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A RETROSPECTIVE RECORD REVIEW OF INDIVIDUALS CHARGED WITH SEXUAL OFFENCES AGAINST MINORS, REFERRED FOR FORENSIC PSYCHIATRIC OBSERVATION

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Medicine in the branch of Psychiatry

Johannesburg, 2014

DECLARATION

I, Navanthree Govender, declare that this research report is my own work. It is being submitted for the degree of Master of Medicine in the branch of Psychiatry to the University of the Witwatersrand, Johannesburg. It has not been previously submitted for any degree or examination at this or any other University.

This ---------- day of ----------, 2014

DEDICATION

This work is dedicated to

my husband and my parents

for your unwavering patience, support and love

PRESENTATIONS ARISING FROM THIS STUDY

1. Oral presentation

   Forensic Mental Health Conference – Division of Psychiatry, University of Cape Town

   20-21 April 2011 – Valkenberg Hospital, Cape Town.

2. Oral presentation

   23rd Annual Psychiatry Research Day – Department of Psychiatry, University of the Witwatersrand

   Wednesday, 8 June 2011 – Sunnyside Park Hotel, Johannesburg.

ABSTRACT

BACKGROUND: Sexual offences against children have been an escalating problem in South Africa. Several international studies have found links between mental illness and sexual offenders. However, very little has been published on forensic psychiatric observation populations charged with sexual offences. South African studies have neither reported on mental illness and sexual offences against children, nor on forensic psychiatric observation of individuals charged with sexual offences against children.

AIMS: To determine the demographic and clinical characteristics, and outcomes of the observation process, in a population charged with sexual offences against minors, referred for forensic psychiatric observation.

OBJECTIVES: To measure the number of individuals admitted to a forensic psychiatric unit for observation, for any charge of a sexual offence against a minor, over a three year period; to determine their demographic profiles; to determine the number assessed to be fit to stand trial and criminally responsible, and the number not fit to stand trial and/or not criminally responsible; to determine if associations exist between the reasons for referral and outcomes in terms of fitness and responsibility; and to ascertain whether mental disorders were present in these individuals.

METHODS: This study took the form of a retrospective record review at Sterkfontein Hospital from January 2007 to December 2009. It included all

individuals charged with a sexual offence against a minor. Data was collected from the Criminal Procedure Act reports and clinical files.

RESULTS: Rape was the commonest charge. More than half the sample was found fit to stand trial and criminally responsible. However, a high number of psychiatric diagnoses were made, of which substance-related disorders and intellectual impairment represented the majority of diagnoses.

CONCLUSIONS: Among individuals referred for forensic psychiatric observation, charged with sexual offences against minors, rape was the commonest charge. Most of these individuals were found fit to stand trial and/or criminally responsible. However, a significant number were diagnosed with mental disorders. It is recommended that they receive special rehabilitation and psycho-education into their psychiatric conditions and the consequences thereof.

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NOMENCLATURE

CPA: Criminal Procedure Act of South Africa No. 51 of 1977

DSM-III: Diagnostic and Statistical Manual for Mental Disorders, Third Edition

DSM-IV-TR: Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition, Text Revision

GBH: Grievous bodily harm

GMC: General medical condition

HIV / AIDS: Human immunodeficiency virus / acquired immune deficiency syndrome

HLOE: Highest level of education

IQ: Intelligence quotient

MHCA: Mental Health Care Act of South Africa No. 17 of 2002

NOS: Not otherwise specified

PD: Personality disorder

PTSD: Post-traumatic stress disorder

SAPS: South African Police Services

DEFINITIONS

Minor / child: A person under the age of 18 years – according to the Criminal Law (Sexual Offences and Related Matters) Amendment Act No. 32 of 2007[1]

Serious crime: In South Africa this is grouped into five broad categories, i.e. contact crime, contact-related crime, property-related crime, other serious crime, and crime dependent on police action for detection[2]

Contact crime: Refers to violent crime against the person that involves physical contact, i.e. murder, attempted murder, sexual offences, assault with the intent to inflict grievous bodily harm (GBH), common assault, aggravated robbery, and other robbery.

Contact-related crime: e.g. arson, malicious damage to property

Property-related crime: e.g. burglary, motor vehicle theft, usually without victims present

Other serious crime: e.g. commercial, shoplifting (not theft above)

Crime dependent on police action for detection: e.g. illegal possession of a firearm, driving under the influence, and drug-related crimes

Axis I disorders: According to the DSM-IV-TR, referring to clinical syndromes, such as psychotic, mood, anxiety, substance-related and impulse-control disorders

Axis II disorders: According to the DSM-IV-TR, referring to personality disorders and intellectual disability

Cluster A personality disorders: According to the DSM-IV-TR, referring to schizoid, schizotypal and paranoid personality disorders

Cluster B personality disorders: According to the DSM-IV-TR, referring to borderline, antisocial, narcissistic and histrionic personality disorders

Cluster C personality disorders: According to the DSM-V-TR, referring to dependent, avoidant and obsessive-compulsive personality disorders

Paraphilia: “Perversions – sexual stimuli or acts that are deviations from normal sexual behaviours but are necessary for some persons to experience arousal and orgasm”[3]

Paedophilia: “Involves recurrent intense sexual urges towards, or arousal by, children 13 years of age or younger, over a period of at least 6 months. Pedophiles are at least 16 years of age and at least 5 years older than the victims”[3]

Observandi: Individuals, in whom mental illness/defect is suspected, sent for forensic psychiatric observation, according to the CPA, who are awaiting trial

J88: A SAPS medico-legal document on which the medical practitioner records the physical examination findings on a victim, and which may be used as evidence in cases/charges brought against an accused

1.0 INTRODUCTION

1.1 Background

The Criminal Law (Sexual Offences and Related Matters) Amendment Act[1] was implemented on 17th December 2007. Prior to this, "rape" referred only to the penetration of female genitalia by the male sexual organ. Other sexual "transgressions" were considered to be indecent assaults.[2] Rape, according to this Sexual Offences and Related Matters Amendment Act No. 32 of 2007, now includes the "vaginal, anal or oral penetration of *any* person with *any* object without his/her consent." Likewise, "indecent assault" has been replaced with "sexual assault", which encompasses all forms of sexual violation without consent. (Sexual violation refers to all sexual offences, not including rape, e.g. inappropriate touching or kissing and may involve people, objects or animals.[1])

Section 15 of the new Act[1] addresses statutory rape, i.e. it intends to criminalize acts of sexual *penetration* by adults with children between the ages of 12 and 16 years, to which the child has consented. Section 16 aims to criminalize acts of statutory sexual assault, i.e. acts of consensual sexual *violation* committed by adults with children in this age group.

According to South African Police Services (SAPS) crime statistics[2] for the 2008/2009 financial year (that is the period 1st April 2008 – 31st March 2009), 2 098 229 cases of serious crimes were reported. The category of contact crime made up 32.7% of cases of serious crime**,** higher than any other category of serious crime.

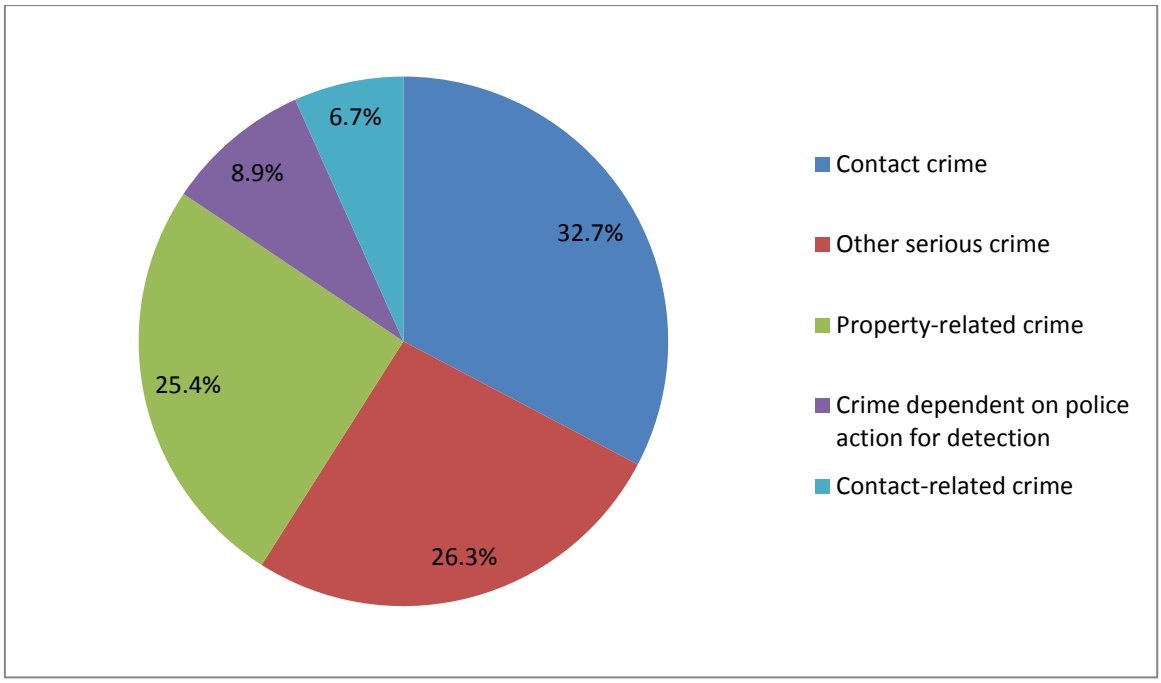

Figure 1.1: SAPS statistics: serious crime 2008/2009

This report[2] showed that sexual offences comprised 10.4% of cases of contact crime reported. (Sexual offences were the fourth highest contact crime after assault GBH, common assault, and robbery with aggravating circumstances.)

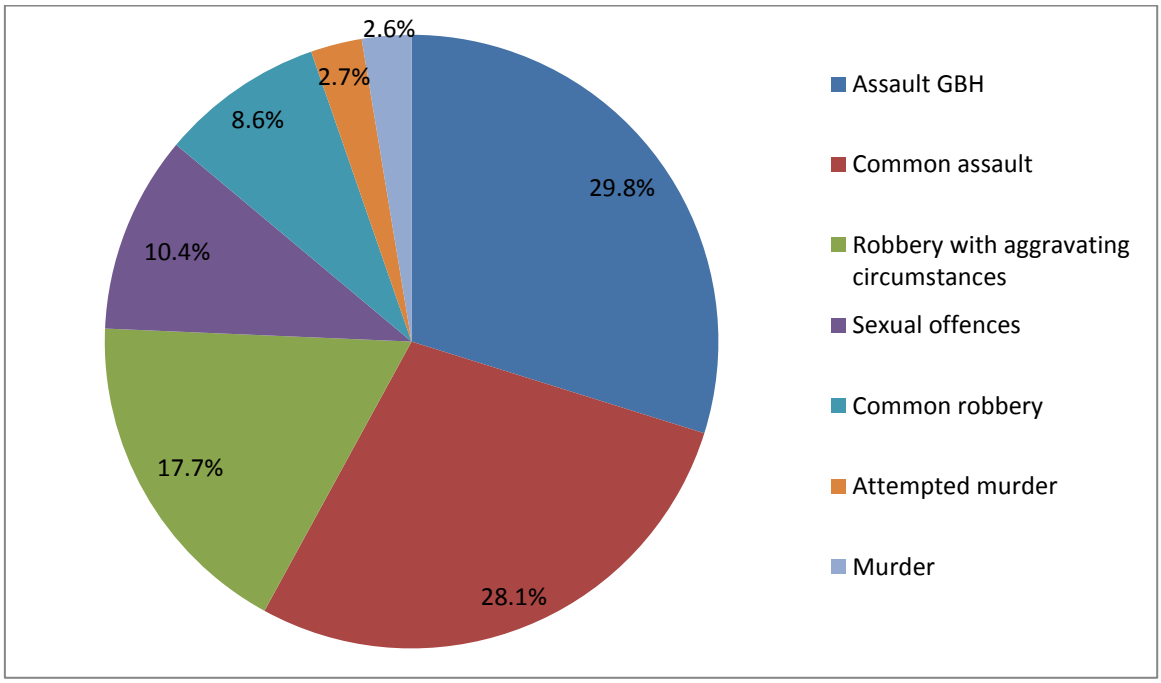

Figure 1.2: SAPS statistics: contact crime 2008/2009

Although the Government's objective in January 2004 had been to reduce each sub-category of contact crime by seven to ten percent per annum, sexual offences for 2008/2009 was one of the two sub-categories of contact crime which showed an *increase* in number. There was a 12% increase in sexual offences – 71 500 cases reported during 2008/2009 compared to 63 818 cases reported during 2007/2008. However, it is important to note that the 2008/2009 statistics included two categories of sexual offences that were not covered by the previous Act, i.e. "sexual offences related to sex work or prostitution" and "other sexual offences, current" (e.g. pornography, public indecency, incest, bestiality, sexual acts with a corpse). Therefore, it might be possible that the increase in the number of cases reported is due to offences other than rape and sexual assault.

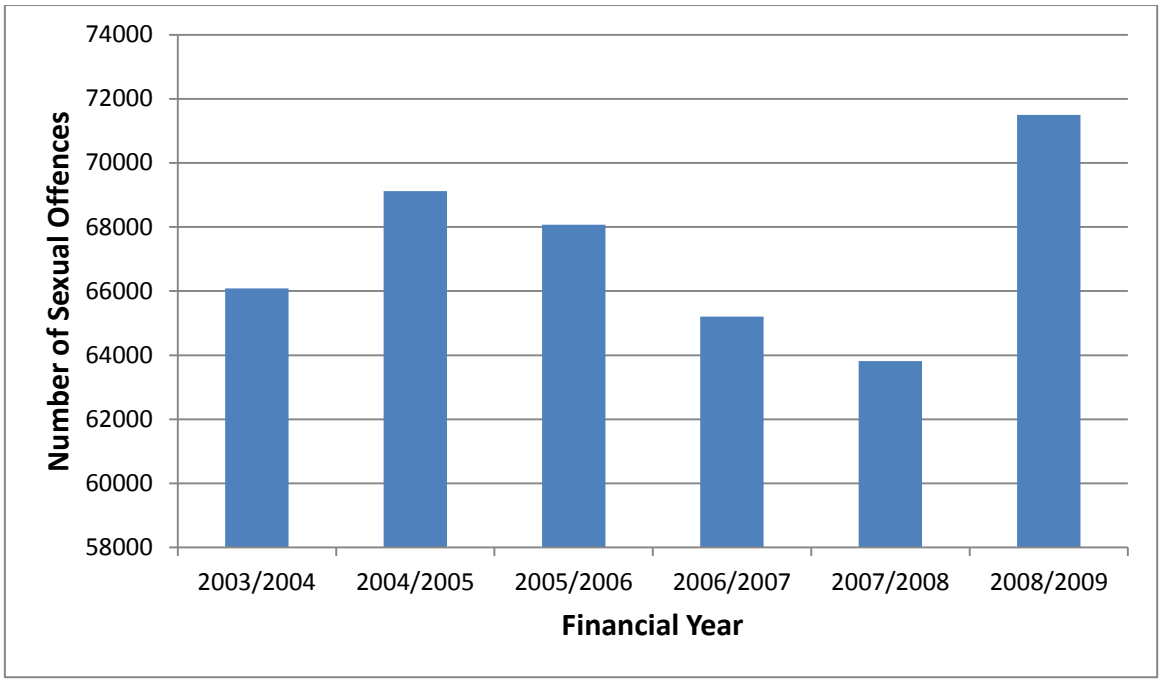

Figure 1.3: SAPS statistics: sexual offences 2003/2004 – 2008/2009

With regards to children, according to Kaplan and Sadock,[3] 10-20% have been molested before the age of 18 years. As has been the trend in preceding years, for the 2008/2009 period, sexual offences continued to make up the largest number of

crimes against children in South Africa, followed by common assault, assault GBH, murder, and attempted murder.[2]

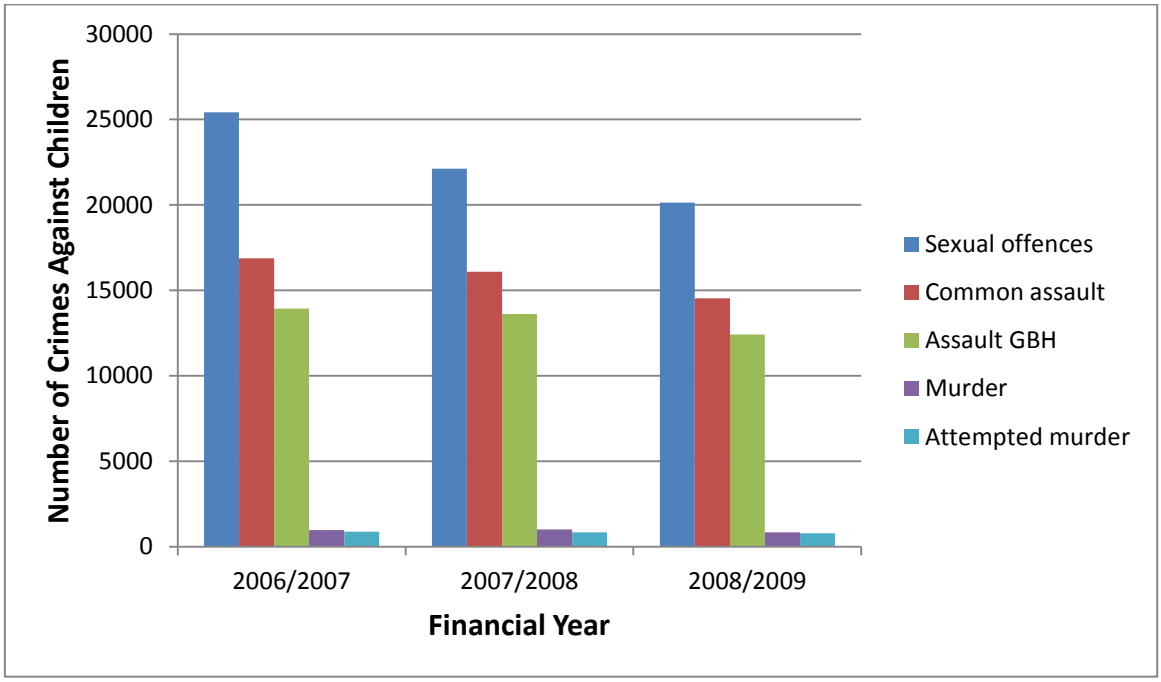

Figure 1.4: SAPS statistics: crimes against children 2006/2007 – 2008/2009

Twenty thousand one hundred and forty one (28%) of the 71 500 sexual offences reported in 2008/2009 were committed against children under the age of 18 years. Forty eight percent of reported cases were in children under the age of 14 years, and 52% were in the age group 14-18 years.

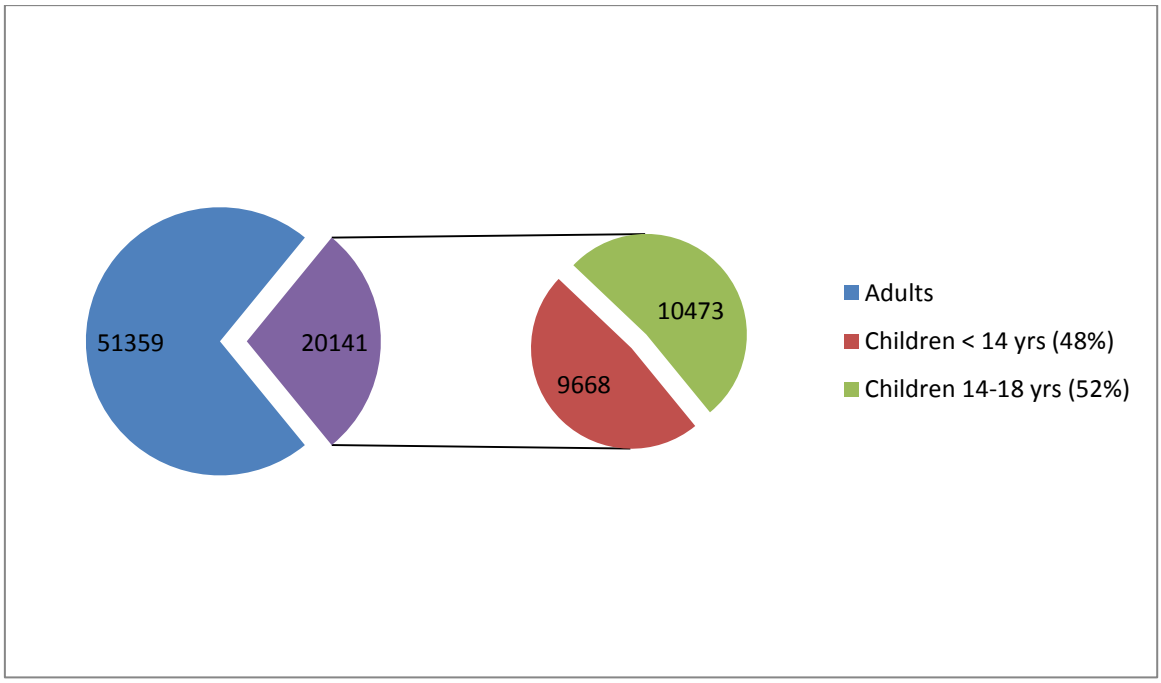

Figure 1.5: SAPS statistics: sexual offences against children 2008/2009

In 1994 there were 7 559 reported cases of rape and attempted rape of children. Three years later, this figure had more than doubled to 15 336 cases.[4] (Note that these did not include other sexual offences covered by the amended Act.[1])

As seen, this figure has dramatically increased over the years. Despite this high number, it is believed that a large percentage of cases remain unreported.[4]

Sexual crimes against children may leave in its wake severe psychological and physical adverse effects. Profiling of perpetrators may assist in protecting children from sexual crimes. As seen in several studies,[5-32] part of this profiling might include evaluation for mental disorders.

However, there is a dearth of literature with regards to forensic observation populations charged with sexual offences against children, i.e. alleged child sex offenders; and therefore the following aims and objectives emerged.

1.2 Aims

To determine the demographic and clinical characteristics, and the outcomes of the observation process, in a population charged with sexual offences against minors, referred for forensic psychiatric observation.

1.3 Objectives

i. To measure the number of individuals admitted to a forensic psychiatric unit for observation, for any charge of a sexual offence against a minor, over a three year period, from 1st January 2007 to 31st December 2009.
ii. To determine the demographic profiles of these individuals.
iii. To determine the number of these individuals assessed to be fit to stand trial and criminally responsible, and the number found not fit to stand trial and/or not criminally responsible.
iv. To determine if associations exist between the reasons for referral of the observandi and the outcomes in terms of fitness to stand trial and criminal responsibility.
v. To ascertain whether mental illness/defect was present in these individuals.

2.0 LITERATURE REVIEW

2.1 Sexual Abuse of Children

Madu[33] cited Finkelhor and Browne's adverse effects of sexual abuse in children – traumatic sexualisation, stigmatisation, betrayal and powerlessness. Other psychological effects include post-traumatic stress disorder (PTSD), depression with suicidal ideation or behaviour, and substance use problems.[34-36] Many children also later experience sexual dissatisfaction, promiscuity, an increased risk of re-victimisation, and even an increased likelihood of sexual aggression themselves.[36,37]

Physical adverse effects of sexual abuse include body injury, HIV/AIDS and other sexually transmitted infections, and may even result in death.[38-40]

An Australian study, by Smallbone and Wortley,[41] of 207 convicted child sexual offenders, showed that the mean age of first sexual contact with a child was 32 years, but the mean age of first conviction for a sexual offence was 37 years. Offenders in this study were classified as intra-familial, extra-familial and mixed-type. Extra-familial and mixed-type offenders were younger at the time of first conviction than intra-familial offenders. Eleven percent of offenders in this study reported that first sexual contact with a child occurred before the age of 18 years. Intra-familial offenders started offending at a later age than extra-familial offenders. The mean number of victims reported by the offenders was 5.79. Another study[42] showed that extra-familial child molesters had a relatively high risk of sexual recidivism, while the rate for intra-familial offenders was low.

2.2 Mental Illness and Violent Crime

The link between mental illness and violent crime is not clear, with differing reports. Some[43-52] associate mental illness with violent behaviour, while others[53-64] believe that most of those who suffer from a mental illness are not generally violent. One study[60] found that individuals with severe mental illness contributed to only five percent of all violent crimes, while another[43] reports that people with major mental disorders have a three to five times higher risk of behaving violently than those in the general population. However, it has been repeatedly found[44-47,53,58,59,61-66] that the association between mental illness and violence is often confounded by the presence of comorbid substance abuse.

One large study[65] of patients enrolled in the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) showed that serious violence (including sexual offences) was increased in schizophrenic patients with “positive” psychotic symptoms, such as hallucinations; whereas in patients with predominantly “negative” psychotic symptoms, such as social withdrawal, the risk of serious violence was significantly decreased.

2.3 Mental Disorders and Sexual Offenders

With regards to mental disorders and sexual offenders, high rates of substance use disorders, personality disorders (PDs), paraphilias, impulse control disorders, mood disorders, psychotic disorders and anxiety disorders have been found.[5-20,22-31,67] However, a limitation when comparing these studies with the current research, is that the research reviewed has focused largely on known/convicted, rather than alleged (pre-trial), sexual offenders; and most of these studies have excluded

individuals with psychotic disorders and intellectual disability. Further, most of the literature is based on international populations, and only one African study was found.

Dunsieth *et al*[5] evaluated 113 men convicted of sexual offences. Seventy four percent met DSM-IV criteria for at least one lifetime Axis I disorder, and 21% for at least three disorders. There were high rates of lifetime substance use disorders (85%), paraphilias (74%), mood disorders (58%, of which 61% of these were bipolar disorder) and antisocial personality disorder (56%). Thirty eight percent also had an impulse control disorder, 23% had an anxiety disorder, and 9% had an eating disorder. Other DSM-IV Axis II disorders that were prevalent were borderline personality disorder (28%) and narcissistic personality disorder (25%). It is important to note that those individuals with an intelligence quotient (IQ) of <70 and those with active psychotic illness were excluded from the study. The mean age of offenders in this study was 35.3 years. Sixty three percent were white and 36% were black. Fifty percent of the individuals with paraphilias were diagnosed with paedophilia. (Paedophilia is in fact the most common legally identified paraphilia.[3]) In this study, individuals with paraphilias were significantly younger than those without. White men were significantly more likely to meet criteria for a paraphilia than black men. A significant number of these men with paraphilias were either divorced or had never been married. Forty two percent of the total sample offended against children exclusively. Thirty eight percent of the total sample had committed incest. Almost 25% had been *convicted* of rape or attempted rape of a minor (19 with paraphilia / 7 without paraphilia), while 38% *admitted* to rape or attempted rape of a minor (35 with paraphilia / 6 without). Just over 45% (47 with

paraphilia / 2 without paraphilia) were *convicted* of gross sexual imposition of a minor, while 57.1% (55 with paraphilia / 7 without paraphilia) *admitted* to this. It can therefore be seen, in this study population, that paraphilic offenders were significantly more likely to offend against children.

Raymond *et al*[15] also showed high rates of DSM-IV Axis I and Axis II comorbidity in a group of 45 male paedophilic sex offenders. The average age of the sample was 37 years. Eighty nine percent were white, seven percent were black, and the remainder were from other population groups. Nine percent had not completed high school, 71% had completed high school or some college education, and 20% had a college degree. Seven percent were unemployed. Ninety three percent of these subjects had another Axis I disorder (beside paedophilia). The lifetime prevalence of mood disorders was 67%, of which more than half had a history of major depression. A history of anxiety disorders had been diagnosed in 64%, the most common anxiety disorders being social phobia and PTSD. Sixty percent of the sample had a history of substance abuse. Alcohol was the most common substance abused, followed by cannabis and cocaine. Twenty four percent of subjects met criteria for a sexual dysfunction diagnosis, and another 53% for other paraphilias. Only one subject was diagnosed with a psychotic (schizoaffective) disorder. Antisocial, narcissistic, avoidant, obsessive-compulsive and paranoid personality disorders were also common.

Leue *et al*[17] also showed high lifetime rates of various comorbid Axis I disorders and personality disorders among sexual offenders with paraphilias and impulse control disorders not otherwise specified (NOS) in State Forensic Hospitals in

Germany. This study, similar to that of Dunsieth *et al*,[5] also excluded offenders with a history of psychosis or intellectual disability. The total sample of 55, all male, was split into two groups: 55% were diagnosed with a paraphilia (of which 60% were paedophiles) and 45% with an impulse control disorder NOS. Twenty one offenders (38%) were child molesters. Close to one third of the total sample did not complete secondary school, half had no profession, and two thirds were single. Sixty nine percent of the total sample had anxiety disorders (of which social phobia and simple phobia represented the majority), 56% had mood disorders (all depressive disorders), and 56% were diagnosed with substance use disorders. About half of these offenders were intoxicated with alcohol at the time of their offences and met criteria for alcohol dependence. Drug dependence was less common than alcohol dependence. Cluster B and C personality disorders were also highly prevalent: antisocial 35%, avoidant 24%, borderline 15%, narcissistic 11%, and obsessive-compulsive 11%. The lifetime prevalence rates of these personality disorders were about twelve times higher than the general population. These results were similar to those of a study of 36 male sex offenders by McElroy *et al*.[14]

Harsch *et al*[20] compared the prevalence of mental disorders among sexual offenders in German forensic psychiatry (hospitals) and prison. Subjects with psychotic disorders or intellectual disability were excluded. A high prevalence of Axis I disorders was present in both groups, although comorbidity was significantly higher in the forensic group for both Axis I and Axis II disorders. Axis I diagnoses in the forensic psychiatry group included substance use disorders (55%); paraphilias (52.5%); sexual dysfunctions (10%); and mood, anxiety and

somatoform disorders (7.5% each). Axis I diagnoses in the imprisoned group of sexual offenders included substance use disorders (66.7%), mood disorders (10%), somatoform disorders and paraphilias (6.7% each), and anxiety disorders and sexual dysfunctions (3.3% each). Substance use disorders were the most frequent diagnoses in both groups. With regards to personality disorders in the forensic psychiatry group, antisocial personality disorder was the most prevalent (50%); followed by avoidant personality disorder (20%); and borderline, narcissistic and paranoid personality disorders (12.5% each). Personality disorders were diagnosed less frequently in imprisoned sexual offenders: antisocial PD in 16.7%, borderline PD in 6.7%, and paranoid PD and PD NOS in 3.3%. The authors commented on the surprising findings regarding the higher prevalence of paraphilias and personality disorders in the forensic sexual offender group compared to the imprisoned sexual offender group, saying that sexual offenders in prison may make more of an attempt to appear "completely normal" as opposed to forensic sexual offenders whose psychiatric experiences may have reduced stigmatisation and led to them answering questions more frankly. Further, they noted that information was collected from different sources (patient file, patient himself and therapist) and not only the patient himself.

Only one study of forensic (hospitalised) sex offenders was found, that did not exclude subjects with a psychotic disorder. Novak *et al*,[23] in their study of sex offenders found not guilty by reason of insanity, found that 33% of child molesters in their sample were diagnosed with schizophrenia and 20% with schizoaffective disorder, whereas of those who offended against adults 62% were diagnosed with schizophrenia and 17% with schizoaffective disorder. With regards to child

molesters, mood and substance disorders were the primary diagnoses found in 19% and 10% respectively, while being the secondary diagnoses in 6% and 58% respectively. Antisocial personality disorder contributed to 40% of personality disorders in child molesters and 86% in those who offended against adults. There was only one female in this study (who had offended against a child). Sixty seven percent of child molesters had never been married. Whites made up 86% of the child molester population, followed by 5% black, 5% Hispanic and 5% being "other".

2.4 Intellectual Disability and Sexual Offences

A high prevalence of psychiatric comorbidity may also be found in individuals with intellectual disability,[29,52] which itself has been associated with an increased incidence of sexual offending.[68] Some evidence of this was also found in a 2002 review by Lindsay[21] who cited that several researchers reported increased incidences of sexual offending amongst those with intellectual impairment. However, he concluded that overall, "there was no clear evidence for the over- or under-representation of people with developmental disabilities among sex offenders".

Another review by Holland *et al*[69] cited a 1973 study by Walker and McCabe who found that one third of a sample of men, in a psychiatric hospital population, who were of below-normal intelligence, were responsible for more than half of the sexual offences of the group. However, this review[69] found that recent studies have showed that sex offending cannot be sufficiently explained by a person's IQ.

A large Danish follow-up study,[42] carried out from 1978-1992, also showed that severely intellectually impaired (or mentally ill) offenders carry a lower rate of sexual re-offending than their less disturbed counterparts.

What was evident from one study[70] of 950 sex offenders was that sex offenders with intellectual disabilities were more likely to commit offences against younger children and male children.

2.5 Forensic Psychiatric Observations of Alleged Sex Offenders

Only two studies were found that looked at individuals referred for psychiatric observation after being charged with a sexual offence.

From 1980-1983 Packard and Rosner[8] evaluated 95 men for court, who had been referred to a forensic psychiatry clinic, charged with a sexual offence(s). Their sample consisted predominantly of young subjects – 95.5% were under the age of 40 years. Only 15.8% were white, while the remainder of the sample consisted of minority groups: 50.5% black and 33.7% Hispanic defendants. Just over three quarters were single, 10.5% married, and 11.6% divorced or separated. Most of the sample (40%) had started but not completed high school, and 35.7% had completed. Almost 60% had been employed in unskilled labour, 30.5% held semi-skilled jobs, and only 7.5% had a skilled job. With regards to clinical characteristics, one psychiatric illness (according to DSM-III) was listed for each subject, although there may have been more than one diagnosis present. As the primary diagnosis, psychotic, mood and paraphilic disorders were given precedence over personality disorders, which were in turn given precedence over

substance abuse. Schizophrenia was diagnosed in 13.7% of subjects, “atypical psychosis” in 4.2% and a mood disorder in 2.1%. Personality disorders were diagnosed in 43.2%, with antisocial PD contributing to 8.4%, passive-aggressive and schizoid PDs making up 5.3% each, schizotypal 4.2%, paranoid 2.1%, borderline and avoidant PDs 1.1% each, and 15.8% being “mixed/other” PDs. Two thirds of the 6.3% of the sample diagnosed with a paraphilia were also given a PD diagnosis. Only 4.2% were diagnosed with substance abuse as the primary diagnosis, and various other diagnoses contributed to 7.3% of primary diagnoses. Only 4.2% had no mental disorder. In those subjects with only one charge, rape was the most frequently occurring (40% of cases) and sodomy in 12.6% of cases. Almost 56% were found competent (fit) to stand trial, 28.9% were not competent, and the remainder had to be referred for further hospitalisation to determine their competency.

During the years 1952-1973 Henn *et al*[6] evaluated records of 239 individuals referred for observation to a forensic psychiatric service after being charged with a sexual offence(s). Of the total of 273 charges, 116 were of child molestation. Defendants charged with child molestation were found across age ranges, whereas three quarters of those with charges against adults were under the age of 30 years. With regards to the primary diagnosis, subjects charged with child molestation were mainly diagnosed with paedophilia without a comorbid diagnosis (29% of cases), 14.5% with a personality disorder (antisocial PD in 6.4%), 14.4% with “organic brain syndrome” (DSM-III terminology referring to disorders classified as dementias in DSM-IV), 13.5% with mental retardation, 9% with schizophrenia, 7.2% with substance abuse, 1.8% each with schizoaffective and mood disorder;

and no illness was found in 7.2%. This was in contrast to diagnoses found in those charged with rape and attempted rape of adults, wherein PDs made up 69% of diagnoses, with antisocial PD contributing 48%. Substance abuse was the most common secondary diagnosis in both groups. Eighty two percent of child molesters were found competent to stand trial and 76% were found to be “sane”. Figures were higher in the group that offended against adults – 93% were assessed as competent and 95% were found to be “sane”.

2.6 The African Perspective

The only African study found on sexual offenders was carried out in Kenya. Kanyana *et al*[22] looked at the prevalence of psychiatric morbidity among 76 convicted male sex offenders. The mean age of offenders in the study was 33.5 years. Six (7.9%) had no formal education; 65.8% had primary school education only; and 26.3% had secondary school, college or university education. Thirty two (42.1%) were married; and the rest were single, separated, divorced or widowed. Four (5.3%) were professional workers, another four had no occupation, and the remainder were skilled and unskilled workers. The majority of this sample (61.8%) were convicted of rape or attempted rape of children. Other offences committed were rape (30.3%), sodomy (3.9%), incest (2.6%) and indecent assault (1.3%). Most of the subjects with a DSM-IV Axis I disorder were diagnosed with substance abuse or dependence (71.1%). Alcohol, cannabis and khat were the most common substances abused. Almost 44% reported being under the influence of a substance(s) at the time of the offence. Other lifetime Axis I disorders diagnosed were anxiety-related disorders (15.8%), and mood disorders (13.1%) which were all depression-related. Thirty four percent of the total subjects had an Axis II

disorder – mostly antisocial (26.9%) and impulsive (19.2%) personality disorders. Almost 20% of the sample had both Axis I and Axis II disorders, 15.5% had an Axis I disorder only, 14.5% had an Axis II disorder only, and 65.8% had no psychiatric diagnosis. The rates of Axis I disorders in this study are lower than those in international studies, which were as high as 93%.[15] In this study,[22] most of those with psychiatric diagnoses victimized children and had an antisocial or impulsive personality disorder.

There is insufficient literature regarding sexual offenders whose victims are children. In particular, no South African studies have been done. It would make sense that, when compared to adults, children may be considered easier and more vulnerable targets. It would be useful to determine the profiles of such offenders, thereby creating greater awareness, and hence help to prevent these crimes. Furthermore, the identification and forensic hospitalisation of mentally ill and intellectually disabled offenders whose illnesses may result in such offences enables the provision of appropriate and structured treatment programmes for such offenders – this is of benefit for the offender, as well as to assist in reducing recidivism.

3.0 SUBJECTS AND METHODS

3.1 Background / Procedure

Some of the reasons that individuals are admitted for forensic observation are:
a history of mental illness, apparent confusion or abnormal behaviour during court proceedings, and in instances where the legal representative reports difficulty communicating with the accused.

Section 79 of the Criminal Procedure Act (CPA) 51 of 1977[71] provides for referral of the accused for a psychiatric observation of up to 30 days at a state psychiatric hospital. A thorough evaluation is performed that involves the multi-disciplinary team, and a report is then compiled and submitted to the court. The psychiatric report must include the nature of the enquiry (interviews, nursing observations, psychological tests, occupational therapist assessment, biological investigations etc.); diagnosis (includes major psychiatric illnesses, personality disorders, substance-related disorders, disorders in remission, intellectual impairment, or no diagnosis at all); fitness to stand trial; and criminal responsibility. During the study period, as required by the CPA, the report was compiled by three psychiatrists – one state-appointed, one for the defence, and another in private practice.

Section 77 of the CPA deals with accused's *current* mental state, referring to his/her ability to understand court proceedings so as to make a proper defence, i.e. his/her fitness to stand trial.

Section 78 of the CPA relates to criminal capacity, i.e. (under South African law) the accused's ability to appreciate the wrongfulness of his/her actions (commonly referred to as the "first leg") and his/her ability to act in accordance with an appreciation of such wrongfulness *at the time of the alleged offence* (referred to as the "second leg"), i.e. could he/she distinguish between right and wrong and could he/she freely choose what he/she wanted to do.

If found not fit to stand trial and/or not criminally responsible, in cases of serious offences he/she would be detained in a psychiatric hospital under Section 42 of the Mental Health Care Act (MHCA).[72] In cases of minor offences he/she may be admitted as an involuntary user in terms of Chapter V of the MHCA.

3.2 Study Design

This study took the form of a retrospective record review of individuals charged with sexual offences against minors, admitted to a tertiary psychiatric hospital for forensic observation, from the period 1st January 2007 to 31st December 2009. These individuals were identified from the J138, a document forwarded from the prosecutor's office to the forensic unit, which bears the name of the observandus together with the offence with which he/she has been charged.

3.3 Study Site

The study was conducted at Sterkfontein Psychiatric Hospital, located in Krugersdorp, Gauteng. It is the largest of the specialist hospitals associated with the University of the Witwatersrand, Department of Psychiatry. It is a tertiary academic hospital, with one of its primary functions being to serve as a facility for

the assessment of forensic observation cases under the CPA. Other functions include treatment, care and rehabilitation of users admitted under Section 42 of the MHCA (state patients), and it also caters for mentally ill patients usually referred for involuntary care from hospitals with facilities/resources that are inadequate to cope with these mental health care users.

This hospital setting thus provides an opportunity to investigate sexual offenders whose victims are children, and are referred for forensic psychiatric observation.

3.4 Study Population

This study included all individuals charged with sexual offences against minors, admitted for psychiatric observation in the aforementioned period.

3.5 Sample Size

The minimum sample size was calculated as 120. This was based on meeting the criterion of 10-15 subjects per variable studied.

3.6 Data Collection

Data was collected from CPA reports, as well as from clinical records.

3.7 Material

To assist in data collection, a data sheet was used to collate information related to the observandus and information related to the victim (Appendix A).

3.8 Data Analysis

The sample size over the three year period amounted to 128. Statisticians were consulted when analysing the data. The data was analysed with STATA version 10.0 for descriptive statistical analysis; and is represented by means, frequencies and percentages, in graphs and tables. STATA version 12.0 was used to compare associations and determine statistical significance between the reason for referral and outcomes in terms of fitness to stand trial and criminal responsibility. Here multi-variate analyses were conducted, using Pearson's Chi squared test and Fischer's exact test.

3.9 Ethics

Ethics approval was granted from the University of the Witwatersrand Human Research Ethics Committee (Appendix B).

This study took the form of a retrospective review of individuals who had already completed the observation process. No interviews were conducted, nor active participation required from these subjects. Confidentiality was maintained at all times, as names and hospital numbers were not recorded on data collection sheets. Only the researcher had access to the names of the observandi which corresponded to the participant numbers on the data collection sheets.

The researcher received permission from the CEO of Sterkfontein Hospital to obtain access to records for data collection.

3.10 Funding / Budget

Private funding was used by the principal researcher.

ITEMS	COST
Travel and petrol	R 2 000
Photocopies and stationery	R 750
Printing and binding	R 750
Other	R 500
Total cost	R 4 000

4.0 RESULTS

A total of 128 subjects admitted for observation, charged with sexual offences against minors, were found for the three-year period.

4.1 Characteristics of the Study Population

Of the 128 observandi, only one (0.78%) was a female. The youngest subject was 13 years old and the oldest was 64 years old. Twenty of the observandi (15.63%) were minors. The majority (n=116, 90.63%) were black. With regards to their relationship status, most of the sample were single (n=115, 89.84%). More than 60% (n=78) had no children. Twelve (9.38%) had no form of education, fifteen (11.72%) had received special education, and only one (0.78%) had tertiary education. The vast majority (76.56%, n=98) were unemployed. Just over 45% (n=58) of the observandi knew their victims, 15.63% (n=20) of the victims were strangers, and in 39.06% (n=50) of cases the relationship between the accused and the victim(s) was not stated.

Table 4.1: Characteristics of the study population

N		**128**	**%**
Age (years)			
	Minors	20	(15.63)
	Mean ± SD	31.58 ± 11.71	
	Youngest	13	
	Oldest	64	
Gender [n (%)]			
	Male	127	(99.22)
	Female	1	(0.78)
Race [n (%)]			
	Black	116	(90.63)
	White	8	(6.25)
	Coloured	2	(1.56)
	Indian	2	(1.56)
Relationship status [n (%)]	Single	115	(89.84)
	Married	7	(5.47)
	Long-term relationship	2	(1.56)
	Divorced / separated	4	(3.13)
Number of children [n (%)]	None	78	(63.41)
	One	18	(14.63)
	Two	15	(12.20)
	Three	7	(5.69)
	Four	5	(4.07)
Highest level of education [n (%)]	No education	12	(9.38)
	Primary school	41	(32.03)
	High school incomplete	46	(35.94)
	High school complete	8	(6.25)
	Tertiary education	1	(0.78)
	Special education	15	(11.72)
	Unknown	5	(3.91)
Employment status [n (%)]	Unemployed	98	(76.56)
	Employed	17	(13.28)
	Informal employment	11	(8.59)
	Unknown	2	(1.56)
Relationship to victim(s) [n (%)]	Known to	58	(45.31)
	Stranger	20	(15.63)
	Not stated	50	(39.06)

N = number of subjects, % = percentage, SD = standard deviation.

4.2 Data Relating to the Victims

The youngest victim was 9 months old and the oldest was 17 years old. Close to 85% (n=118) of the victims were females, 12.86% (n=18) were males, and the gender was not known in 2.86% (n=4) of cases. (There were 140 victims identified in this study, as some of the observandi had allegedly committed offences against more than one minor.)

Table 4.2: Data relating to the victims

N		**140**	**%**
Age (years)			
	Mean ± SD	8.54 ± 3.87	
	Youngest	0.75	
	Oldest	17.00	
Gender			
[n (%)]	Female	118	(84.29)
	Male	18	(12.86)
	Unknown	4	(2.86)

N = number of subjects, % = percentage, SD = standard deviation.

4.3 Forensic Information

4.3.1 Charges Against the Observandi

There were 108 (84.38%) charges of rape, ten (7.81%) charges of attempted rape, nine (7.03%) charges of sexual assault, and one (0.78%) charge of indecent exposure. These charges exceed 128 (the number of observandi in this study population) as some of the observandi had more than one charge against them.

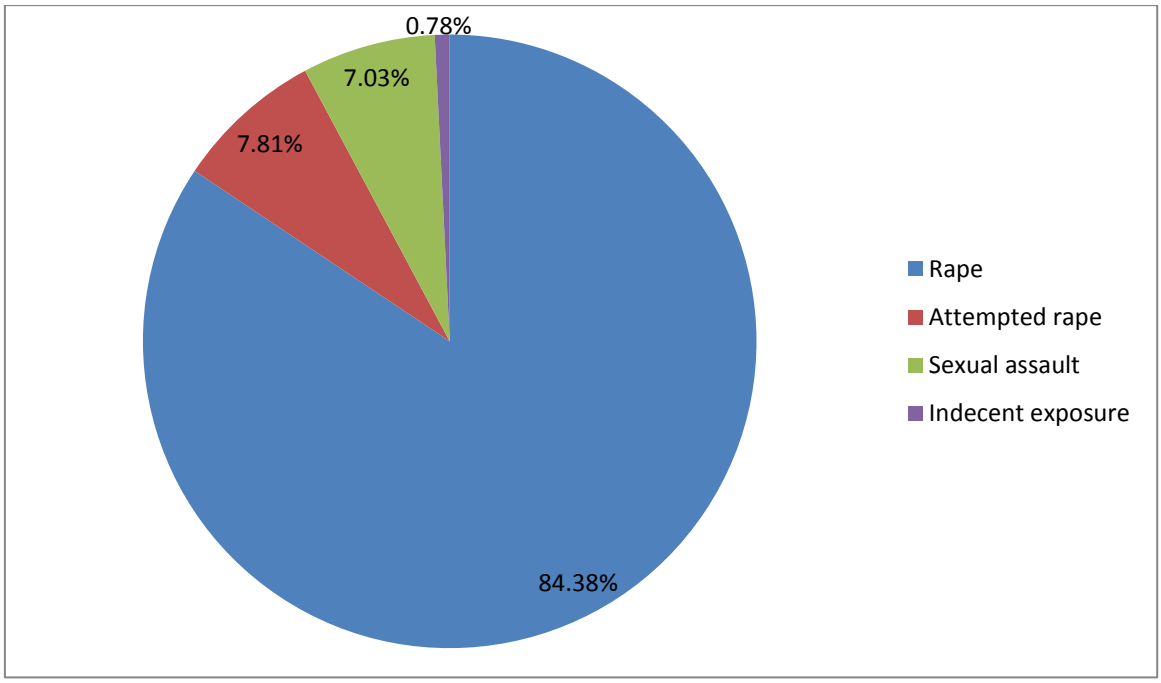

Figure 4.1: Charges against the observandi

4.3.2 Reasons for which an Accused may be Referred for Forensic Psychiatric Observation

In this study, the most common reason for the referral of an accused for forensic observation (38.28%, n=49) was due to statements made by someone who knew him/her, to the court, that the accused may be mentally unwell. This was followed by odd behaviour being observed by those in the legal system 24.22% (n=31) of the time, proof of mental (or other relevant) illness being provided 19.53% (n=25) of the time, on request of the defence lawyer 7.81% (n=10) of the time, and in 5.47% (n=7) of cases the accused himself/herself having informed the lawyer/court that he/she was mentally unwell. For six (4.69%) of the observandi, the reason for referral was unclear / not stated.

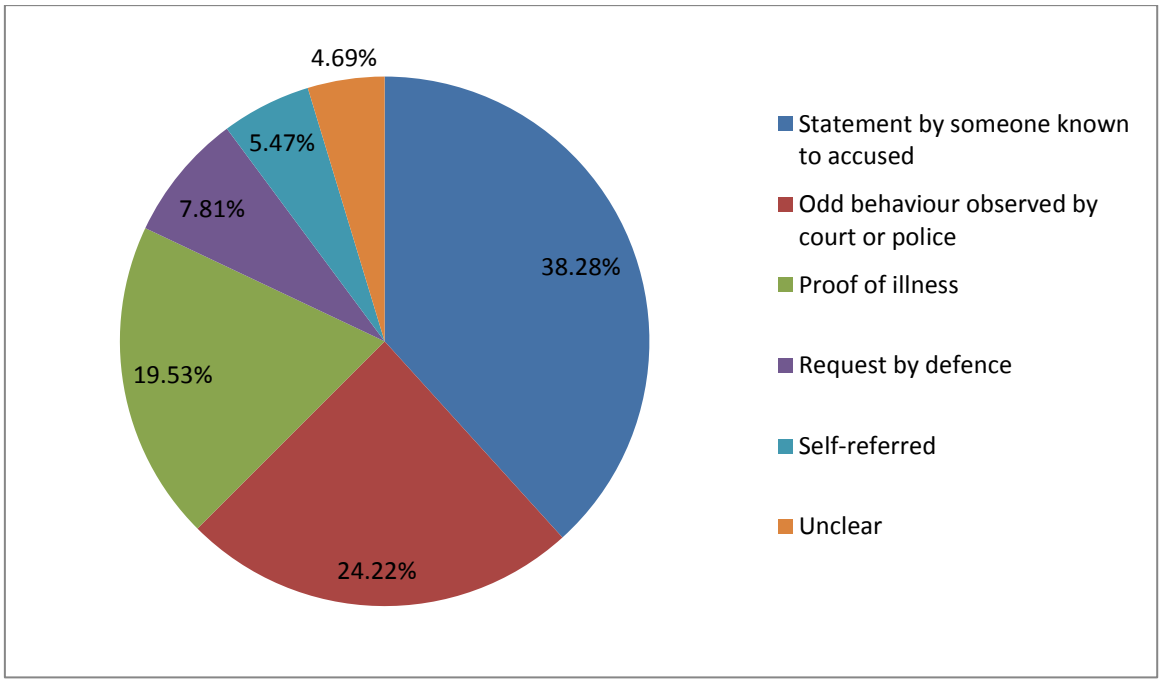

Figure 4.2: Reason for referral for forensic psychiatric observation

4.3.3 Outcomes of the Observation Process

4.3.3.1 Diagnoses

The two most common diagnoses (27.34%, n=35 each) were related to substances and intellectual impairment. Intellectual impairment in this study refers to those with borderline IQ; mild, moderate or severe intellectual disability; and intellectual disability with severity not classified. Twenty percent (n=7) with intellectual impairment were classified as borderline IQ.

Of the 20 observandi who were minors, half (50%) were intellectually impaired, six (30%) were diagnosed with conduct disorders or had features thereof, one (5%) had a substance-related disorder, one (5%) was malingering, one (5%) had a general medical condition (GMC), and six (30%) had no diagnosis.

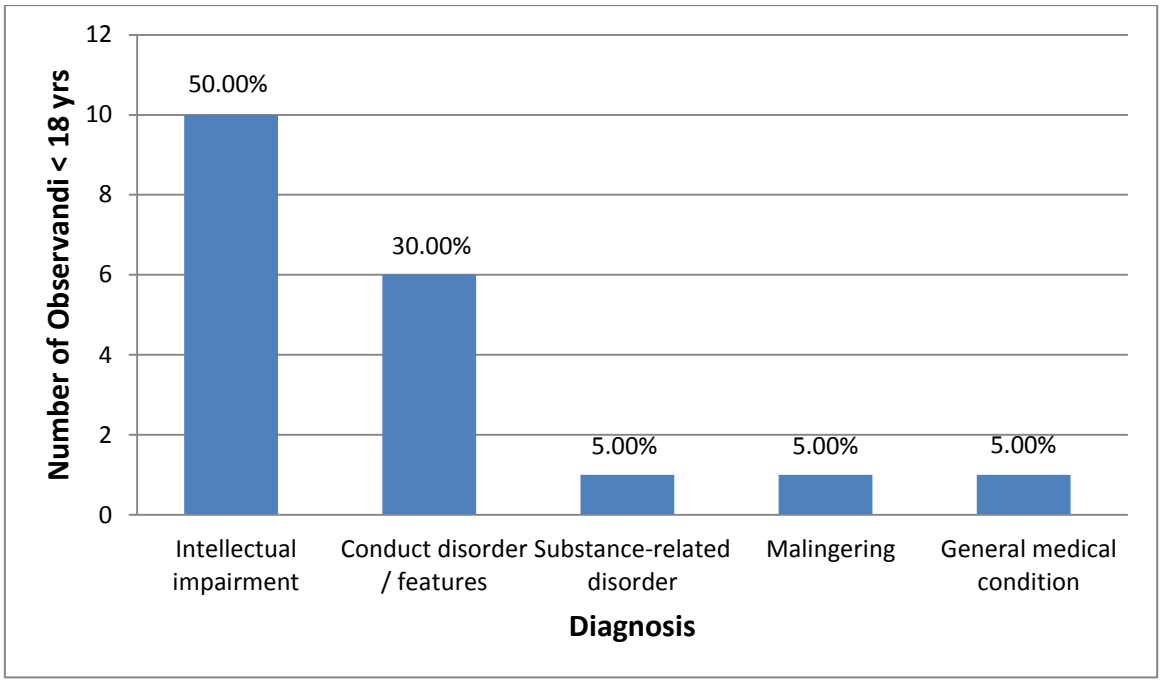

Figure 4.3: Distribution of diagnoses of the observandi < 18 years old

Close to 25% (n=30) of the overall diagnoses were psychosis-related (excluding substance-induced psychosis), 2.34% (n=3) were mood disorders (not substance-induced), 4.69% (n=6) were dementias (or cognitive impairment), 4.69% (n=6) were conduct disorders or features thereof, 3.13% (n=4) were personality disorders or with traits, 7.81% (n=10) were found to be malingering, and 18.75% (n=24) had no diagnosis. Relevant GMCs were diagnosed in 7.81% (n=10).

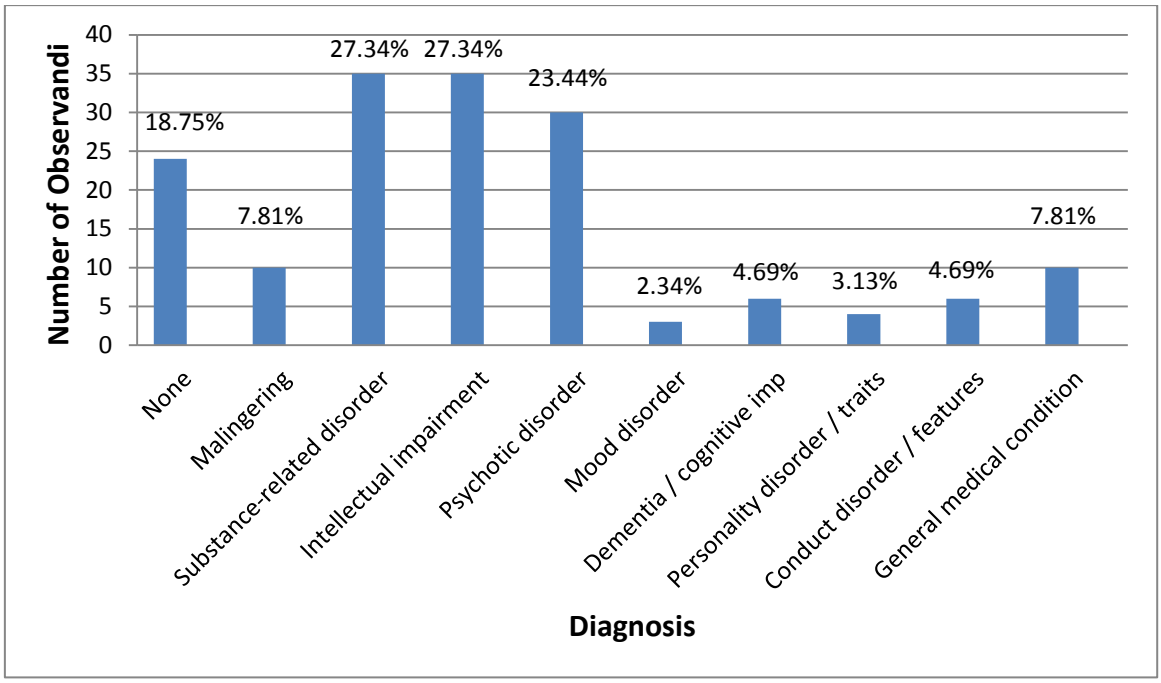

Figure 4.4: Distribution of diagnoses of the observandi

4.3.3.2 Comorbidity

The following combinations of diagnoses occurred together most frequently: psychotic and substance-related disorders occurred together ten times (7.81%); substance-related disorders and personality traits/disorder, substance-related disorders and malingering, and intellectual impairment and conduct features/disorder all occurred together three times (2.34%) each.

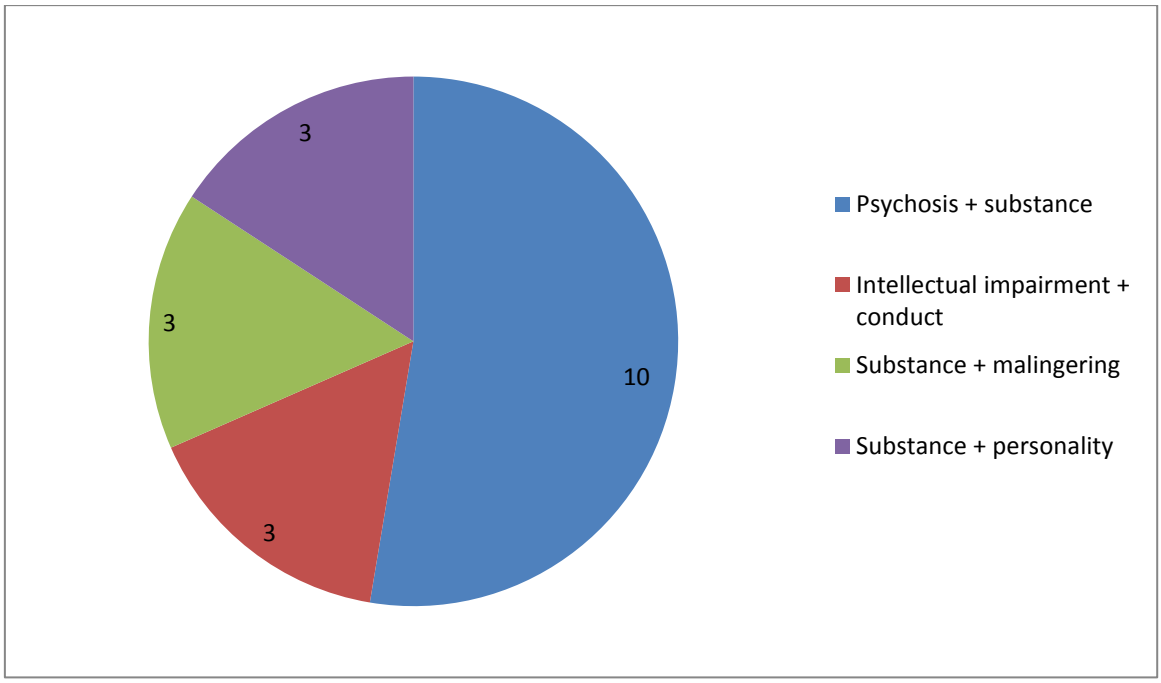

Figure 4.5: Distribution of combinations of diagnoses of the observandi

The following figure depicts the descending order of overall diagnoses and the most common combinations.

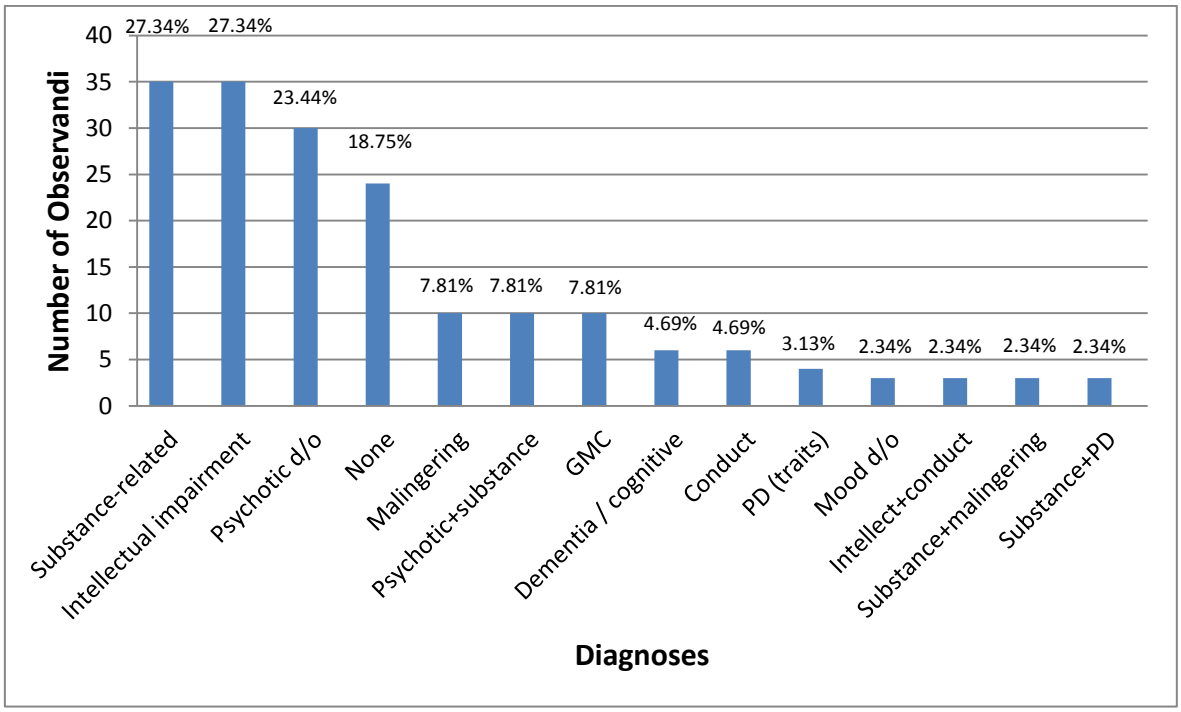

Figure 4.6: Descending order of overall diagnoses and combinations of diagnoses of the observandi

4.3.3.3 Fitness to Stand Trial

Seventy two observandi (56.25%) were found fit to stand trial, another eight (6.25%) were found to be fit with assistance, and forty eight (37.50%) were found not fit to stand trial.

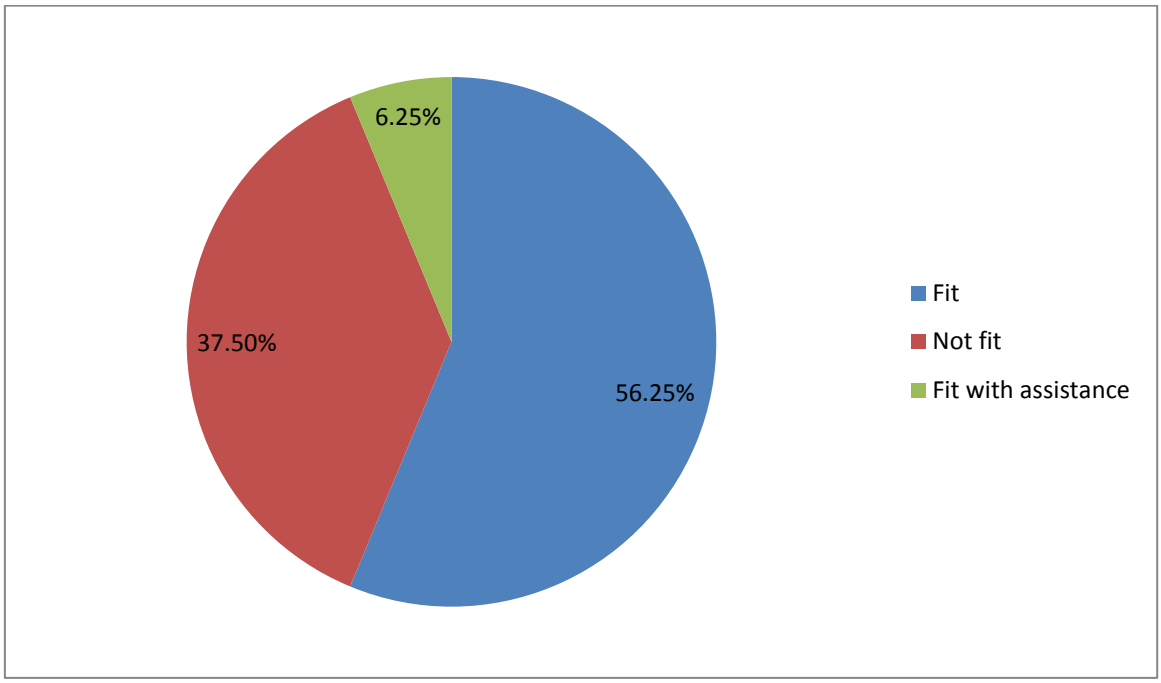

Figure 4.7: Distribution of the observandi regarding fitness to stand trial

4.3.3.4 Criminal Responsibility

Seventy five (58.59%) observandi were found criminally responsible, twenty (15.63%) were found not responsible on both legs, eighteen (14.06%) were found not responsible on the second leg (i.e. able to appreciate the wrongfulness of his/her actions but unable to act in accordance with the appreciation of the wrongfulness of the act), four (3.13%) were found to have diminished capacity on the second leg (i.e. diminished capacity to act in accordance with the appreciation of the wrongfulness of the act), and in eleven (8.59%) there was insufficient information available to comment on criminal responsibility.

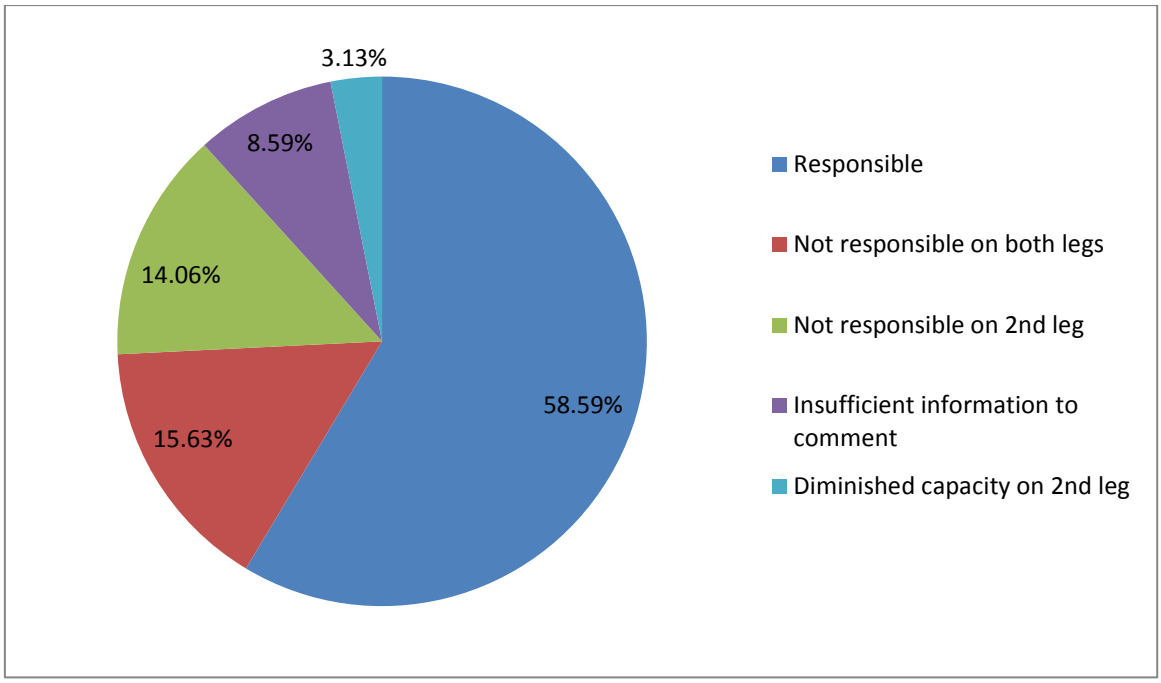

Figure 4.8: Distribution of the observandi regarding criminal responsibility

4.3.3.5 Outcome of the Diagnoses versus Fitness to Stand Trial

With regards to those with intellectual impairment, the majority (68.57%, n=24) were found not fit to stand trial, 20% (n=7) were fit, and 11.43% (n=4) were fit with assistance. Likewise, of those with psychotic disorders, most were not fit (70%, n=21) and 30% (n=9) were fit. Most of those with substance-related disorders (74.29%, n=26) were fit to stand trial, 2.86% (n=1) were fit with assistance, and 22.86% (n=8) were not fit to stand trial. Of those with comorbid psychotic and substance-related disorders, 50% (n=5) were fit and 50% (n=5) were not fit. With regards to mood disorders and dementia (or cognitive impairment), most (66.67%, n=2 and n=4 respectively) observandi were not fit to stand trial.

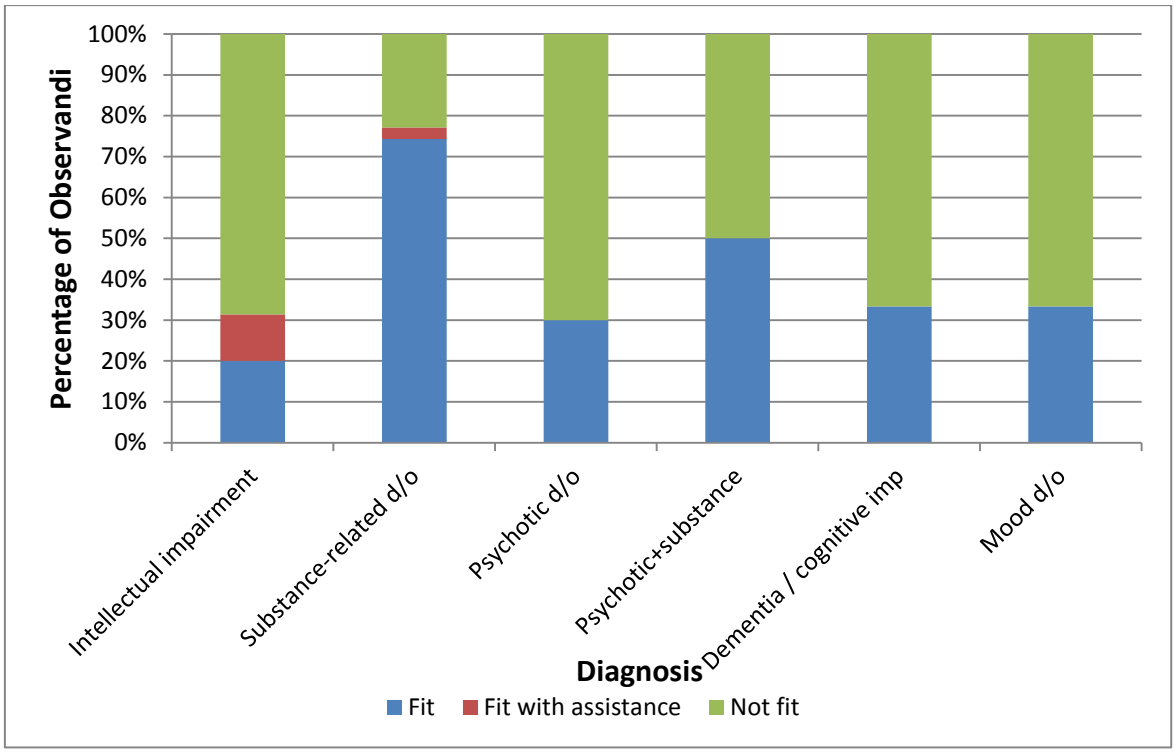

Figure 4.9: Diagnoses versus fitness to stand trial of the observandi

4.3.3.6 Outcome of the Diagnoses versus Criminal Responsibility

One third (33.33%, n=2) of those with dementia (or cognitive impairment) were found criminally responsible, along with 28.57% (n=10) of those with intellectual impairment, 65.71% (n=23) of those with substance-related disorders, 26.67% (n=8) of those with psychotic disorders, 30% (n=3) of those with comorbid psychotic and substance-related disorders, and 33.33% (n=1) with mood disorders.

Just over a quarter (25.71%, n=9) of the sample diagnosed with intellectual impairment, 8.57% (n=3) with substance-related disorders, 40% (n=12) with psychotic disorders, half (50%, n=5) with comorbid psychotic and substance-related disorders, and half (50%, n=3) with dementia (or cognitive impairment) were found not responsible on both legs.

Most of those who were found not responsible on the second leg had intellectual impairment (42.86%, n=15), along with 5.71% (n=2) of those with substance-related disorders, 10% (n=3) of those with psychotic disorders, 16.67% (n=1) of those with dementia (or cognitive impairment), and one third (33.33%, n=1) of those with mood disorders.

Another one third (33.33%, n=1) of those with mood disorders, and 2.86% (n=1) each of those with intellectual impairment and substance-related disorders, had diminished capacity on the second leg.

There was insufficient information to comment on criminal responsibility in 17.14% (n=6) of observandi with substance-related disorders, 23.33% (n=7) with psychotic disorders, and 20% (n=2) of those with comorbid psychotic and substance-related disorders.

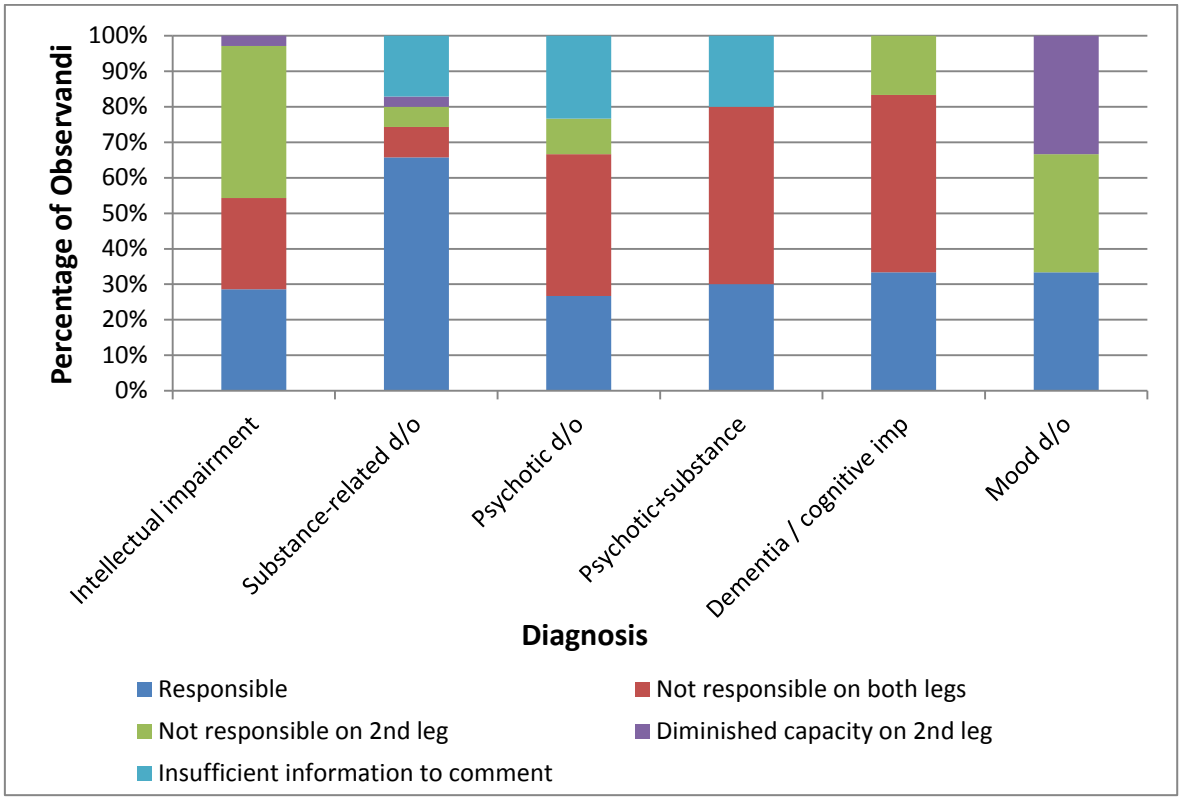

Figure 4.10: Diagnoses versus criminal responsibility of the observandi

4.3.3.7 Outcome of the Reason for Referral versus Fitness to Stand Trial

In cases where the accused was referred on request by the defence, he/she was found fit half (50%, n=5) of the time, fit with assistance 20% (n=2) of the time, and not fit 30% (n=3) of the time. Half of those observandi for which the reason for referral was unclear / not stated were fit and the other half were not fit (50%, n=3 each). Significantly higher associations were found between cases in which observandi themselves told the court that they were mentally unwell, or who were referred based on statements made by someone known to the accused that he/she was mentally unwell; and the accused being found fit to stand trial: 100% (n=7) of those who were referred due to their own claims of being unwell, and 69.39% (n=34) of those referred due to statements made by someone who knew him/her. Even where proof of mental or other illness was provided, he/she was still fit more often than not – 56% of cases (n=14) compared to 44% (n=11) being found not fit. The only time when the reason for referral was significantly more associated with being found not fit to stand trial was for those observations who were referred due to abnormal behaviour being directly observed either in court or by the investigating officer around the time of the arrest. This occurred in 58.06% (n=18) of cases.

($\chi^2 = 24.42$, $p = 0.003$)

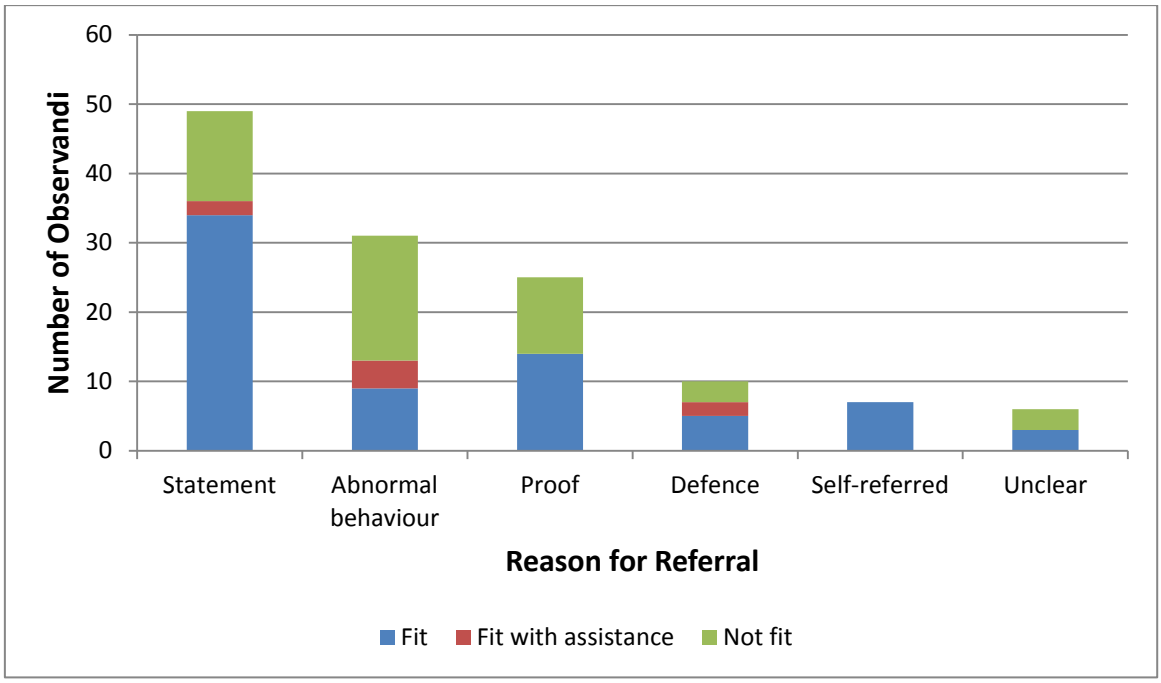

Figure 4.11: Reason for referral versus fitness to stand trial of the observandi

4.3.3.8 Outcome of the Reason for Referral versus Criminal Responsibility

The majority (73.47%, n=36) of those referred due to statements made by someone who knew them that they were mentally unwell were found criminally responsible. This was similarly the case for the other reasons for referral: 60% (n=6) of those referred by the defence, 35.48% (n=11) of those referred because abnormal behaviour was observed, 100% (n=7) of those who themselves claimed mental illness, and even the majority (52%, n=13) where proof of illness was provided.

With regards to being found not responsible on both legs, this occurred in 29.03% (n=9) of those referred because abnormal behaviour was observed by a member of the legal system, 10.2% (n=5) of observandi who were referred due to statements made by someone who knew him/her, and in none of the cases referred because the defence stated they had difficulty communicating with the

accused. Only 24% (n=6) of cases where proof of mental or other (relevant) illness was provided were found not responsible on both legs.

Of those referred due to statements made by someone who knew him/her that he/she was mentally unwell, 10.2% (n=5) were found not responsible on the second leg, along with one fifth (20%, n=2) of those referred on request by the defence, and 16.13% (n=5) of those where abnormal behaviour was observed. Again, only 16% (n=4) of those in which proof of illness was provided were found not responsible on the second leg.

The outcome of having diminished capacity on the second leg was found in 10% (n=1) of those referred due to the defence lawyer having difficulty communicating with the accused, 6.45% (n=2) of those in whom abnormal behaviour had been observed, and 4% (n=1) where proof of illness was provided.

In those cases where the reason for referral was not clearly stated, the observandi were found equally responsible, not responsible on the second leg, and without sufficient information to comment on responsibility.

When analysing these statistics, the outcome of “insufficient information to comment on criminal responsibility” was excluded from the analysis, as this category did not provide information that was relevant to the results.

Statistically significant associations were found between those who were assessed as being criminally responsible; and referred due to statements made by someone

who knew the accused (73.47%), by the defence due to difficulty communicating with the accused (60%), and all those who told the court that they were mentally unwell.

($\chi^2 = 25.23$, $p = 0.024$).

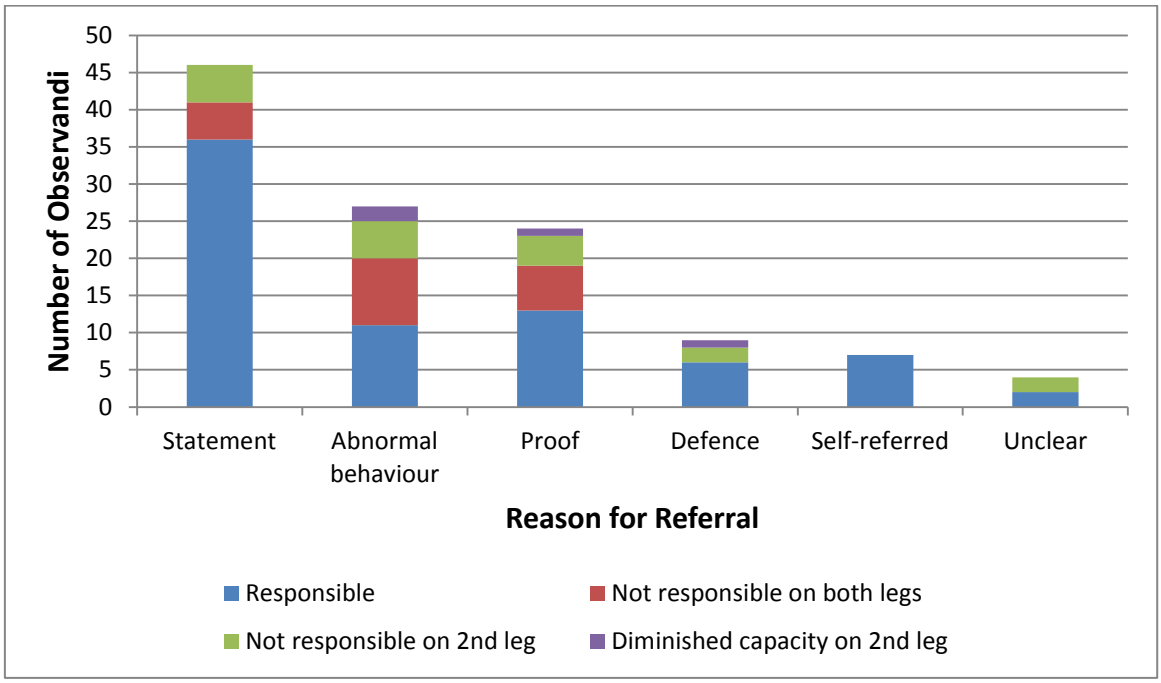

Figure 4.12: Reason for referral versus criminal responsibility of the observandi

5.0 DISCUSSION

5.1 Characteristics of the Study Population

Only one female made up part of this study population, similar to the study of forensic sex offenders by Novak *et al*.[23] Males are generally considered to have a higher rate of committing a sexual offence than females, and also are generally charged more easily and frequently than a female would, for committing a sexual offence. The majority of studies reviewed[5,7-16,18,19,22,25-31,41,67,73] looked at males only as offenders, or did not mention the gender of those in the population studied.[6,17,20]

The mean age of the observandi in this study was 31.58 years which compares closely with sex offenders in other studies.[5,14-19,22,23,25-28,41,67,70] In Smallbone and Wortley's study[41] of convicted child sexual offenders the mean age at the time of first child sexual offence conviction was 37.3 years, although the mean age at first sexual contact with a child was 32.2 years. Some of the factors known to be associated with violent behaviour in the general population include younger age, male sex and substance abuse.[58,65,74-76]

The majority of this population was black, followed by whites, and then coloureds and Indians. This reflects the racial distribution of South Africa, with our population being predominantly black, followed by whites, coloureds and Indians. The only other African study[22] found on sex offenders, carried out in Kenya, did not comment on race. In most American studies[5,9,11,15,16,18,23,26,67] (with the exception of Packard and Rosner's[8]) white males encompassed the majority of those samples,

followed by blacks, and the remainder falling under other minority population groups, reflecting America's racial distribution.

Similar to other sex offender studies,[5,8,17,20,22,23,25,28] most of the population in this study were single. A high proportion of single individuals might be accounted for by the presence of mental illness or intellectual impairment, with their associated stigma,[77,78] and which is known to impair social functioning; and the high rate of substance abuse which potentially also causes problematic relationships.[79] Likewise, the majority of the sample had no children. Other studies reviewed did not report on the number (or existence) of children of their study populations, except the study by Harsch *et al*[20] which reported that about half of the sex offenders in their forensic psychiatric population and about 15% of imprisoned sexual offenders had a "child in care".

Most of the individuals in this sample had some form of high school education, though did not complete high school. Only one individual had a tertiary level of education. A somewhat large number had received no education at all, and a significant number had received special education (as supported by the number of individuals diagnosed with intellectual impairment). These findings are similar to those of Kanyana *et al*[22] in Kenya, which is to be expected, as both South Africa and Kenya are lower/middle income countries whose socio-economic statuses have direct bearing on their education systems, often with inadequate schooling facilities. In South Africa this is especially relevant in cases where individuals have grown up in rural or (under the apartheid government) previously socio-economically disadvantaged areas. In those cases where the level of education

was not known, this might have been due to the individual being mentally unwell and being unable to give this information during the observation process. These results are in stark contrast to American studies reviewed[5,15,16,26] where the majority of samples of sex offenders had completed high school or had some form of college education, and only a small number did not complete high school. Low socio-economic status and level of education, prevalent in this study, are factors often associated with violent crime including sexual offences.[16,22,43,58,65]

The majority of this population was unemployed at the time of the alleged offence. This figure is partly a reflection of the high level of unemployment suffered by most South Africans. From January 2007 to December 2009 the unemployment rate in South Africa ranged from 23.5% to 24.2%.[80] Informal employment, in this country, is commonly referred to as “piece jobs” and may include temporary domestic workers, gardeners and street vendors. A lower level of education, and the high prevalence of mental disorders and intellectual impairment in this study, may also be contributing factors to the high level of unemployment.

In this study, about 45% of the observandi knew their victims, while in a further 39% of cases the relationship between victim and accused was not stated. It was therefore not possible to draw conclusions about which type of victim-perpetrator relationship was the predominant one. One South African study[33] found that the majority of perpetrators of female child sexual abuse were acquaintances or relatives who came from outside the nuclear family. LoBaido[4] stated that police research conducted indicated that perpetrators were known to their victims in 83% of sexual abuse cases. Peugh and Belenko,[67] in their study of substance abuse in

incarcerated sex offenders, found that those who used substances were less likely to have known their victims. Dunsieth *et al*[5] and Kanyana *et al*,[22] in their studies of convicted male sex offenders, found that 38% and 2.6% of their samples respectively had committed incest. Pierce and Pierce[81] reported that boys are often abused by a step-father, whereas girls usually by their biological fathers. Smallbone and Wortley[41] found that in their sample of 207 males convicted of sexual offences against children, 47% were classified as intra-familial, 35% as extra-familial, and the remaining 18% as mixed-type offenders. Lodico *et al*[37] found that there is a higher prevalence (and more frequent reporting) of extra-familial abuse relative to intra-familial. Both these studies[37,41] differentiate between extra- and intra-familial abuse, and not relative/acquaintance versus stranger abuse. Snell and Godwin[38] reported that acquaintance rape occurs more frequently than stranger rape. Tong *et al*[82] also quoted Finkelhor's findings that the psychological impact of abuse is more severe when the perpetrator is known to the child.

5.2 Data Relating to the Victims

The youngest victim was a nine-month old infant, known to the accused. Rape of babies in South Africa is in fact not an uncommon occurrence.[4] The mean age of the victims was about 8 years old. The majority of the victims were female (as is the trend worldwide),[36,37] and males made up 12.86% of victims in this study. The now broader definition of rape, according to the amended Sexual Offences and Related Matters Act,[1] allows for the identification and inclusion of sodomy of males as a serious issue, a plight which might have received inadequate attention in the past, as the focus had remained largely on females. This is of benefit for male

victims who may now benefit from programmes which might not have been previously commonly available. However, females are still more likely to report, and be victims of, sexual abuse than males.[33,36,37] Tong *et al*[82] found that boys are more likely to be victims of sexual assault by a stranger, whereas girls more often by a relative or acquaintance.

5.3 Forensic Information

5.3.1 Charges Against the Observandi

Of the 108 subjects charged with rape, three had been charged with two counts of rape, and two were charged with four counts of rape. Of the nine subjects charged with sexual assault, one had been charged with three counts of sexual assault. Another had been charged with one count of rape and one count of sexual assault. Each of the charges here pertained to a separate victim. In Smallbone and Wortley's study[41] the mean number of self-reported victims for their sample was 5.79 and the median was two. They found that multiple-victimisation was accounted for by a small number of chronic/serial offenders. Dunsieth *et al*[5] found that men with paraphilias (half of whom had paedophilia) had a higher number of victims. The current study does not indicate the total number of victims that the accused might have had prior to his/her arrest – rather, it indicates only what he/she has been charged with, i.e. what has come to the attention of the SAPS.

5.3.2 Reasons for which an Accused may be Referred for Forensic Psychiatric Observation

In this study, most individuals were referred for forensic observation based on a statement made to the court by a family member or someone known to the

accused, that he/she (the accused) was suffering from a mental illness, was on psychiatric treatment, previously had a psychiatric admission, or gave some history of having observed abnormal behaviour.

The next most common reason for being sent for observation was when the accused was observed, during the legal process, by one of its members (other than the defence lawyer), to have behaved in a strange manner during or before court proceedings.

In only about 20% of cases was there proof provided, in the form of documentary evidence, either in a letter from a health care professional, or on referral from a doctor in prison. This usually pertained to the accused having been treated for mental illness, having received special education for intellectual impairment, or in other instances where, for example, he/she had sustained a head injury.

In about eight percent of cases, the defence lawyer could not properly communicate with the accused, and he/she therefore suspected mental illness and requested an observation. This reason for referral was at times difficult for the psychiatrist to interpret, as being “unable to communicate” was usually not elaborated on or more clearly defined/described by the defence.

“Self-referred” here refers to those cases where the accused him/herself told the court that he/she had been diagnosed with a mental illness, had been hospitalised for mental illness, had been on treatment for mental illness, or even that he had

heard voices telling him to commit the offence; and was therefore sent for observation.

In a few cases, the reason for referral was not stated on any of the forensic documents. This is not a common occurrence. However, when it does occur, this often lends some difficulty for the psychiatrist responsible for the observation, as time is wasted trying to determine the reason for referral, especially in those observandi where there are no apparent or obvious signs of mental illness.

A South African study by Schutte and Subramaney,[83] comparing the outcomes of 'single' versus 'panel' observations, found strikingly similar results with regards to the reasons individuals were referred for observation. In their study, the most common reason for referral was due to odd or abnormal behaviour observed in court or custody 30% of the time, followed closely by the family of the accused providing oral evidence 28% of the time, documented proof of psychiatric condition 21.5% of the time, attorney being unable to consult with accused 11.5% of the time, the accused him/herself stating that he/she was mentally unwell 7.5% of the time, and unknown reason for referral 1.5% of the time.

5.3.3 Outcomes of the Observation Process

5.3.3.1 Diagnoses

Together with intellectual impairment, one of the other most common diagnoses was related to the use of substances, that is substance abuse (22.66%, n=29), substance dependence (0.78%, n=1), substance-induced mood disorder (0.78%, n=1), substance-induced psychotic disorder (2.34%, n=3), and substance-induced

dementia (0.78%, n=1). The commonest substances abused were alcohol and cannabis – a finding similar to those in other studies.[15,16,22,67] In contrast to the current findings regarding substance use disorders, Leue *et al,*[17] in their study of mental disorders in a forensic sample of sexual offenders, found higher rates of substance dependence than substance abuse. In a South African study by Calitz *et al*,[84] of individuals undergoing observation in the Free State, substance-induced disorders were diagnosed in less than five percent (similar to the current study where substance-induced disorders comprising mood, psychosis and dementia collectively were 3.9%), and the authors also found that 20.4% of the sample was under the influence of alcohol and 23% under the influence of cannabis at the time of the offence. Peugh and Belenko[67] found that two thirds of incarcerated sex offenders were under the influence of substances at the time of the offence. The current study does not, however, investigate whether the accused was under the influence of a substance(s) at the time of the alleged offence.

High rates of substance use disorders, ranging from 55% to 85%, have been found in sex offender studies.[5,14-17,20,22,23,67] Substance problems are known to impair judgement and increase the likelihood of violent behaviour.[58] Some studies[17,20,67] also showed that the consumption of substances at the time of the offence was a relevant factor. On the other hand, in contrast to the high rates quoted, and similar to the current study, studies of observation subjects or awaiting-trial detainees had lower rates of substance use disorders – 4.2%,[8] 7.2%[6] and 17.1%,[85] but stated that "alcohol, even without alcoholism, plays a major role in these (child molestation) offences."[6] It is also important to remember that Henn *et al*[6] and Packard and Rosner[8] did not incorporate substance abuse into their

results unless it was a primary diagnosis (i.e. it was not superseded by another major psychiatric illness). Henn *et al*[6] did mention, however, that alcohol and drug abuse was the most prevalent secondary diagnosis and was found in one third of the secondary diagnoses in their sample. A higher prevalence of substance abuse would have been reported in their studies had it been documented as a comorbidity.

Sex offender studies[5,14,17,19,20] have often excluded individuals with below-average IQ. However, in the current study, the other most common diagnosis (alongside substance-related disorders) was related to the accused's IQ. Of the 35 observandi diagnosed with intellectual impairment (27.34% of the total population), seven (20%) were classified as borderline IQ, with the rest being some other form of intellectual impairment, i.e. mild, moderate, severe or unspecified intellectual disability. A study by Day,[29] of mentally handicapped men referred to hospital for antisocial sexual behaviour, also found a similar prevalence of 23% for those with borderline mental handicap. Individuals with intellectual impairment (depending on their level of impairment) are often not fully aware of societal norms and laws, often lack adequate sexual knowledge, have poor relationship skills, poor judgement and impulse control, and may even be influenced by others.[21] All these factors may be relevant in the commission of a sexual offence. Lund[68] stated that there is a slightly increased incidence of crime among the mild and borderline intellectually impaired, and a clearly decreased incidence of crime among the more severely impaired.

Henn *et al*,[6] in their sample of sex offenders referred for psychiatric evaluation, found that 13.5% of child molesters had mental retardation. Calitz *et al*,[84] who studied various types of offenders referred for observation, found that only 8.5% of their study population was mentally handicapped, a relatively low number compared to the current study. This might suggest the possibility that those with sub-normal intelligence are more prone to sexual rather than other types of offences. However, Bengtson and Lund[42] found that severely intellectually disabled sex offenders had lower rates of sexual recidivism than less disturbed offenders. Day[29] also suggested that, in the majority of cases, mentally handicapped sex offenders usually offend by circumstance and opportunity rather than due to sexual preference. Studies[29,68] have suggested that community policies such as de-institutionalisation and inadequate/inappropriate community-based services have also resulted in higher convictions for the intellectually disabled.

While violent behaviour is uncommon, yet problematic, among schizophrenia patients,[65] schizophrenia is generally associated with higher rates of inter-personal violence than other major mental disorders.[43] A large number of diagnoses in the current study (almost 25%) were due to psychotic disorders – either psychotic disorder NOS or schizophrenia (either stable or psychotic). A diagnosis of psychotic disorder NOS was largely made where time restriction of the observation process, or inadequate information, did not allow for a more specific diagnosis to be made. Similar to this result, Packard and Rosner,[8] in their evaluation of defendants charged with sexual offences in a forensic clinic, found that 17.9% were diagnosed with a psychotic disorder. However, in a similar type of study,

Henn *et al*[6] founder a lower rate of 10.8% for schizophrenia and schizoaffective disorder in child molesters. Combining their results with other sex offenders evaluated, they suggested that "psychosis in no way predisposes an individual to sexual assault… and that the incidence of psychosis among pedophiles in general is very low".[6] Novak *et al*[23] found a 53% prevalence of schizophrenia and schizoaffective disorder in a sample of hospitalised child molesters found not guilty by reason of insanity. Raymond *et al*,[15] who examined paedophilic sex offenders, found only a 2% prevalence of psychotic disorders. Kafka and Hennen[16] studied male outpatients with paraphilias or related disorders, and found that five subjects (4.1%) were diagnosed with "psychosis" (all in the group of paedophiles). This small number may be accounted for by the fact that these individuals were probably relatively stable, as can be seen from the fact that they were all outpatients.

With regards to children, Lewis *et al*[7] examined a group of incarcerated male juvenile sexual assaulters for psychiatric symptoms (rather than diagnoses) and found auditory hallucinations in 46.7%, olfactory and/or gustatory hallucinations in 18.8%, paranoid symptoms in 73.3%, and formal thought disorder in 70%. In the current study, no psychotic disorders were diagnosed in subjects under the age of 18 years.

In a German forensic study of sex offenders by Leue *et al*,[17] those with a history of psychosis (12 out of the total of 141) were excluded from the study. Another German study by Harsch *et al*,[20] of sex offenders in forensic psychiatry and prison, excluded those with "schizophrenia spectrum psychosis". Dunsieth *et al*[5] also

excluded subjects with active psychotic illness, but their results also did not reflect any lifetime psychotic disorder. Kanyana *et al*[22] found no psychotic disorders present in their study of convicted Kenyan sex offenders.

Only a few subjects (2.34%) were diagnosed with bipolar disorder in this study, and none of the subjects were diagnosed with depressive disorders. This is in keeping with other studies of observation samples which also found low rates of mood disorders: 2.1% of sex offenders by Packard and Rosner,[8] 1.8% of child molesters by Henn *et al*[6] (type of mood disorder not specified in both studies), and less than five percent diagnosed with bipolar disorder in the Free State observation study.[84]

The Kenyan study[22] of incarcerated sex offenders found only depressive (and not other mood) disorders in 13.1%, and a German sample[20] of imprisoned sex offenders found a 10% prevalence of mood disorders (type not specified). These results are in contrast to some studies of convicted sex offenders which have reported very high rates of mood disorders, where the prevalence of having any mood disorder was 58% (of this total sample, about 35% and 24% had bipolar and major depressive disorders respectively)[5] and 61% (of which bipolar disorder was 36% of total sample).[14] Lewis *et al*,[7] studying incarcerated juvenile sex offenders, found depressive symptoms (but not necessarily depressive disorders) in 75% of their sample.

Novak *et al*[23] found that mood disorders (type not specified) were the primary diagnosis in 19%, and the secondary diagnosis in 6%, of their sample of

hospitalised child molesters found not guilty by reason of insanity. In two German forensic samples of sex offenders, one study[17] found that 30% of paraphilia patients (60% of these were paedophiles) had “any mood disorder”, 30% had major depression, and 7% had dysthymia; while the other[20] reported a lower rate of 7.5% of their sample having a mood disorder (type not specified).

Raymond *et al*[15] reported a lifetime prevalence of 67% for mood disorders in a group of paedophilic sex offenders. Major depression, found in more than half of their sample, was the most common diagnosis. In Kafka and Hennen’s study[16] of subjects with paraphilias (of which 16.6% had paedophilia), mood disorders were the most common Axis I diagnoses (71.5%), made up mostly of dysthymic disorder, followed by major depression and then bipolar disorder.

It appears from the studies reviewed that observation samples generally tend to reflect lower rates of mood disorders than do other (convicted,[5,7,14,20,22] forensic[17,20] and outpatient[15,16]) samples. One reason for this might be that during psychiatric court-ordered evaluations, the assessing psychiatrist might not focus on the presence of lifetime disorders, but rather what is more relevant (and therefore current) to the outcome of the evaluation in terms of fitness to stand trial and criminal responsibility. Disorders such as dysthymia and mild to moderate depression, highly prevalent in some of the studies reviewed here, would usually not impact on fitness and responsibility, and hence might not be actively sought out or reported on. Furthermore, it is quite likely that depressive disorders develop in individuals after they have been incarcerated.

Dementia or cognitive impairment (excluding those that were substance-induced) was diagnosed in 4.69% of this sample. Three out of the 128 observandi were sixty years and older. Two of these had at least one of their diagnoses being dementia, and the other was diagnosed with a psychotic disorder. All three were found not fit to stand trial, one was not responsible on both legs, another on the second leg, and in the third there was insufficient information to comment on responsibility.

Demented patients exhibit symptoms of disinhibition, socially inappropriate behaviour, impulsivity and impaired judgement, which could all well lead to the commission of a sexual offence. However, this is not a diagnosis that is common to most sex offender studies. Some reasons might be that certain studies[5,14-17,20,22] require that subjects give informed consent to participate, and other studies[16,20,25] specifically exclude individuals with dementia, "neurological disabilities" and "mental handicap" (although the latter terms were not always clearly defined). Further, this may also be due to the fact that older people (in whom one would expect a higher prevalence of dementia) are only responsible for a small portion of total crime.[86,87]

However, there has been an association demonstrated between dementia and criminal behaviour.[88,89] In a study[88] of 44 demented subjects, five (11.36%) displayed hypersexual behaviours that would constitute sexual offences. A study by Lewis *et al*,[87] of a group of geriatric subjects referred for forensic evaluation for various crimes, found that 8.1% were charged with a "lewd act on a minor" and a

further 10% for other sexual offences. Of their total sample, 44.4% were diagnosed with dementia.

In another study[6] of forensic evaluations, 14.4% of child molesters were diagnosed with "organic brain syndrome" (the most frequently occurring diagnosis, after paedophilia, in this group), compared to 2.9% who had been charged with rape or attempted rape (of adults). From this, it would seem that the cognitively impaired may be more likely to offend against children rather than adults.

In this study, twenty subjects were minors themselves. Of these, one (5%) had a substance-related disorder (substance abuse), six (30%) were diagnosed with conduct disorders or features thereof, half (50%, n=10) had intellectual impairment, and none were diagnosed with mood or psychotic disorders. Statistics show that many sexual offences are committed by juveniles,[7,11] and that risk factors such as "delinquency" may play a role.[90] A study of outpatient male adolescent sex offenders, by Kavoussi *et al*,[30] found that conduct disorder was the most common diagnosis in this group, followed by substance abuse in more than 10%, but that none met full criteria for major mood or psychotic disorders; whereas Galli *et al*[13] found a prevalence of 94% for conduct disorder, but also high rates of paraphilias, mood, anxiety, impulse-control, substance use and attention deficit hyperactivity disorders, in their sample of adolescents who sexually molested other children. Awad and Saunders[31] assessed 29 male adolescent child molesters, and found that 45% displayed antisocial behaviours. Lewis *et al*[7] also found that juvenile sex offenders display various antisocial behaviours since childhood. It may therefore be suggested that adolescent patients who present

with conduct disorder or features should be further assessed for evidence of untoward sexual behaviour.

Personality disorders, especially antisocial and borderline, are closely linked to violence; and sexual offences are a prevalent finding amongst this group.[53,91] In the current study, only four subjects (3.13%) were diagnosed with personality disorders or traits thereof (all antisocial). Other forensic observation studies have found higher rates – 43.2% as the primary diagnosis in one sample[8] of sexual offenders (8.4% being antisocial), and 14.5% in another sample[6] of child sexual offenders (6.4% antisocial). However, Henn *et al*[6] noted that PDs were not the predominant diagnoses in their group of child molesters (versus their group who offended against adults). Higher rates of up to 87% have been reported in other studies[5,14,17,20,22,23,25] of sex offenders, with cluster B PDs, especially antisocial, being the most prevalent, ranging from 27% to 72%.

One reason for the low rate of PDs diagnosed in the current study might be that they were not recorded, since they are not generally considered, in South Africa[92] (and internationally[93]), to impair fitness or responsibility. This is due to the intact reality testing found in such patients. Related to this, clinicians may be reluctant to document this diagnosis on their reports to the courts, as the term “disorder” may be misinterpreted to mean an illness that impairs fitness and/or responsibility. Furthermore, it is possible that individuals with personality disorders may be less likely to be referred as they may not display obviously abnormal behaviour to the court, such as those seen in, for example, psychotic, manic or demented patients.

Relevant general medical conditions diagnosed in 7.81% of subjects were stroke, head injury and epilepsy. Having a GMC, especially one that is neurological in nature, may very well impact on an individual's mental state,[94] hence this was important to take into account. Strokes may result in dementia, which itself may lead to violent behaviour, including sexual offences. Likewise, head injury (taking into account factors such as localisation and severity) may also result in personality changes, disinhibition, poor judgement, impulsivity, and socially inappropriate and sexually aggressive behaviour.[94,95] Pardini *et al*[96] found that patients with lesions in the pre-frontal cortex, compared to other brain areas, displayed higher levels of aggression. With regards to epilepsy, targeted/intentional violence is not present during the ictus itself, but it should be borne in mind that such patients may experience inter-ictal psychosis, which may lead to violent offences.[97] There has also been a long-standing controversy about the association of epilepsy with violence, although Fazel *et al*,[98] in a systematic review and meta-analysis on epilepsy and traumatic brain injury, found epilepsy to be inversely associated with violence, while traumatic brain injury increased the risk of violence.

Henn *et al*[6] found that 7.2% of child molesters in their study had no diagnosis, and Packard and Rosner[8] also found no mental disorder in 4.2% of their sample. In the Free State study[84] looking at all observations (various charges) between 1995 and 2001, more than half the sample had no diagnosis. The current study falls somewhere in-between – twenty six (20%) had no diagnosis and ten (7.81%) were found to be malingering.

It is interesting to note the large number of mood, anxiety and paraphilic disorders, (and the relative absence of psychotic disorders) diagnosed in other study populations[5,11,13-17,19,20,22] in comparison to this study, which revealed a small number of diagnosed mood disorders, no paraphilias nor anxiety disorders, and a significant number of psychotic disorders. Individuals with paraphilias and anxiety disorders would not usually be referred for forensic observation, as these, like personality disorders, are not generally considered to be serious mental illnesses that would impact on fitness and responsibility in terms of the CPA.[71] The findings in the current study are very similar to the forensic observation studies of Henn *et al*[6] and Packard and Rosner.[8] With regards to paraphilias, it is also highly possible that subjects would deny symptoms of deviant behaviour to the clinician, or it might be that these (and anxiety disorder) diagnoses were not specifically looked for as they do not usually affect fitness and criminal responsibility. It must also be borne in mind that all of the previous studies highlighted (with the exception of Henn *et al*[6] and Packard and Rosner[8]) did not look at forensic observation populations, but were mostly studies of convicted sex offenders, in which one would be less likely to find psychotic subjects. (One would assume that these offenders already would have been found not fit and/or not responsible, and hence be detained in medical facilities, not prison populations).

5.3.3.2 Comorbidity

With regards to comorbid diagnoses, psychotic disorders and substance-related disorders were the most common combination, followed by substance-related disorders and personality disorder/traits. Fazel *et al*[63] concluded that the association between schizophrenia and violence is minimal and strongly

attenuated by the presence of comorbid substance abuse. Similar findings have been replicated in other studies.[44-47,53,58,61,62,65] Steadman *et al*[64] found that the one-year prevalence rates for violence was 18% in non-substance abusing mentally ill patients, 31% in patients with comorbid mental illness and substance abuse, and 43% in patients with comorbid personality and substance use disorders. Rueve and Welton,[58] in their review of violence and mental illness, concluded that "individuals with mental illness, when appropriately treated, do not pose any increased risk of violence over the general population" and that "violence may be more of an issue in patients diagnosed with personality disorders and substance dependence". This was similar to the findings of Coid *et al*[54] who reported that substance dependence and antisocial PD substantially increased the risk of violence, while a diagnosis of psychosis did not. This was further supported by Fountoulakis *et al*[91] who stated that the relationship between antisocial PD and violence was strengthened by the presence of alcohol or substance abuse. From studies highlighted here, it is evident that comorbidity increases the risk for violent behaviour.

As seen by these findings, the challenge of substance abuse (and its related problems) remains a huge difficulty globally. Comorbidity with other psychiatric disorders, both Axis I and Axis II, is also frequently encountered.

5.3.3.3 Fitness to Stand Trial

The majority of these observation cases (62.5%) were found to be fit to stand trial or fit with assistance, and 37.5% were found not fit to stand trial. Fit with assistance, a poorly defined, and now infrequently used term, refers to those

observandi who, for example, may have milder forms of intellectual impairment or cognitive impairment, and on initial evaluation appear not to be able to understand or follow court proceedings. However, with assistance from their legal representatives, in terms of explaining court proceedings in a simple and clear manner, these individuals will be able to follow court proceedings and assist in their defence.

Schutte and Subramaney[83] found that 67% of individuals charged with panel observations (i.e. serious offences including sexual offences) were found fit to stand trial. Henn *et al*[6] also found that the vast majority of child molesters (82%) in their study were competent, as was the majority (55.6%) of sex offenders in Packard and Rosner's study.[8]

5.3.3.4 Criminal Responsibility

Almost 60% of the observandi in this study were found criminally responsible. This was followed in descending order by being not responsible (on both legs), not responsible on the second leg, having diminished capacity on the second leg, and in 8.59% there was insufficient information available to comment on responsibility.

Likewise, Schutte and Subramaney[83] found that the majority (65%) of those referred for serious offences (including sexual offences) were found criminally responsible. Henn *et al*[6] found that 76% of child molesters in their sample were responsible.

Diminished capacity on the second leg refers to those individuals who could appreciate the wrongfulness of their actions, but had diminished capacity with regards to being able to act in accordance with that appreciation (as opposed to being "unable" to act in accordance). This was stated where there was an illness/disorder present that could be viewed as a mitigating factor in sentencing, and was usually used in those individuals with milder forms of intellectual impairment or cognitive impairment. Just over three percent of alleged offenders in this study were found to have diminished capacity, similar to the finding of 4.9% in the study by Calitz *et al*.[84]

"Insufficient information to comment on criminal responsibility" is usually recorded where there is a lack of information from the prosecutor's office, e.g. where there is an absence of contact details to gain collateral/insight into the accused's behaviour/mental state at/around the time of the offence, or in cases where collateral information was obtained but was still deemed to be inadequate to make an evaluation on responsibility. In such cases, the psychiatrist may state that, should further information become available at a later stage, responsibility may then be commented on. This is a rare occurrence, but can be problematic in cases where, for example, an individual with a psychotic disorder in remission may be found fit to stand trial, but it is unclear if he/she was psychotic or not at the time of the offence.

5.3.3.5 Outcome of the Diagnoses versus Fitness to Stand Trial

Most of those with intellectual impairment were found not fit to stand trial. Due to an individual's sub-normal IQ, especially in those cases that fell within the more

severe range, one can understand his/her difficulty in following court proceedings and inability to assist with his/her defence. A small number were found fit or fit with assistance. These were usually those individuals who fell in the borderline IQ or mild intellectual disability category. Those with a diagnosis of psychosis (who were actively/currently psychotic), dementia or cognitive impairment, and mood disorder (in a manic episode) were mostly found not fit to stand trial due to their mental state at the time of observation. The majority of those with a substance-related diagnosis were fit to stand trial. This is likely due to the high number of individuals diagnosed with substance abuse, or even those with substance-induced disorders (such as substance-induced psychotic disorder) which were in remission.

Understandably, observandi with diagnoses such as conduct and personality disorders were found fit to stand trial, as being diagnosed with such a condition does not impair one's ability to follow court proceedings and assist in his/her defence.

5.3.3.6 Outcome of the Diagnoses versus Criminal Responsibility

In those with intellectual impairment, most were found not responsible on the second leg. A similar pattern is seen in those observandi with dementia or cognitive impairment. The reason for this, as can be expected, is that although these individuals may have sufficient cognitive capacity to differentiate between right and wrong, they often have poor judgement and impulse control, and therefore lack volition for their offences. However, those diagnosed with borderline IQ, mild intellectual disability or mild cognitive impairment, were usually found responsible. The majority of those diagnosed with a psychotic disorder were found

not responsible on both legs. This was largely based on collateral from family members, or treating doctors in those with a previously diagnosed illness, that the accused was unwell/psychotic at/around the time of the alleged offence. This was similarly the reason for those individual diagnosed with mood disorders, who were found not responsible on the second leg. Substance-related disorders (making up the majority of diagnoses in this study) did not automatically render one a "free pass", as these observandi were mostly found criminally responsible. Further, the majority of these diagnoses were that of substance abuse, which would not impair responsibility.

Despite the significant presence of Axis I and Axis II diagnoses in this study, the majority of the observandi were found overall to be fit to stand trial and criminally responsible. Having a psychiatric diagnosis does not necessarily negate one's ability to follow court proceedings and assist in his/her defence, nor does it always preclude one from distinguishing between right and wrong, and acting in accordance thereof. This can also be seen in studies[5,7,11,14,15,18,20,22,25,61,67] where significant numbers of the studied population did meet criteria for an Axis I and/or Axis II diagnosis, but were found to have been convicted, not hospitalised.

5.3.3.7 Outcome of the Reason for Referral versus Fitness to Stand Trial

Similar to the study by Schutte and Subramaney,[83] the most reliable reason for referral, i.e. cases where the accused was found not fit for trial, appears to be in the instance where abnormal behaviour or communication is directly observed by a member of the legal process themselves e.g. a policeman, investigating officer, or magistrate; but not including the defence attorney. It is difficult to understand

what problems the defence attorney encountered when communicating with his/her client, as most of these individuals (70%) were inevitably found fit (or fit with assistance) to stand trial. Language barriers encountered by the psychiatrist during the observation period have often been found to be a simple reason as to why there might have been a breakdown in communication between a lawyer and client. Further, as cautiously suggested by the above authors,[83] perhaps referring an accused for psychiatric observation may be a tactic in defending difficult cases.

In the current study, in most other instances, and surprisingly even when evidence of mental (or other relevant) illness was provided, most observandi were still found fit to stand trial. Proof of illness obtained from health care facilities usually merely states that the individual has been diagnosed with a certain illness, and that he/she might have been on treatment. His/her mental state is generally not commented on. Another assumption might be that individuals who were able to provide such proof were in fact regular patients at these facilities that provided such proof; and hence if they had been regularly following up, they were more likely to have been compliant on treatment and therefore remained well/stable. As can be seen, all of the cases where the accused him/herself reported to the court that he was mentally unwell, and almost 70% of cases who were referred because of statements made by someone who knew the accused, were found fit to stand trial. One may consider from this that individuals should not be referred for psychiatric observation merely due to unsubstantiated information given by themselves to the court.

5.3.3.8 Outcome of the Reason for Referral versus Criminal Responsibility

In all categories defining the reason for referral, the majority of observandi were found criminally responsible for the alleged offence. In fact, for those cases which were referred due to their own statements, statements made by someone who knew them, or due to the defence counsel having difficulty communicating with the accused, there was a significant association with being found responsible.

One must wonder about the system of referring subjects for forensic observation. There is no set screening method/protocol for this currently, which means that almost anyone charged with any offence may be referred for an observation, based on almost any reason.

6.0 LIMITATIONS

Firstly, the sample size of 128 is probably not large enough on which to base generalised conclusions. Secondly, this being a retrospective study, the quality of record-keeping is always a factor to take into consideration. Certain information, albeit not crucial, was sometimes not present in the clinical files and therefore had to be excluded, for example, the highest level of education, or the accused's relationship to the victim.

Although it is ultimately the psychiatrist who finalises the report to the court, it is noteworthy that rotating registrars and psychologists, at various stages and levels of experience as part of their post-graduate training, also assist in assessments. The diagnoses in this study were chart diagnoses and therefore dependent on the skill of the clinician. Standardised diagnostic tools are not (and should not be) employed during forensic evaluations.

Commenting on criminal responsibility is also done in retrospect (as opposed to fitness to stand trial) and, at times, may be an instinctive subjective decision or weighing up of probabilities, in cases where information gathered may be conflicting.

This study does not investigate if the accused was under the influence of a substance(s) at the time that he/she allegedly committed the sexual offence. Such findings may lend credence to the fact that substances may play a contributory role in sexual offences.

Information regarding the victim was also dependent on the accuracy of reports from the prosecutor's office, and was often found to be lacking. In many instances, the age of the victim was not stated, hence that particular subject could not be included in the sample, as it could not be determined if the victim was a child or adult. Therefore, potential cases of sexual offences against minors had to be excluded.

In many cases, the charge was not properly/accurately stated as per the amended Sexual Offences Act of 2007,[1] e.g. a person accused of rape of a male was still (incorrectly) being charged with "indecent assault", and unless a clear report or J88 was provided, in some instances it could not be determined what the actual/correct charge was.

The study takes into account only those individuals who have been referred for an observation, while certainly there would be others in whom mental illness (if it exists) has been missed. Hence this study may not accurately represent all individuals charged with sexual offences against minors.

It is also important to keep in mind that this is a study of alleged sex offenders, i.e. individuals who have only been charged with, but not yet convicted of, a crime. Some may ultimately be found not guilty. Therefore this study does not reflect the profile of confirmed sex offenders (either by being convicted/found guilty, or their own admission), and it is therefore difficult to draw comparisons of this sample with most other studies reviewed.[5,7,13-16,18,20,22,24-26,28,30,31,41,61,67,70] Similarly, comparisons cannot be drawn with studies[5,14,15,17,19,20,23,29,99-101] of sex offenders

admitted to hospitals or other treatment programmes. However, as stated by Taylor and Gunn,[85] an advantage of this type of study is that the extremes of violence and mental illness, found in prisons and hospitals respectively, may be more restricted/balanced in a sample of detainees who are awaiting trial.

7.0 RECOMMENDATIONS

Despite the majority of the studied population being found fit to stand trial and/or criminally responsible, there remains a significant number of Axis I and Axis II psychiatric diagnoses, especially substance-related disorders and intellectual impairment, in this study.

Recognising and treating psychiatric disorders (including substance-related disorders such as abuse and dependence), which may or may not have directly led to the commission of an offence, may assist in reducing the risk of recidivism. Comorbidity also increases the risk of recidivism, and ignoring the treatment thereof may also result in treatment disengagement, a dynamic risk factor known to be associated with sex offender recidivism.[32] Both pharmacological and psycho-therapeutic measures should be used where appropriate. Pharmacological treatment should be directed at treating the relevant disorder, and hormonal medication reducing hyper-sexual urges may also be utilised. These measures, together with special rehabilitation and psycho-education groups geared towards sex offenders, should also be employed in prisons, hospitals and even outpatient settings for those who have been released back into the community. Further, the availability of adequate community resources, such as structured and supervised day care facilities and sheltered employment, would be valuable for mentally disordered offenders.

Specifically for those with intellectual impairment, more education involving issues of sex and relationships would be beneficial as part of their special education in

special schools that they attend. Behavioural and, where possible, cognitive interventions should also form part of the management of those intellectually challenged individuals in which inappropriate sexual behaviour is of concern.

In psychotic, demented/cognitively impaired or mood disorder patients who are seen at community clinics, on review, special attention should be paid to symptoms such as libido, impulse control, these patients' social circumstances and contact with minors, and potentially harmful behaviours associated with their contact with children.

From the researcher's experience, it is noted that the waiting list for an individual to gain admission into a forensic psychiatric hospital is usually a long one, due to the shortage of resources in these units; and when it appears that the majority of these subjects are being found fit and responsible, it is worth considering a screening procedure for an accused to be referred. This would entail the accused being seen by a health professional with some psychiatric experience, before being referred to the hospital for observation. Such a person could assist in determining if a mental disorder which impacts on fitness and responsibility might be present, and if a referral is indeed warranted. This would help save on high monetary costs and manpower, and reduce the length of the observation waiting list for admission, that is required for longer, more formal assessments.

Another recommendation is that those working in the justice system, when referring individuals for observation, provide detailed information regarding the reason for referral, a clear description of the accused's seemingly "odd" behaviour,

and what exactly is meant by a defence lawyer having “difficulty communicating” with the accused, as often times it has turned out that the accused could not understand and respond appropriately merely due to a language barrier. Contact numbers to gather information from collateral sources, such as friends and relatives, is at times missing, and these result in delays and difficulties in concluding an assessment. Sometimes, the thirty-day observation period has to be extended due to these delays; and as seen in the results, at times it was still not possible to comment on responsibility due to insufficient information. In a resource-limited setting, every effort should be made to ensure a smooth and efficient observation process.

With regards to the victims, sexual abuse of children has long-lasting consequences. There should be more focus on campaigns psycho-educating the public on maintaining the safety of children, increasing their awareness of symptoms and signs of sexual offences in children, and encouraging the reporting of offences to police services. Physical and psychological/psychiatric support for the victims should be readily available and made known to the public.

More research is needed on sex offenders, which will also assist in creating more specific treatment and rehabilitation programmes for different types of psychiatric disorders and comorbidities in child sex offenders.

8.0 CONCLUSIONS

In this study it was found that a large number of individuals were referred yearly for forensic psychiatric observation after being charged with a sexual offence against a minor. Rape was the most common charge. Most of these individuals were found fit to stand trial and/or criminally responsible, and were sent back to the courts for continuation of their trials. However, a significant number were diagnosed with Axis I and Axis II psychiatric diagnoses, most especially substance-related disorders and intellectual impairment. It is recommended that these individuals receive rehabilitation and psycho-education into their illness and the consequences thereof.

9.0 REFERENCES

1. South Africa. Criminal Law (Sexual Offences and Related Matters) Amendment Act No. 32 of 2007. Government Gazette, 14 December 2007, Vol. 510, No. 30599.
2. South African Police Services. Annual Report on the Crime Situation in South Africa. 2009. Available: http://www.saps.gov.za [Accessed 01.02.2010]
3. Sadock BJ, Sadock VA. *Kaplan and Sadock's Synopsis of Psychiatry*. 10th edition. Lippincott Williams and Wilkins 2007: pp 705-708.
4. LoBaido AC. Child-rape epidemic in South Africa. World Net Daily. 26 December 2001. Available: http://www.wnd.com/2001/12/12139/ [Accessed 20.06.2013]
5. Dunsieth NW Jr, Nelson EB, Brusman-Lovins LA, Holcomb JL, Beckman D, Welge JA, Roby D, Taylor P Jr, Soutollo CA, McElroy SL. Psychiatric and legal features of 113 men convicted of sexual offences. *Journal of Clinical Psychiatry*. 2004 March; 65(3):293-300.
6. Henn FA, Herjanic M, Vanderpearl RH. Forensic psychiatry: profiles of two types of sex offenders. *American Journal of Psychiatry.* 1976 June; 133(6):694-6.
7. Lewis DO, Shankok SS, Pincus JH. Juvenile male sexual assaulters. *American Journal of Psychiatry.* 1979 September; 136(9):1194-6.
8. Packard WS, Rosner R. Psychiatric evaluations of sexual offenders. *Journal of Forensic Sciences.* 1985 July; 30(3):715-20.

9. Grossman LS, Cavanaugh JL Jr. Psychopathology and denial in alleged sex offenders. *The Journal of Nervous and Mental Disease.* 1990 December; 178(12):739-44.
10. Langevin R, Lang RA. Substance abuse among sex offenders. *Annals of Sex Research.* 1990; 3(4):397-424 [abstract].
11. Becker JV, Kaplan MS, Tenke CE, Tartaglini A. The incidence of depressive symptomatology in juvenile sex offenders with a history of abuse. *Child Abuse & Neglect.* 1991; 15(4):531-6.
12. Saunders EB, Awad GA. Male adolescent sexual offenders: exhibitionism and obscene phone calls. *Child Psychiatry and Human Development.* 1991 Spring; 21(3):169-78.
13. Galli V, McElroy SL, Soutullo CA, Kizer D, Raute N, Keck PE Jr, McConville BJ. The psychiatric diagnoses of twenty-two adolescents who have sexually molested other children. *Comprehensive Psychiatry.* 1999 March/April; 40(2):85-8.
14. McElroy SL, Soutullo CA, Taylor P Jr, Nelson EB, Beckman DA, Brusman LA, Ombaba JM, Strakowski SM, Keck PE Jr. Psychiatric features of 36 men convicted of sexual offenses. *Journal of Clinical Psychiatry.* 1999 June; 60(6):414-20.
15. Raymond NC, Coleman E, Ohlerking F, Christensen GA, Miner M. Psychiatric comorbidity in pedophilic sex offenders. *American Journal of Psychiatry.* 1999 May; 156(5):786-8.
16. Kafka MP, Hennen J. A DSM-IV Axis I comorbidity study of males (n=120) with paraphilias and paraphilia-related disorders. *Sexual Abuse: A Journal of Research and Treatment.* 2002 October; 14(4):349-66.

17. Leue A, Borchard B, Hoyer J. Mental disorders in a forensic sample of sexual offenders. *European Psychiatry.* 2004 May; 19(3):123-30.
18. Chantry K, Craig RJ. Psychological screening of sexually violent offenders with the MCMI. *Journal of Clinical Psychology.* 1994 May; 50(3):430-5.
19. Hoyer J, Kunst H, Schmidt A. Social phobia as a comorbid condition in sex offenders with paraphilia or impulse control disorder. *The Journal of Nervous and Mental Disease.* 2001 July; 189(7):463-70.
20. Harsch S, Bergk JE, Steinert T, Keller F, Jockusch U. Prevalence of mental disorders among sexual offenders in forensic psychiatry and prison. *International Journal of Law and Psychiatry.* 2006 September-October; 29(5):443-9.
21. Lindsay WR. Research and literature on sex offenders with intellectual and developmental disabilities. *Journal of Intellectual Disability Research.* 2002 May; 46 Supplement 1:74-85.
22. Kanyana IM, Othieno CJ, Ndetei DM. Psychiatric morbidity among convicted male sex offenders at Kamiti Prison, Kenya. *East African Medical Journal*. 2007 April; 84(4):151-5.
23. Novak B, McDermott BE, Scott CL, Guillory S. Sex offenders and insanity: an examination of 42 individuals found not guilty by reason of insanity. *Journal of the American Academy of Psychiatry and the Law.* 2007; 35(4):444-50.
24. Allnutt SH, Bradford JM, Greenberg DM, Curry S. Co-morbidity of alcoholism and the paraphilias. *Journal of Forensic Sciences.* 1996 March; 41(2):234-9.

25. Berger P, Berner W, Bolterauer J, Gutierrez K, Berger K. Sadistic personality disorder in sex offenders: relationship to antisocial personality disorder and sexual sadism. *Journal of Personality Disorders.* 1999 Summer; 13(2):175-86.
26. Overholser JC, Beck S. Multimethod assessment of rapists, child molesters, and three control groups on behavioural and psychological measures. *Journal of Consulting and Clinical Psychology.* 1986 October; 54(5):682-7.
27. Rader CM. MMPI profile types of exposers, rapists, and assaulters in a court services population. *Journal of Consulting and Clinical Psychology.* 1977 February; 45(1):61-9.
28. Segal ZV, Marshall WL. Heterosexual social skills in a population of rapists and child molesters. *Journal of Consulting and Clinical Psychology.* 1985 February; 53(1):55-63.
29. Day K. Male mentally handicapped sex offenders. *British Journal of Psychiatry.* 1994 November; 165(5):630-9.
30. Kavoussi RJ, Kaplan M, Becker JV. Psychiatric diagnoses in adolescent sex offenders. *Journal of the American Academy of Child and Adolescent Psychiatry.* 1988 March; 27(2):241-3.
31. Awad GA, Saunders EB. Adolescent child molesters: clinical observations. *Child Psychiatry and Human Development.* 1989 Spring; 19(3):195-206.
32. Hanson RK, Harris AJR. Where should we intervene? Dynamic predictors of sexual offender recidivism. *Criminal Justice and Behavior.* 2000 February; 27(1):6-35.
33. Madu SN. Childhood forcible sexual abuse and victim-perpetrator relationship among a sample of secondary school students in the Northern

Province (South Africa). *Crime Research in South Africa.* 2001 April; 2(1):1-13. Available: http://reference.sabinet.co.za/sa_epublication_article/crisa_v2_n1_a4 [Accessed 20.06.2013]

34. Epstein JN, Saunders BE, Kilpatrick DG, Resnick HS. PTSD as a mediator between childhood rape and alcohol use in adult women. *Child Abuse and Neglect.* 1998 March; 22(3):223-34.
35. Epstein JN, Saunders BE, Kilpatrick DG. Predicting PTSD in women with a history of childhood rape. *Journal of Traumatic Stress.* 1997 October; 10(4):573-88.
36. Beitchman JH, Zucker KJ, Hood JE, DaCosta GA, Akman D. A review of the short-term effects of child sexual abuse. *Child Abuse & Neglect.* 1991; 15(4):537-56.
37. Lodico MA, Gruber E, DiClemente RJ. Childhood sexual abuse and coercive sex among school-based adolescents in a midwestern state. *Journal of Adolescent Health.* 1996 March; 18(3):211-7.
38. Snell WE Jr, Godwin L. Social reactions to depictions of casual and steady acquaintance rape: the impact of AIDS exposure and stereotypic beliefs about women. *Sex Roles.* 1993 November; 29(9/10):599-616.
39. Rose DS. “Worse than death”: psychodynamics of rape victims and the need for psychotherapy. *American Journal of Psychiatry.* 1986 July; 143(7):817-24.
40. Pynoos RS, Nader K. Children’s exposure to violence and traumatic death. *Psychiatric Annals.* 1990 June; 20(6):334-44.

41. Smallbone SW, Wortley RK. Onset, persistence, and versatility of offending among adult males convicted of sexual offenses against children. *Sexual Abuse: A Journal of Research and Treatment*. 2004 October; 16(4):285-98.
42. Bengtson S, Lund J. Criminal recidivism among sexual offenders. *Ugeskr Laeger*. 2008 December; 170(49):4035-9 [abstract].
43. Joyal CC, Dubreucq JL, Gendron C, Millaud F. Major mental disorders and violence: a critical update. *Current Psychiatry Reviews.* 2007; 3(1):33-50.
44. Tiihonen J, Isohanni M, Rasanen P, Koiranen M, Moring J. Specific major mental disorders and criminality: a 26-year prospective study of the 1966 Northern Ireland birth cohort. *American Journal of Psychiatry.* 1997 June; 154(6):840-5.
45. Mullen PE, Burgess P, Wallace C, Palmer S, Ruschena D. Community care and criminal offending in schizophrenia. *The Lancet.* 2000 February 19; 355(9204):614-7.
46. Rasanen P, Tiihonen J, Isohanni M, Rantakallio P, Lehtonen J, Moring J. Schizophrenia, alcohol abuse, and violent behaviour: a 26-year followup study of an unselected birth cohort. *Schizophrenia Bulletin.* 1998; 24(3):437-41.
47. Wallace C, Mullen PE, Burgess P. Criminal offending in schizophrenia over a 25-year period marked by deinstitutionalization and increasing prevalence of comorbid substance use disorders. *American Journal of Psychiatry.* 2004 April; 161(4):716-27.
48. Hodgins S. Mental disorder, intellectual deficiency, and crime. Evidence from a birth cohort. *Archives of General Psychiatry.* 1992 June; 49(6):476-83 [abstract].

49. Brennan PA, Mednick SA, Hodgins S. Major mental disorders and criminal violence in a Danish birth cohort. *Archives of General Psychiatry.* 2000 May; 57(5):494-500.

50. Arseneault L, Moffitt TE, Caspi A, Taylor PJ, Silva PA. Mental disorders and violence in a total birth cohort: results from the Dunedin Study. *Archives of General Psychiatry.* 2000 October; 57(10):979-86.

51. Wessely SC, Castle D, Douglas AJ, Taylor PJ. The criminal careers of incident cases of schizophrenia. *Psychological Medicine.* 1994 May; 24(2):483-502 [abstract].

52. Palijan TZ, Muzinic L, Radeljak S. Psychiatric comorbidity in forensic psychiatry. *Psychiatria Danubina.* 2009 September; 21(3):429-36.

53. Menaster M. Psychiatric disorders associated with criminal behavior. *Medscape*. 2012 April. Available: http://emedicine.medscape.com/article/294626-overview [Accessed 20.06.2013]

54. Coid J, Yang M, Roberts A, Ulrich S, Moran P, Bebbington P, Brugha T, Jenkins R, Farrell M, Lewis G, Singleton N. Violence and psychiatric morbidity in a national household population – a report from the British Household Survey. *American Journal of Epidemiology.* 2006 October; 164(12):1199-208.

55. Coid J, Yang M, Roberts A, Ulrich S, Moran P, Bebbington P, Brugha T, Jenkins R, Farrell M, Lewis G, Singleton N. Violence and psychiatric morbidity in the national household population of Britain: public health implications. *British Journal of Psychiatry.* 2006 July; 189:12-9.

56. Appelbaum PS, Robbins PC, Monahan J. Violence and delusions: data from the MacArthur Violence Risk Assessment Study. *American Journal of Psychiatry.* 2000 April; 157(4):566-72.
57. Swanson JW. Mental disorder, substance abuse, and community violence: an epidemiological approach. In: Monahan J, Steadman H, eds. *Violence and Mental Disorder: Developments in Risk Assessment.* Chicago, III: University of Chicago Press; 1994:101-36. Available: http://books.google.co.za/books?hl=en&lr=&id=v4oSb2Na4nQC&oi=fnd&pg=PA101&dq [Accessed 24.02.2014]
58. Rueve ME, Welton RS: Violence and mental illness. *Psychiatry 2008*. 2008 May; 5(5):35-48.
59. Mulvey EP. Assessing the evidence of a link between mental illness and violence. *Hospital and Community Psychiatry.* 1994 July; 45(7):663-8 [abstract].
60. Fazel S, Grann M. The population impact of severe mental illness on violent crime. *American* Journal *of Psychiatry*. 2006 August; 163(8):1397-403.
61. Wallace C, Mullen P, Burgess P, Palmer S, Ruschena D, Browne C. Serious criminal offending and mental disorder. Case linkage study. *British Journal of Psychiatry.* 1998 June; 172:477-84.
62. Walsh E, Buchanan A, Fahy T. Violence and schizophrenia: examining the evidence. *British Journal of Psychiatry.* 2002 June; 180:490-5.
63. Fazel S, Langstrom N, Hjern A, Grann M, Lichtenstein P. Schizophrenia, substance abuse, and violent crime. *Journal of the American Medical Association*. 2009 May; 301(19):2016-23.

64. Steadman JH, Mulvey EP, Monahan J, Robbins PC, Appelbaum PS, Grisso T, Roth LH, Silver E. Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Archives of General Psychiatry.* 1998 May; 55(5):393-401.
65. Swanson JW, Swartz MS, Van Dorn RA, Elbogen EB, Wagner HR, Rosenheck RA, Stroup TS, McEvoy JP, Lieberman JA. A national study of violent behaviour in persons with schizophrenia. *Archives of General Psychiatry*. 2006 May; 63(5):490-9.
66. Swartz MS, Swanson JW, Hiday VA, Borum R, Wagner HR, Burns BJ. Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. *American Journal of Psychiatry.* 1998 February; 155(2):226-31.
67. Peugh J, Belenko S. Examining the substance use patterns and treatment needs of incarcerated sex offenders. *Sexual Abuse: A Journal of Research and Treatment.* 2001 July; 13(3):179-95.
68. Lund J. Mentally retarded criminal offenders in Denmark. *British Journal of Psychiatry.* 1990 May; 156:726-31.
69. Holland T, Clare ICH, Mukhopadhyay T. Prevalence of 'criminal offending' by men and women with intellectual disability and the characteristics of 'offenders': implications for research and service development. *Journal of Intellectual Disability Research.* 2002 May; 46 Supplement 1:6-20.
70. Blanchard R, Watson MS, Choy A, Dickey R, Klassen P, Kuban M, Ferren DJ. Pedophiles: mental retardation, maternal age, and sexual orientation. *Archives of Sexual Behavior.* 1999 April; 28(2):111-27.
71. South Africa. Criminal Procedure Act No. 51 of 1977. Available:

www.justice.gov.za/legislation/acts/1977-051.pdf [Accessed 20.02.2014]

72. South Africa. Mental Health Care Act No. 17 of 2002. Government Gazette, 6 November 2002, Vol. 449, No. 24024.

73. Briken P, Habermann N, Kafka MP, Berner W, Hill A. The paraphilia-related disorders: an investigation of the relevance of the concept in sexual murderers. *Journal of Forensic Sciences.* 2006 May; 51(3):683-8.

74. Jonsson G. The handing over by the South African Police Services and outcome of suspected mentally ill patients at Chris Hani Baragwanath Hospital. 2008. Available: http://wiredspace.wits.ac.za/bitstream/handle/10539/7446/MMed%20research%20Report%20Dr%20G%20Jonsson.pdf?sequence=1 [Accessed 24.02.2014]

75. Yang M, Coid C. Gender differences in psychiatric morbidity and violent behaviour among a household population in Great Britain. *Social Psychiatry and Psychiatric Epidemiology.* 2007 August; 42(8):599-605.

76. Cantwell R. Substance use and schizophrenia: effects on symptoms, social functioning and service use. *British Journal of Psychiatry.* 2003 April; 182:324-9.

77. Dinos S, Stevens S, Serfaty M, Weich S, King M. Stigma: the feelings and experiences of 46 people with mental illness: qualitative study. *British Journal of Psychiatry.* 2004 February; 184:176-81.

78. Crisp AH, Gelder MG, Rix S, Meltzer HI, Rowlands OJ. Stigmatisation of people with mental illnesses. *British Journal of Psychiatry.* 2000 July; 177:4-7.

79. Rudolph MN, Hughes DJ. Emergency assessments of domestic violence, sexual dangerousness, and elder and child abuse. *Psychiatric Services.* 2001 March; 52(3):281-2, 306.
80. South Africa Unemployment Rate. Available: http://www.tradingeconomics.com/south-africa/unemployment-rate [Accessed 24.02.2014]
81. Pierce R, Pierce LH. The sexually abused child: a comparison of male and female victims. *Child Abuse and Neglect.* 1985; 9(2):191-9.
82. Tong L, Oates K, McDowell M. Personality development following sexual abuse. *Child Abuse and Neglect.* 1987; 11(3):371-83.
83. Schutte T, Subramaney S. 'Single' v. 'panel' appointed forensic mental observations: is the referral process ethically justifiable? *The South African Journal of Bioethics and Law.* 2013 November; 6(2):64-8.
84. Calitz FJW, van Rensburg PHJJ, Fourie C, Liebenberg E, van den Berg C. 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.* 2006 September; 12(3):47-50.
85. Taylor PJ, Gunn J. Violence and psychosis. I. Risk of violence among psychotic men. *British Medical Journal.* 1984 June; 288(6435):1945-9.
86. Taylor PJ, Parrott JM. Elderly offenders. A study of age-related factors among custodially remanded prisoners. *British Journal of Psychiatry.* 1988 March; 152:340-6.
87. Lewis CF, Fields C, Rainey E. A study of geriatric forensic evaluees: who are the violent elderly? *Journal of the American Academy of Psychiatry and the Law.* 2006; 34(3):324-32.

88. Miller BL, Darby A, Benson DF, Cummings JL, Miller MH. Aggressive, socially disruptive and antisocial behaviour associated with fronto-temporal dementia. *British Journal of Psychiatry.* 1997 February; 170:150-4.
89. Kim JM, Chu K, Jung KH, Lee ST, Choi SS, Lee SK. Criminal manifestations of dementia patients: report from the national forensic hospital. *Dementia and Geriatric Cognitive Disorders Extra.* 2011 January-December; 1(1):433-8. doi: 10.1159/000330929. [Accessed 18.02.2014]
90. Loeber R. The stability of antisocial and delinquent child behaviour: a review. *Child Development.* 1982 December; 53(6):1431-46.
91. Fountoulakis KN, Leucht S, Kaprinis GS. Personality disorders and violence. *Current Opinion in Psychiatry.* 2008 January; 21(1):84-92.
92. Kaliski S. *Psycholegal Assessment in South Africa.* 1st edition. Oxford University Press Southern Africa 2006: pp 244-246.
93. Johnson SC, Elbogen EB. Personality disorders at the interface of psychiatry and the law. *Dialogues in Clinical Neuroscience.* 2013; 15(2):203-211.
94. Fazel S, Lichtenstein P, Grann M, Langstrom N. Risk of violent crime in individuals with epilepsy and traumatic brain injury: a 35-year Swedish population study. *PLoS Medicine.* 2011 December; 8(12):e1001150. doi: 10.1371/journal.pmed.1001150. [Accessed 05.02.2014]
95. Kaliski S. *Psycholegal Assessment in South Africa.* 1st edition. Oxford University Press Southern Africa 2006: pp 211-214.
96. Pardini M, Krueger F, Hodgkinson C, Raymont V, Ferrier C, Goldman D, Strenziok M, Guida S, Grafman J. Prefrontal cortex lesions and MAO-A

modulate aggression in penetrating traumatic brain injury. *Neurology.* 2011 March; 76(12):1038-45.

97. Sadock BJ, Sadock VA. *Kaplan and Sadock's Comprehensive Textbook of Psychiatry.* 9th edition. Lippincott Williams and Wilkins 2009: Vol. 1, pp 452-458.

98. Fazel S, Philipson J, Gardiner L, Merritt R, Grann M. Neurological disorders and violence: a systematic review and meta-analysis with a focus on epilepsy and traumatic brain injury. *Journal of Neurology.* 2009 October; 256(10):1591-602.

99. Gibbons P, Mulryan N, O'Connor A. Guilty but insane: the insanity defence in Ireland, 1850-1995. *British Journal of Psychiatry.* 1997 May; 170:467-72.

100. Lindsay WR, Smith AHW. Responses to treatment for sex offenders with intellectual disability: a comparison of men with 1- and 2-year probation sentences. *Journal of Intellectual Disability Research.* 1998 October; 42(5):346-53.

101. Gibbens TCN, Robertson G. A survey of the criminal careers of hospital order patients. *British Journal of Psychiatry.* 1983 October; 143:362-9.

APPENDIX A: Data Collection Sheet

FOR THE OBSERVANDI

Age

Sex

Male	Female

Race

Black	White	Asian	Coloured	Other

Marital Status

Single	Married	Divorced	Separated	Widowed

No. of Children

Employed

Yes	No	Informal

HLOE

None	Primary School	High school		Tertiary education		Special education	Not known
		complete	incomplete				

Charge

Reason for Referral

Psychiatric Diagnosis

Outcome

Fit / fit with assistance / not fit	Responsible / not responsible both legs / not responsible second leg / diminished capacity / insufficient information to comment

Relationship to Victim

Stranger	Known to	Not Stated

FOR THE VICTIM

Age

Sex

Male	Female

APPENDIX B: Ethics Approval

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Dr Navanthree Govender

CLEARANCE CERTIFICATE	**M10433**
PROJECT	A Retrospective Record Review of Individuals Charged with Sexual Offences against Minors, Referred for Forensci Psychiatric Observation
INVESTIGATORS	Dr Navanthree Govender.
DEPARTMENT	Department of Psychiatry
DATE CONSIDERED	30/04/2010
DECISION OF THE COMMITTEE*	Approved unconditionally

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

DATE 03/05/2010 **CHAIRPERSON** .....
(Professor PE 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...