East African Medical Journal Vol. 84 No. 4 April 2007
PSYCHIATRIC MORBIDITY AMONG CONVICTED MALE SEX OFFENDERS AT KAMITI PRISON, KENYA
I.M. Kanyanya, MBChB, Registrar, C.J. Othieno, MBChB, MMed Psych (Nrb), Senior Lecturer and Chairman and D.M. Ndetei, MBChB (Nrb), DPM Lond), FRCPsych (UK), MD (Nrb), Professor, Department of Psychiatry, School of Medicine, College of Health Sciences, University of Nairobi, P.O. Box 19696-00202, Nairobi, Kenya

Request for reprints to: Dr. I.M. Kanyanya, Department of Psychiatry, School of Medicine, College of Health Sciences, University of Nairobi, P.O. Box 19696-00202, Nairobi, Kenya

PSYCHIATRIC MORBIDITY AMONG CONVICTED MALE SEX OFFENDERS AT KAMITI PRISON, KENYA

I.M. KANYANYA, C.J. OTHIENO and D.M. NDETEI

ABSTRACT

Objectives: **To determine the prevalence and distribution of psychiatric morbidity among convicted male sex offenders and to establish factors associated with sexual offending.**
Design: **A Cross-sectional descriptive survey.**
Setting: **Kamiti Maximum Security Prison, Nairobi, Kenya.**
Subjects: Seventy six male convicts.
Results: **Forty seven (61.8%) had defilement-related convictions, 23 (30.3%) had rape-related, while six (7.9%) had other convictions. Twenty seven (35.5%) out of 76 had a DSM-IV Axis I disorder, majority of whom (71.1%) were dependent on or abused substances, and 26 (34.2%) had an Axis II disorder, most of whom had antisocial and impulsive personality disorders (46.2%). Of these 12 (15.8%) had an Axis I diagnosis alone, 11 (14.5%) had an Axis *II* diagnosis alone while 15 (19.7%) had both Axis I and II diagnoses, that is, co-morbidity. Exposure to erotica was statistically associated with both Axis I and II ($p = 0.02$ and $p = 0.0003$ respectively) and pre-occupation with thoughts about sex was associated with Axis II disorders ($p = 0.01$).**
Conclusions: **Most of those with psychiatric morbidity targeted children and had antisocial or impulsive personality disorder. Awareness campaigns to enlighten the public of the fact that children are the most common victims and research to determine ways of treating and rehabilitating sexual offenders could reduce the vice.**

INTRODUCTION

What constitutes a sexual offence varies between societies and within society over time. Issues relating to gender, age, relationship, aggression, the definition of consent, and location all influence whether a particular sexual act is considered an offence or not (1).

In Kenya sexual offences are defined under Offences Against Morality (CAP XV) in the Kenya Penal Code, as summarised in the appendix.

Criteria for admission to maximum security prison: Gravity of the offense (felonies) and length of the sentence (>7 years) are the basic determinants of admission to maximum security prison: proximity of the prison, possession of special skills by the subject utilised in specific prisons and, request by subjects for personal reasons determine to which particular maximum security prison one is sent to.

Sexual offending and mental illness: Studies have shown a relationship between sexual offending and socio-demographic characteristics and mental disorders. For example McElroy *et al* (2,3) used Structured Clinical Interview for DSM-IV to assess for Axis I and II disorders. Thirty six males aged 25-41 years old convicted of sexual offenses and found high

rates of lifetime DSM-IV Axis I disorders: 30 (83%) had a substance use disorder; 21(58%), a paraphilia; 22 (61%), a mood disorder 13 (36%) with a bipolar disorder; 14 (39%), an impulse control disorder; 13 (36%), an anxiety disorder; and six (17%), an eating disorder. Subjects also displayed high rates of Axis II disorders, with 26 (72%) meeting criteria for antisocial personality disorder.

Other factors associated with sexual offending: Multiple factors (psychological, biological and sociological) are thought to interact in complex and poorly understood ways to produce deviant sexual behaviour. Some studies suggest some association between sexual offending and a combination of individual characteristics, family variables, and socio-economic factors. A history of prior physical or sexual abuse, impaired family functioning, alcohol and substance abuse, exposure to erotica, neurobiological factors, and psychiatric co-morbidity have been found to be associated with a higher prevalence of sexual offending (4-8).

Sexual offending causes enormous emotional pain and suffering to the victims and their families, as well as huge economic loses to the victims, their families and the state (9). Although a few studies targeting the victims of sexual offending have been done in Africa (3,4) none have targeted the offender in spite of research findings demonstrating some treatment benefits to some of these offenders (10-13). This study attempted to determine the prevalence of psychiatric disorders in convicted sexual offenders and socio-demographic factors of male sexual offenders in Kenya.

MATERIALS AND METHODS

This was a cross-sectional descriptive survey carried out at Kamiti Maximum Security Prison among convicted male sex offenders aged 18 years and above. This is the largest maximum security prison in Kenya, situated on the northern outskirts of the Kenyan capital, Nairobi.

Seventy six subjects were selected consecutively from volunteers who individually came forward after a brief introduction to groups of 3-5 convicted male sex offenders. Written informed consent was obtained from each subject prior to administration of the socio-demographic and sexual questionnaires designed by the researcher, Structured Clinical Interview for the Diagnosis and Statistical Manual IV (SCID) (14) and International Personality Disorder Examination (IPDE) questionnaires (15).

RESULTS

The seventy six subjects were aged between 18 and 73 years (Mean 33.5, Mode 23.0, Median 29.5); thirty eight (50%) were Protestants, thirty one (40.8%) Catholics and seven (9.2%) Muslims. Six (7.9%) had no formal education, fifty (65.8%) had primary education, and twenty (26.3%) had secondary, college or university education.

The subjects were arrested from six of Kenya's eight provinces (Table 1) and the majority of them came from Nairobi and Central Provinces. Thirty two (42.1%) were married while forty four (57.9%) were widowed, separated, divorced or single. Four (5.3%) were professionals, twenty one (27.6%) skilled and forty seven (61.8%) were unskilled workers while four (5.3%) had no occupation.

Twenty eight (36.8%) were frequently physically assaulted in childhood, most (84.6%) by their biological parents. Only three (3.9%) reported being sexually assaulted in childhood. Forty six (60.5%) lived with both parents during adolescence, sixteen (21.1%) with mothers alone, one (1.3%) lived with his father alone while thirteen (17.1%) lived with other

Table 1

Provinces where subjects were arrested

Province	Frequency	(%)
Central	26	34.2
Nairobi	22	28.9
Eastern	18	23.7
Rift Valley	5	6.6
North Eastern	3	3.9
Western	2	2.6

people. Ten (13.2%) had a positive personal history of mental illness, and a further ten (13.2%) had family history of mental illness. Twenty one (27.6%) lived alone, twenty six (34.2%) with a spouse and twenty nine (38.2%) lived with other people before arrest. Thirteen (17.1%) thought about sex almost all the time at the time of offending whereas thirty four (44.7%) of the subjects had exposure to erotica at the same time. Sixteen (62.5%) of those who did not deny the offence lacked empathy for their victims. Seven of these (43.8%) were under the influence of substance(s) at the time of offending.

Alleged Offenses: Most offences committed were related to defilement (defilement and attempted defilement) (61.8%). Other offences were related to rape (30.3%), sodomy (3.9%), incest (2.6%) and indecent assault (1.3%).

There was no significant statistical association between socio-demographic and sexual factors sexual offending.

DSM-IV Axis I Disorders (Table 2): Majority of those subjects who met the criteria for DSM-IV Axis I had life-time dependence or abuse of substances (71.1%). Some had been dependent on more than one substance. Alcohol and cannabis were the most commonly abused substances. Other Axis I diagnoses anxiety-related (15.8%) and mood disorders, all of which were depression- related (13.1%). None of the subjects had psychiatric morbidity of psychotic proportions.

There was significant statistical association between Axis I disorders and exposure to erotic materials only (p= 0.02).

Axis II Disorders: (Table 3); Antisocial (26.9%) and impulsive (19.2%) personality disorders were most common (46.2%). Personality Disorder Not Otherwise Specified (NOS) accounted for 23.1%. The others (30.7%) had histrionic, schizoid, paranoid and borderline personality disorders.

There was significant statistical association between Axis II disorders and;

(i) How much the offender thought about sex at the time of offending (p = 0.01), and;
(ii) Exposure to erotica (p = 0.0003).

There was no significant statistical association between Axis II disorders and other socio-demographic factors.

DSM-IV Axes I and II Disorders (co-morbidity): Of the 76 subjects, fifteen (19.7%) met criteria for both Axis I and II, twelve (15.8%) had Axis I disorders and eleven (14.5%) met the criteria for Axis II alone while fifty (65.8%) had no psychiatric morbidity.

Table 2

DSM-IV axis I Disorders

Code (DSM-IV-TR)	Variable	Frequency
303.90	Alcohol dependence	8
305.00	Alcohol abuse	3
305.1	Nicotine dependence	2
304.30	Cannabis dependence	7
305.20	Cannabis abuse	1
304.90	Khat dependence	5
305.90	Khat abuse	1
309.81	Post traumatic stress disorder	1
296.6	Past major depressive episode	2
296.23	Current major depressive episode	1
300.4	Dysthymic disorder	2
300.29	Lifetime specific phobia	4
300.81	Somatisation disorder	1

Table 3

DSM-IV Axis II Disorders

Code	DSM-IV Axis II disorders	Frequency
301.7	Antisocial personality disorder	7
	Impulsive personality disorder	5
301.50	Histrionic personality disorder	3
301.20	Schizoid personality disorder	2
301.4	Obsessive-compulsive personality disorder	1
301.83	Borderline personality disorder	1
301.0	Paranoid personality disorder	1
301.9	Personality disorder NOS	6

DISCUSSION

This is a pioneer study in this country and perhaps in Africa as a whole in as much as it attempts to determine the prevalence rates of psychiatric morbidity in a population of sexual offenders.

This is unlike other studies in Africa that have focused on the victims (16,17). This study showed that although more young people were convicted for sexual offending (mean 33.5, mode 23.0) than older people, sexual offending was not limited to any particular age group of perpetrators and the vast majority (94.7%) of the subjects were non-professionals comprising the lower socio-economic class of the population. This intertwined with low or no education of nearly three quarters (73.7%) of the subjects may have interfered with their legal defenses leading to wrongful convictions as alleged by many of the subjects.

Most of the subjects were arrested in Nairobi and Central Provinces. This does not necessarily imply that most offenders are found in these two provinces. It is likely to be due to the proximity of these two provinces to the Kamiti Prison.

And in the case of childhood sexual abuse where only three of the 76 subjects gave a positive history, it is possible that there was under-reporting.

Some studies suggest an association between exposure to sexually explicit materials and sexually offending behaviours while others do not find such an association (4). This study found no such association but found 44.7% of the subjects were exposed to sexually explicit materials before offending.

Pre-occupation with thoughts about sex was significantly associated with DSM-IV Axis II (personality) disorders ($p= 0.01$) but not with sexual offending.

This study found that 47 (61.8%) of majority offenders (defilement and attempted defilement) targeted minors. This shows a pattern similar to what has been demonstrated in other studies (17). Twenty-three of the subjects met the criterion for DSM-IV Axis I disorders: 71% had life time dependence on or abuse of substances. Some were dependent on more than one substance. The substances most commonly misused were alcohol, cannabis and khat. Other Axis I diagnoses were anxiety-related (15.8%) and mood disorders (13.1%). Twenty six of the subjects (34.2%) met the criterion for DSM-IV Axis II disorders, this being quite similar to Fazel's study (3) that found 33% of offenders with personality disorders. The current study found that antisocial (27%) and impulsive personality disorders (19.2%) were the most commonly occurring personality disorders among those who met the criteria for personality disorders. The others (30.7%) had histrionic, schizoid, paranoid and borderline personality disorders.

There was significant statistical association between personality disorders and pre-occupation with thoughts about sex ($p= 0.01$) and exposure to erotica ($p = 0.0003$).

Fifteen (19.7%) of subjects met criteria for both Axis I and II (DSM-IV) disorders, 12 (15.8%) had an Axis I disorder alone, and 11 (14.5%) met the criteria for Axis II disorder alone. These rates are lower than

what has been found in some of the studies done in the western world where rates of Axis I-disorders was as high as 93% (6).

In conclusion, most of those with psychiatric morbidity targeted children and had antisocial or impulsive personality disorder. Awareness campaigns to enlighten the public of the fact that children are the most common victims and research to determine ways of treating and rehabilitating sexual offenders could reduce the vice.

ACKNOWLEDGEMENTS

To my supervisors (co-authors) for their invaluable input in making the work a success and to my family for their support during the time I spent in research and preparation of this paper.

REFERENCES

1. Maclen T. Violence, mental disorders and public protection. *Psychiatry.* 2004; **3:** 1-2.
2. McElroy S.L., Soutullo C.A., Taylor P. Jr., *et al.* Psychiatric features of 36 men convicted of sexual offenses. *J. Clin. Psych.* 1999; **60:** 414-422.
3. Fazel S., Hope T., O'Donnell I. and Jacoby R. Psychiatric, demographic and personality characteristics of elderly sex offenders. *Psych. Med.* 2002; **32:** 219-226.
4. Pratt H.D., Patel D.R., Greydanus D.E., *et al.* Adolescent sexual offenders: Issues for pediatrician. *Int. Pediat.* 2001; **16:** 3.
5. Glasser M. and Kolvin I. Cycle of child sexual abuse: Links between a victim and becoming a perpetrator. *Brit. J. Psych.* 2001; **179:** 482-492.
6. Raymond N.C., Coleman E., Ohlerking F., Christenson G.A. and Miner M. Psychiatric comorbidity in pedophilic sex offenders (comment). *Amer. J. Psych.* 1999; **156:** 786-788.
7. Rayel M.G. Clinical and demographic characteristics of elderly offenders at a Maximum Security Forensic Hospital. *J. Forensic Sci.* 2000; **45:** 1193-1196.
8. Haapasalo J. Self-reported childhood among sex offenders. *Arch. Sex Behav.* 1997; **26:** 421-431.
9. Lievore D. Recidivism of sexual assault offenders: Rates, risk factors and treatment efficacy. *A report prepared for the office of the status of women by the Australian Institute of Criminology.* 2004; 10:
10. Grossman L.S., Martis B. and Fichtner C.G. Are sex offenders treatable? A research overview. *Amer. J. Psych.* 1999; **50:** 349-361.
11. Baker M. and White T. Sex offenders in high-security care in Scotland. *J. Forensic Psych.* 2002; **13:** 285-297.
12. Wood R.M., Grossman L.S. and Fichtner C.G. Psychological assessment, treatment and outcome with sex offenders. *Behav. Sci. & Law.* 2000; **18:** 23-41.
13. Phillips S.L., Heads T.C., Taylor P.J. and Hill G.M. Sexual offending and antisocial sexual behavior among patients with schizophrenia. *J. Clin. Psych.* 1999; **60:** 170-175.
14. Loranger A.W., Janca A. and Sartorius N. Assessment and diagnosis of personality disorders: *The International Personality Disorder Examination (IPDE).* Published by Cambridge, University, Press. UK. 1997; 114-129.
15. Melesse F. and Kussie A. Child abuse in urban setting: A one-year analysis of hospital information on abused children at Yekatit 12 hospital, Addis Ababa. *Ethiop. Med. J.* 2005; **43:** 223-232.
16. Meursing K., Vos T., Coutinho O., *et al.* Child sexual abuse in Matabeleland, Zimbabwe. *Soc. Sci. Med.* 1995; **41:** 1693-1704.

APPENDIX

Sexual offences as listed under Offences Against Morality (CAP XV) in the Kenya

Penal Code;

- Rape
- Attempted rape
- Indecent assault on females
- Indecent assault on boys under 14 years of age
- Indecent practices between males
- Defilement of girls under 14 years
- Defilement of idiots and imbeciles
- Attempted defilement
- Conspiracy to defile
- Unnatural offences
- Attempt to commit unnatural offences
- Incest by males
- Incest by females
- Abduction of females