PSYCHIATRIC MORBIDITY
IN CHILDREN AND YOUNG
PERSONS APPEARING IN THE
NAIROBI JUVENILE COURT

THIS DISSERTATION IS
PRESENTED AS A PART
FULFILMENT
FOR THE DEGREE OF
MASTER OF MEDICINE IN
PSYCHIATRY
UNIVERSITY OF NAIROBI
1998



MEDICAL LIBRAL.

UNIVERSITY OF NAIROBI

BY DR. HITESH M. MARU MBBS (INDIA)

DEDICATION

TO MY PARENTS,

MR. MUKUNDRAI B. MARU AND MRS. DAMYANTI M. MARU

DECLARATION

I, DR. HITESH M. MARU, DO HEREBY DECLARE THAT THIS DISSERTATION IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR A DEGREE IN ANY OTHER UNIVERSITY.

SIGNED: History

DATE: 16th OCT 1998

THIS DISSERTATION HAS BEEN SUBMITTED FOR EXAMINATION WITH OUR APPROVAL AS THE UNIVERSITY SUPERVISORS.

> 1. MAJOR (Rtd.) DR. DAMMAS M. KATHUKU MB.CHB (MAKERERE), M.MED PSYCH. (NBI.), AV. MED. (USA)

SIGNED: Wathren

DATE: 26 October 1998

2. PROF. DAVID M. NDETEI MB.ChB (NBI), DPM (LOND.), MRCPsych. (UK), MD (NBI)

DATE: 2/1/98

ACKNOWLEDGEMENT

My appreciation to all those whose persistent efforts made this work possible.

- Professor David M. Ndetei, Professor of Psychiatry and Chairman, Department of Psychiatry for his guidance and support.
- Dr. Dammas M. Kathuku for his concern, availability, support and encouragement.
- Dr. John M. Mburu in being supportive for providing material for literature review.
- Members of staff, Probation Department, Ministry of Home Affairs: Mr. Joseph
 Gitau (Director), Mr. Ahmed Hussein (Assistant Director), Mrs. Gertrude
 Mutangili (Chief Probation Officer), Mrs. Mary Waireri (Senior Probation Officer),
 Mrs. Margaret Kivindu (Probation Officer) and Mr. Clement Okech (Probation
 Officer).
- Members of staff, Children's Department, Ministry of Home Affairs: Mr. S. Ole
 Kwallah (Director) and Mr. Antony Lundi (Children's Officer).
- Miss Victoria Mutiso and Ms. Caroline Karicho of the Department of Psychiatry,
 University of Nairobi, for their professional skill in typing the final manuscript.
- Sun Pharmaceutical for providing stationery.

Finally, very special thanks to my wife, Sejal, and daughter, Nirali for their constant support.

TABLE	E O I	F CONTENTS	PAGE
			(i)
Dedication	n	•••••••••••••••••••••••••	(ii)
Declaration	on	***************************************	(iii)
Acknowle	dgen	ment	(iv)
Table of c	onte	nts	(v)
Abbrevia	tions		(viii)
List of Ta	bles	and Figures	(x)
Abstract	,,,,,,,,,,		(xi)
Chapter 1	l :	Introduction	1
1.	1:	Trends of Deviant Behaviour	1
1.	.2:	Historical Aspects of the Law that Relates to	
		Children and Young Persons in Kenya	4
Chapter 2	2:	Literature Review	6
2	.1:	The Rights of a Child in Relation to the Law	6
2	.2:	Juvenile Delinquency	7
2	.3:	Causes of Juvenile Delinquency	8
2	2.4: Studies on Child and Adolescent Psychiatric		
		Morbidity in Kenya	16
Chapter 3	3:	The Area of The Study	20
3	.1:	The Nairobi Juvenile Court	20
3	.2:	Proceedings in the Juvenile Court	21
Chapter 4	4:	Methodology	26
4.	1:	Aims and Objectives	26
4.	.2:	Hypothesis	26
4.	3:	Inclusion Criteria	27
4.	4:	Exclusion Criteria	27
4.	5:	Instruments	27
4.	6:	Procedure	27
4.	7:	Flow Chart for the Study	29

Chapter 5	5:	Results.		30
5	.1:	Psychiat	ric Morbidity	30
5	.2:	Socio D	emographic Factors	31
5	5.3:	Tables		32-46
Chapter	6:	Discuss	ion	47
6	.1:	Limitati	ons	47
ϵ	5.2:	Prevale	nce of Psychiatric Morbidity	
		ICD-10	Diagnosis	47
6	5.3:	Substan	ce Use	52
6	5.4:	Age at	First Use of a Substance	56
6	5.5:	Deviant	Behaviour	57
6	5.6:	Level o	f Education	60
6	5.7:	Appear	ances in Court	61
(5.8:	Parenta	ge	63
(5.9:	Numbe	r of Siblings	65
(6.10:	Occupa	ation of Caregiver	65
(5.11:	Sexual	Experience	66
(5.12:	History	of Mental Illness in the Family	66
(6.13:	History	of Suicide	67
	6.14:	Physica	i Illness	67
Chapter	7:			
	7.1:	Conclu	sion	68
7	7.2:	Recom	mendations	69
	7.3:	Further	Research	71
Appendi	ices:I	-	References	72
	п		Definitions according to the	
			Children and Young Persons Act	
			(Chapter 141, Laws of Kenya)	78
			(Cimple) 111, 22112 01 11011, 4/1111111111111111111111111111111111	

111 -	Socio-Demographic and Substance						
	Use Questionnaire	80					
IV -	RQC	87					
V -	FIC	88					
VI -	Letter to the Office of The						
	President requesting for permission						
	to conduct the study						
VII -	Letter from the Office of The						
	President authorising conduct						
	of the study						

ABBREVIATIONS

ALC - ALCOHOL

CAN - CANNABIS

CAP - CHAPTER

CPM CRUDE PSYCHIATRIC MORBIDTY

DF - DEGREE OF FREEDOM

FIC FOLLOW-UP INTERVIEW FOR CHILDREN

GROUP I - CHILDREN AND YOUNG PERSONS WHO WERE

BROUGHT TO THE JUVENILE COURT BY

POLICE OR THROUGH THE PROBATION

DEPARTMENT

GROUP II - CHILDREN AND YOUNG PERSONS WHO WERE

BROUGHT TO THE JUVENILE COURT BY

THEIR PARENTS OR OTHER CARE-GIVERS

THROUGH THE CHILDREN'S DEPARTMENT

ICD-10 - INTERNATIONAL CLASSIFICATION OF

DISEASES, 10th EDITION

IQ INTELLIGENCE QUOTIENT

INH - INHALANTS

KHA - KHAT

M.MED - MASTER OF MEDICINE

NIC - NICOTINE

NPM - NON-PSYCHIATRIC MORBIDITY

NSS - NOT STATISTICALLY SIGNIFICANT

P - PROBABILITY VALUE

PM - PSYCHIATRIC MORBIDITY

PSYCH. - PSYCHIATRY

RQC REPORTING QUESTIONNAIRE FOR CHILDREN

SED - SEDATIVES

SPSS - STATISTICAL PACKAGE FOR SOCIAL

SCIENCES PROGRAMME COMPUTER

SS - STATISTICALLY SIGNIFICANT

UoN - UNIVERSITY OF NAIROBI

VH - VOLATILE HYDROCARBONS

X² - CHI SQUARE

PAGE

LIST OF TABLES

Table A	-	Comparison of the Number of Cases	
		Registered at the Nairobi Juvenile Court	
		from 1981-1985 and 1991-August 1997	3
Table 1	-	Age Vs PM	32
Table 2	-	Psychiatric Disorders Detected	33
Table 3	-	Crude Substance Use Vs Sex	34
Table 4	-	ICD-10 Diagnosis Vs Crude Substance Use	35
Table 5	-	Substance Use Vs PM	36
Table 6	-	Comorbidity - Psychiatric Diagnosis	
		Vs Type of Substance Used	37
Table 7	-	Age at First Use Vs Type of	
		Substance Used	38
Table 8	-	Deviant Behaviour Vs PM	39
Table 9	-	Level of Education Vs PM	40
Table 10	•	Reasons for being brought to the	
		Nairobi Juvenile Court	41
Table II	-	Appearances in Court Vs PM	42
Table 12	80	Parentage Vs PM	43
Table 13	•	Psychiatric Diagnosis Vs Parentage	44
Table 14	-	Number of Siblings Vs PM	45
Table 15	-	Occupational Status of Caregiver	
		Vs PM	46

ABSTRACT

This study was carried out among children and young persons in difficult socio-economic circumstances who had been brought to the Nairobi Juvenile Court. A total of 90 children and young persons between the age of 8 and 18 years were studied. Sixty of them were randomly selected from a similar group brought to the court by the police through the Probation department. All of the thirty children and young persons brought by their parents or other caregivers through the Children's department were interviewed. The main objective of this study was to establish the point prevalence of psychiatric morbidity and psychoactive substance use in such children and young persons. Socio-demographic and substance use data were collected using a questionnaire interview by the author. Screening for psychiatric morbidity was done using the Reporting Questionnaire for Children (RQC) and the potential cases were further subjected to a standard psychiatric interview; Follow-up Interview for Children (FIC). ICD-10 diagnoses were then documented in all RQC positive cases.

Results showed a crude psychiatric morbidity (CPM) in 40 out of the 90 children interviewed (44.4%). ICD-10 documented psychiatric disorders detected in those 40 with CPM were:- conduct disorders 18 (45%), mixed disorders of conduct and emotions 8 (20%), emotional disorders with onset specific to childhood 8 (20%), mood disorders 5 (12.5%) and hyperkinetic disorder 1 (2.5%).

Out of the total sample studied, substance use was reported in 39 children (43.3%). The substances used were nicotine, volatile hydrocarbons, cannabis, alcohol, khat and sedatives in that order of decending frequencies. Multiple substance use was an associated factor.

A wide spectrum of deviant behaviour was reported. This included leaving school before reaching secondary school; running away from home; begging; problems with parents, siblings, peers, teachers, police and administrative officers; stealing, thefts and robberies; possession and use of psychoactive substances; early unprotected sexual activity, sexual abuses and suicide attempts.

Rearing patterns and parenting were important factors in this study. Out of the total sample of 90, 23 (25.5%) were brought up by the mother only and 3 (3.3%) by the father only. 15 (16.6%) reported not knowing their fathers and 6 (6.7%) reported not knowing their mothers. Of those brought up by the mother only, psychiatric morbidity was found in 7 (30.4%) and in 2 (66.7%) among those who had been brought up by father only.

The relationship of family size and psychiatric morbidity was also assessed. A PM of about 27.6% was reported in families with an average of 3 siblings.

In this study it was found that 16 (17.7%) of the children and young person had appeared in the court more than once. Of these 6 (37.5%) had psychiatric morbidity.

This study has confirmed the hypothesis that there is a significant psychiatric morbidity among children and young persons appearing in the Nairobi Juvenile Court.

CHAPTER ONE

INTRODUCTION

1. TRENDS OF DEVIANT BEHAVIOUR

Globally, crime rate is on the rise and most criminals have been shown to have antisocial behaviour. Follow up studies into adult life, of both clinic and non clinic children, show that antisocial behaviour in childhood is followed by a substantially increased risk of adult criminality. There is increased risk also of marital problems and breakdown; difficulties in parenting; poor job record and unemployment; financial dependency; social isolation; alcohol and drug related problems and of mental disorder (Robbins, 1966).

Antisocial behaviour has been noted to begin during childhood. Therefore one must focus on its prevention. From an early age any measures that improve the mental health of antisocial children and its families are likely to reduce deviant behaviour (Kaplan, Saddock, Grebb, 1994).

Lucien (1957) notes that a large proportion of children and adolescents appearing before the courts have no major physical or psychological abnormality. They are simply the victims of adverse external circumstances, characterised by social insecurity or a too low standard of living or a combination of both. For such social factors to cause deviant behaviour, they must set in motion a number of psychological processes.

Snyder (1996) reports from the United States of America an increase in the juvenile courts caseload by 23% between 1989 and 1993. In Kenya, between 1991 and 1994 the Nairobi Juvenile Court's caseload increased by 21% (Table A).

Torome (1985) concluded that the ten most common offences committed by young offenders in Kenya are stealing, assault causing actual bodily harm, breaking into a building and committing felony, housebreaking, stealing by servants, damaging property, indescent assault and possession of cannabis and marihuana.

Recent studies have shown a high percentage of psychoactive substance use/abuse among the youth in Kenya (Wangari, 1993, Mwangi S., 1996, Ndetei et al, 1997).

Despite the large number of researches done on substance use/abuse and deviant behaviour among children and young persons, no studies have been done on the psychiatric morbidity and substance use among young offenders appearing in the juvenile courts in Kenya.

The author embarked on a study aimed at finding out the prevalence of psychiatric morbidity and substance use among children and young persons appearing in the Nairobi Juvenile Court.

TABLE A:

COMPARISON OF THE NUMBER OF CASES REGISTERED AT THE NAIROBI JUVENILE COURT FROM 1981-85 AND 1991 UPTO AUGUST

YEAR	1981	1982	1983	1984	1985	1991	1992	1993	1994	1995	1996	UPTO AUGUST 1997
CRIMINAL	1380	1199	1435	1740	1627	2153	2107	2650	2528	*	2167	1357
PROTECTION & DISCIPLINE	124	136	47	76	54	175	230	249	284	323	443	457
TOTAL	1504	1335	1482	1816	1681	2328	2337	2899	2812		2610	1814

1997

^{*} The 1995 register for criminal cases was not available at the juvenile court.

2. <u>HISTORICAL ASPECTS OF THE LAW THAT RELATES TO</u> CHILDREN AND YOUNG PERSONS IN KENYA

History dates back to July 6th 1927 when, at a conference held in Geneva, a Child Welfare Committee was established (League of Nations, 1929).

The Child Welfare Committee at the League of Nations (1929) produced a circular dated 5/10/1929 in the form of a "questionnaire addressed to governments preliminary to a proposed study of the different auxiliary services of juvenile courts". A reply to the circular dated 30/12/1929 and signed by the then Governor of the Colony of Kenya, Governor Edward Grigg stated: "I have the honour to inform your Lordship that there are no juvenile courts in this colony, there are no auxiliary services in connection with such courts. Juvenile offenders are either committed to prisons or to the reformatory at Kabete established under and governed by the provisions of the reformatory school ordinance".

According to the reports in the Juvenile Offenders Ordinance (1933), a committee was set up by the colonial government:

"To consider what special arrangements are in force in dependencies under the control of the colonial office in connection with the trial and punishment of young offenders and to make recommendation".

The committee was composed of:

- a Chairman who was a doctor (qualifications not documented)
- the Commissioner of Prisons
- a Legal Advisor
- a Secretary to the State

The committee drew up a bill which, on August 30th 1932, was introduced into the legislative council by the Governor. On 5th May 1933 an ordinance number XV 1933 cited as "Juvenile Offenders Ordinance 1933" came into action.

The Juvenile Offenders Ordinance was based on the English Children Act (1908), the Home Office Report of Departmental Committee on the Treatment of Young Offenders (1927) and the Probation of Young Offenders Act (1908).

The Juvenile Offenders Ordinance (1934) states that despite the creation of the Juvenile Offenders Ordinance, there were no places to keep the juvenile offenders. On 28th February 1934, the Colonial Secretariat proposed that juvenile offenders should be kept in separate huts in or near a detention camp which would be provided by the Commissioner of Prisons; as no remand homes had been established in the colony of Kenya. The Juvenile Offenders Ordinance was in use from 1934 to 1963.

Presently the act in use is "The Children and Young Persons Act" (Cap 141 Laws of Kenya). This act became effective on 31st December 1963. At present the act is under review by the Law Reform Commission.

CHAPTER TWO

LITERATURE REVIEW

1. THE RIGHTS OF A CHILD IN RELATION TO THE LAW

Munene (1994) reports that a committee on children and young persons was appointed under the chairmanship of Humprey Slade in 1954. The committee recommended, "Interalia", complete separation of the juvenile system from the adult system and "Loco Parentis" referring to the obligation of the government to all children. This means that the state stands in the shoes of the parent in relationship to the welfare of the children.

In his discussion of juvenile administration, Warren (1958) stated that: "The purposes of the juvenile court are to understand the child, to diagnose his difficulty, to treat his condition and to fit him back into the community"

On 20th November, 1989, the United Nations General Assembly marked the thirtieth anniversary of the Declaration on the Rights of the Child. On that day, too, the international community extended the mantle of human rights protection to one of the most vulnerable groups in the society; children, when it adopted the United Nations Convention on the Rights of the Child (1991). It is the first international legal instrument which lays down guarantees for the spectrum of the child's human rights.

The 54-article convention on the rights of the child (1991) - a "Bill of Rights" for children, in relation to law, states in part:

- * When courts, welfare institutions or administrative authorities deal with children, the child's best interests shall be a primary consideration. The child's opinions shall be given careful consideration.
- * Children should not be separated from their parents, unless by competent authorities for their well being.

- * States shall protect children from physical or mental harm and neglect, including sexual abuse or exploitation.
- * States shall protect children from the illegal use of drugs and involvement in drug production or trafficking.
- * Capital punishment or life imprisonment shall not be imposed for crimes committed before the age of 18 years.
- * Children in detention should be separated from adults; they must not be tortured or suffer cruel and degrading treatment.
- * Children who have suffered maltreatment, neglect or detention shall receive appropriate treatment or training for recovery and rehabilitation.
- * Children involved in infringements of the penal law shall be treated in a way that promote their sense of dignity and worth that aims at reintegrating them into the society.

2. JUVENILE DELINQUENCY

Delinquency comes from the Latin word <u>delinquere</u> "to make mistakes". Though not a diagnostic terminology in psychiatric texts, it is an unfortunate term. Russel (1975) noted delinquency as a term calling to mind an immediate type: the tough, unruly kid, with no respect for persons, property or society, who makes a practice of mayhem, destruction, stealing and other forms of aggressive antisocial behaviour.

3. CAUSES OF JUVENILE DELINQUENCY

Lucien (1957) states that, as in the nineteenth century, two age-old ideas clash: one of the "inborn criminal" linked with the name of Cesare Lambroso, the other, a result of socialization, exemplified by the words of Victor Hugo: "the opening of a school is the closing of a prison".

Some of the aetiological factors to juvenile delinquency are:

(i) GENETIC FACTORS

(a) Genetic Endowment Theory

Lucien (1957) states that inherited characteristics direct children into criminal behaviour or make them potentially susceptible to criminal tendencies.

(b) Chromosomal Abnormalities

Other chromosomal abnormalities associated with deviant/criminal behaviours were observed as the presence of an extra Y chromosome in the genetic make up of males (Telfert, 1968).

(c) Twin Studies

Christiansen (1977) followed up over 3,500 twin pairs in Denmark over a 30 year period. He found that the concordance in official offending was 52% for male monozygotic twin pairs and 22% for male dizygotic twin pairs.

(d) Adoption Studies

Mednick et al (1983) in a study based on all non familial adoptions of children born in Denmark in 1924-47 showed more similarity in the prevalence of convictions between boys and their biological parents than between boys and their adoptive parents.

The above findings, indicate some kind of genetic transmission of an underlying construct or tendency that is conducive of offending, although the precise operations of this phenomenon is yet to be well defined.

(ii) BIOCHEMICAL FACTORS

Psychopathy-related personality traits as well as platelet monoamine oxidase (MAO) activity and criminality from the age of 15 years were studied in a group of 68 male former juvenile delinquents and 32 control subjects. The former juvenile delinquents registered for crime as adults were found to have higher Psychopathy Check List (PCL) scores and lower platelet MAO activity than either juvenile delinquents who were not registered criminals from the age of 15 years or non-criminal controls. Although PCL scores and platelet MAO activity were unrelated, a configural frequency analysis showed a significant interaction. Individuals with higher PCL scores, low platelet MAO activity and persistent criminal behaviour constituted a significant "type". Among the 27 former juvenile delinquents who developed persistent criminality, 21 subjects (78%) had PCL scores greater than zero and low platelet MAO activity, while none of these persistent criminals were characterized by a combination of zero PCL score and high platelet MAO activity (Alm et al, 1996).

Levels of triiodothyronine (T3) and thyroid-stimulating hormone (TSH), psychopathyrelated personality traits and criminality from the age of 15 years onward were examined in 70 former juvenile delinquents and 35 control subjects aged 38-46 years. T3 levels were significantly associated with criminality but not with psychopathyrelated personality traits. TSH levels were not related to any of these variables. Juvenile delinquents who displayed persistent criminal behaviour were found to have higher mean T3 levels than juvenile delinquents who did not display criminality in adulthood and non-criminal controls. Former juvenile delinquents with T3 levels above the mean level found in the controls were registered for criminality 3.8 times more often than juvenile delinquents with T3 levels below the mean level found in the control group. The results are discussed in terms of elevated T3 levels representing a compensatory or stress phenomenon for low social adaptive ability of individuals who display persistent criminal behaviour (Alm et al, 1996).

(iii) PSYCHOLOGICAL FACTORS

Lucien (1957) suggested that persons who did not experience warm, loving relationships during their childhood did not develop a stable personality because the superego does not develop properly. It will be easy to understand what can happen if the moral precepts, which the child seeks to incorporate at the time of the formation of the superego, are antisocial, or even criminal. The child's superego, although developed in the normal way, will contain elements which will lead to antisocial behaviour.

In other words, the delinquent's personality has normal psychological structures but the structures of the superego are based on antisocial personality patterning. Such cases develop among children of antisocial parents or from antisocial communities.

Eysenck (1964) suggested that extroverts are more prone to commit delinquent acts than introverts. This is because extroverts are more sociable, have friends, are impulsive, take risks, crave for excitement, are aggressive and lose temper easily and find it hard to keep their feelings under control.

(iv) PSYCHIATRIC MORBIDITY

Juvenile delinquency has often been associated with and equated to conduct disorder. This is wrong, for although the two categories overlap, they are not the same. Many delinquents do not have conduct disorders or any other psychological disorders. Nevertheless in an important group, persistent law breaking is frequently preceded and accompanied by abnormalities of conduct such as truancy, aggressiveness, attention-seeking and by poor concentration (Gelder et al, 1993).

In the Isle of Wight survey of 1279 children aged 10-12 years, Rutter et al (1970), the term conduct disorder was used to refer to disorders involving abnormalities of behaviour, emotions and relationships that were sufficiently marked and sufficiently prolonged to be causing persistent suffering and/or social impairment, and in which the

predominant pattern was of behaviour giving rise to social disapproval. About 38 (3%) of the 10-12 year olds were regarded as having conduct disorder (5.5% boys; 1.5% girls).

Rutter et al (1983) reported that delinquents (especially recidivist delinquents) showed a variety of important problems, particularly so in attention, mood and relationships. He further stated that children with conduct disorders also showed a much increased rate of misery and unhappiness, relationship difficulties, attentional deficits and of bed wetting.

(v) GENERAL MEDICAL CONDITIONS

(a) Prenatal and perinatal factors

McCords (1959) found no significant relationship between prematurity, difficult birth, caesarean section and the quality of the child's general health on one hand and deviant behaviour on the other.

(b) Brain Injury

Studies by Bond (1984) have confirmed the importance of frontal or fronto-temporal damage in determining subsequent behaviour disturbances.

On the contrary, Spreen (1981), focused prospectively on a group of 208 children, aged 8-12 years, with learning disabilities. At follow up, an average of 10 years later, no evidence was found for an association between brain damage, learning disabilities and crime.

(c) Intelligence

Exner (1939) reported that unintelligent delinquents had a greater tendency to recidivism and hence are proportionately more numerous in reform institutions.

West and Farrington (1973) in the London Longitudinal Survey from 1961/62 to 1987 studied 411 boys of 8-9 years age from 6 London schools, every 2-3 years, upto their age of 32 years. It was found that 133 (33.3%) of the boys scoring 90 or less on a non-verbal intelligence test (Raven's Progressive Matrices) at age 8-10 years were convicted as juveniles, twice as many among the remainder 278 (66.7%) whose IQ scores were above 90. Low non-verbal average IQ of 89 was especially characteristic of the juvenile recidivists.

In a New Zealand study (Moslit, Silva, 1988), 1037 children born in 1972-73, in Dunedin were followed from birth to the age of 15 years. The results showed that arrested juveniles were significantly low on verbal IQ according to Weschler Intelligence Scale for children, but not significantly low on performance IQ. Overall, the full scale IQ was significantly low among delinquents.

Ferguson et al (1997) in the Christchurch study of 1265 children over a period of 10 years from age 8 years upto 18 years showed that early attentional difficulties had statistically significant relationship with increase in rates of reading delays, poor academic performance, juvenile offending, substance dependence and increased psychosocial risks.

(d) Epilepsy

Stein (1975), found only 12 cases of epilepsy among 7,000 juvenile delinquents brought before a Chicago juvenile court. Working with 285 children refered from the juvenile courts, Balla (1979) found 18 of them to have symptoms suggestive of temporal lobe epilepsy.

Treiman and Delgado-Escueta (1983) reviewed the world medical literature between 1872 and 1981 and found only 29 cases in which violent events were reported to be due to grandmal epilepsy.

(vi) SOCIO-ECONOMIC FACTORS

Torome (1985) reported that 80% of all cases processed in the Nairobi juvenile court gave their residence as Korogocho, Ngomongo, Kibera, Laini Saba, Soko Mjinga, Kawangware, Soweto and other slum areas of the city of Nairobi. Poverty, lack of food in the house, broken families, dead parents, non caring single parents were most of the factors which pushed many of the children and young persons onto the streets to earn a living. These children are then called the street kids.

During the Grand-Bassam Forum (1985) on "Children and Youth from the Street", the following definition was proposed: the street kid is "that person who has not yet reached adulthood and for whom the street has become the usual homeplace and the source of subsistence and who is inadequately protected, looked after or reared by one or several adults".

The London Study in delinquent development (West, Farrington, 1973) summarised the results as follows:

"The major findings were that juvenile delinquents tended to come from large, poor families and to have criminal parents and siblings. They also tended to have parents who were in conflict with each other, who had cruel, passive or neglecting attitudes and harsh or erratic discipline. While many aspects of family environment were related to delinquency, schools did not seem to be important".

(a) Parenting and Family Influences

Russel (1975) reported that of 700 delinquent youngsters examined at the Institute of Juvenile Research, Chicago, the parents of 46% were legally divorced or permanently separated; 14% had lost a parent by death (4.3% their mothers and 9.7% their fathers); 21.5% had parents who had suffered serious chronic illness during their formative years, (13% their mothers and 8.5% their fathers); alcoholic parents were a deleterious factor in 18% (12.6% their fathers and 5.4% their mothers); in 5% of the cases mothers had deserted their families when the children were quite young; 2.3% had fathers with criminal records and imprisonment.

McCord (1979) in the Cambridge-Somerville study followed up 650 boys (average age 10 years) from 1937/39 upto 1975/80 and reported that poor parental supervision was the best predictor of both violent and property crimes. She also reported that parental aggressiveness and parental conflict were significant precursors of violent, but not property crimes, while the mother's attitude (passive or rejecting) was a significant precursor of property, but not violent crime.

McCord (1982) found that the prevalence of offending was high for boys reared in broken homes without affectionate mothers (62%) and for those reared in united homes characterized by parental conflicts (52%). The prevalence of offending was low for those reared in united homes without conflict (26%) or in broken homes with affectionate mothers (22%). These results suggest that it is not so much the broken home which is criminogenic as the parental conflict which causes it.

(b) Economic Factors

Gunn and Taylor (1995) have suggested that family income, educational levels of parents, type of housing, overcrowding in the house, possessions, dependence on welfare benefits and family size were related to offending.

Arthur (1986) clarifies that the economic theory is basically Marxist in outlook, suggesting that juvenile delingquency is the result of the inequities of the soicial and economic order in which an acquisitive society encourages aggression and discourages altruism.

(vii) SUBSTANCE USE

Of 700 delinquent youngsters examined by Russel (1975) at the Institute of Juvenile Research, Chicago, 28% used marihuana, 11.7% used barbiturates, 11% used amphetamines, 8.6% used LSD, 2.3% used heroin and 26% frequently used alcoholic beverages.

Jalali (1981) reported a survey of 2131 adolescents in five New Jersey Schools, with age ranging from 12 to 18 years. 26.3% had used amphetamines, 25.3% had used barbiturates, 21.1% had used hallucinogens, 13.6% had used cocaine, 13.2% had used inhalants and 9.3% had used opiates.

Martinez (1991) identified several risk factors that point to an increased probability that a young person will use drugs. These include; early use of alcohol or tobacco; allienation from family, religious institution, school and community; poor academic performance and boredom with school; antisocial behaviour; having friends who us drugs; a lack of strong positive role models; a family history of drug and alcohol use and no consistent discipline or direction from adults.

Mwangi S. (1996) in a study on the psychiartic morbidity among 78 children in a community based institution in Nairobi found the prevalence of psychoactive substance use to be 28.2% inhalants, 26.9% cannabis, 16.6% nicotine, 2.6% alcohol and 2.5% sedatives.

Ndetei (1997) in a study (n = 365) of economic-social-political aspects of illicit drug use in Kenya, found that the commonest substances illicitly used by children between the age group 0-9 years were volatile hydrocarbons (75% in this age group) followed by cannabis (25%). In the 10-15 years age group drug use was as follows; volatile hydrocarbons (40%), cannabis (31.4%), cocaine/cannabis (11.4%), mandrax/cocaine (2.9%), amphetamine and heroin (single cases). In the 16-20 years age group, drug use was as follows; cannabis (73%), mandrax/cocaine (13.3%). This study also found that 60% of the illicit drug users were ex-street children and had been involved with the police.

4. STUDIES ON CHILD AND ADOLESCENT PSYCHIATRIC MORBIDITY IN KENYA

Wakube (1983), studied the pattern of childhood psychiatric disorders at Kenyatta National Hospital Child Psychiatric clinic. A total of 71 children (38 boys, 33 girls) aged between four and fifteen years were seen during a study period of 4 months. The diagnoses were:

Neurotic disorder - 40%

Conduct disorder - 21%

Development delays - 16%

Others - 14%

Mwita (1985), studied the pattern of childhood psychiatric morbidity among child psychiatric in-patients at Mathari hospital. A total of 110 children (71 boys, 39 girls) aged between 6 to 15 years were admitted to the children psychiatric ward during the 18 month period of the study. All of them were systematically assessed by a multidisciplinary team consisting of a child psychiatrist, paediatrician, psychologist, social workers and nurses.

The diagnoses were:

Affective disorder - 21%

Organic brain disorder - 20%

Mental handicap - 18%

Epilepsy - 13%

Schizophrenia - 5.5%

Conduct disorder - 4%

Gatangi (1987), did a study on psychiatric morbidity in children and young persons admitted into an approved school in Nairobi. A total of 85 boys were studied, 24.8% had psychiatric morbidity as follows:

Neurotic depression - 11.8%

Hypochondriasis - 4.7%

Anxiety neurosis - 4.7%

Epilepsy - 1.2%

Manic Depressive Psychosis - 1.2%

Schizophrenia - 1.2%

Kang'ethe (1988), did a study in a primary health care facility in a sub-urban township in Nairobi. A total of 303 children (164 boys, 139 girls) aged between 5-15 years were examined. 20% of these children were found to have clinically significant and definable psychiatric disorder.

The diagnoses were:

Neurotic disorder - 77%

Conduct disorder - 13%

Conduct disorders were considerably commoner in boys; male:female ratio - 5:1; whereas neurotic disorders were slightly commoner in girls M:I ratio 0.9:1. 74% of the neurotic children and 25% of those with conduct disorders presented with somatic symptoms. In the psychosocial characteristics of the study population, it was found that 11% of the boys, 23% of the girls with psychiatric morbidity belonged to one parent families. The young parent was almost always the mother and the children were less than 7 years old. All the patients in the sample were from a low social economic background.

Irungu (1993), did a comparative study of psychiatric morbidity in a rural (n = 164) and an urban (n = 175) secondary school in Kenya. The age range of those studied was 14-20 years. The CPM prevalence rates were 27.6% (rural) and 26.2% (urban).

The diagnosis were:

	Rural	Urban
Depression	38.8%	56.5%
Anxiety	11.1%	17.3%
Mixed depression/Anxiety	16.1%	26.2%
Psychosis	0.02%	0.0%
Seizure disorder	0.02%	0.0%

Mwangi S. (1996), did a study on the psychiatric morbidity among children in a community based institution in Nairobi. The study group consisted of 78 children (37 males, 41 females), all between the age of 8-18 years. The CPM was 41%. The DSM-IV diagnoses were as follows:

Depressive disorders not otherwise specified	- 14.1%
Enuresis	- 11.5%
Mental retardation	- 3.8%
Generalised anxiety disorder	- 3.8%
Stuttering	- 2.6%
Conduct disorder	- 2.6%

Mwangi N. (1996), in a comparative study of psychiatric morbidity in a rural (n=144) and urban (n=131) primary school pupils in Kenya found the CPM rates to be 26.4% (rural) and 41.2% (urban).

The ICD-10 diagnoses were as follows:

The

The

		Rural	Urban
Neurotic, stress related & somatoform			
disorders	-	58%	66.7%
Mixed disorders of conduct & emotions	-	13.2%	5.6%
Mental retardation	-	10.5%	1.9%
Conduct disorders	-	7.9%	7.4%
Enuresis	-	7.9%	9.3%
Seizure disorder (Epilepsy)		2.6%	3.7%
Stuttering (speech disorder)	-	0.0%	5.6%

CHAPTER THREE

THE AREA OF THE STUDY

1. THE NAIROBI JUVENILE COURT

The Nairobi Juvenile Court is the only permanent juvenile court in Kenya. In other districts of Kenya, the usual courts are converted into juvenile courts whenever a need arises.

The Nairobi Juvenile Court is situated in the city centre on St. John's Gate, off Parliament road. The author could not establish how the court came to be situated in its current location for there were no available records for this issue. The court building is two storeyed and consists of a courtroom, a registry, two magistrate chambers, offices for probation officers and children's officers, two cells (one for males and one for females) and four toilets (one for the accused and three for the staff members).

This court is governed by the Children and Young Persons Act (CAP 141 Laws of Kenya, 1963). Being a special court, the sitting of juvenile courts according to section 4 of the act is as detailed:

Section 4. A juvenile court shall sit in a different building or room, or on different days, or at different times, from those in which sittings of courts other than juvenile courts are held, and no person shall be present at any sitting of a juvenile court except:-

- (a) Members and officers of the court;
- (b) Parties to the case before the court, their advocates and witnesses and other persons directly concerned in the case;
- (c) Parents or guardians of any person brought before the court;
- (d) Bonafide representatives of newspapers or news agencies;
- (e) Such other persons as the court may specially authorise to be present.

The court in Nairobi sits on every Mondays, Wednesdays and Fridays, except on holidays.

2. PROCEEDINGS IN THE JUVENILE COURT

The only major difference between juvenile courts and courts for adults is that entry of public to the juvenile court is restricted according to section 4 of the Children and Young Persons Act, Cap 141.

Also publications of juvenile cases is prohibited and words like conviction and sentences are not used. Punishments are also different as no child under the age of 18 years should be sent to prison except where the court is of the opinion that he cannot be suitably dealt with in any other way permitted by law; and the court should duly record such opinion and the reason thereof and that shall be subject to confirmation by the High Court.

For that young person ordered to imprisonment, the warrant of committal should clearly show that such a person is a juvenile and should not be allowed to associate with adult prisoners.

Types of Cases

There are two group of cases and each group has a different register.

- A) Children in need of protection and discipline and these are brought by the Children Department.
- B) Criminal cases brought by the police to the courts through the Probation

 Department. These are the children who commit offences and are charged by
 the police.

(A) Protection/Discipline Cases

A child or juvenile is in need of protection or discipline if he is under any one of the following (according to Section 22, Cap 141);

- a) Who has no parent or guardian, or has been deserted by his parent or guardian or is destitute or a vagrant.
- b) Who can not be controlled by his parent or guardian.
- Whose parent or guardian does not, or is unable or unfit, to exercise proper care or guardianship.
- d) Who is falling into bad association or is exposed to moral or physical dangers.
- e) Who is prevented from receiving compulsory education or is a habitual truant.
- f) Who frequents any public bar or gambling house or who is found buying or receiving or in possession of any drug which is deemed to be dangerous or habit forming.
- Who is found begging or receiving or inducing the giving of alms whether or not there is any pretence of singing or playing or performing.

Disposal of Protection and Discipline Cases

Powers of court in respect of children or juveniles in need of protection or discipline (Section 25 Cap 141):

If the court is satisfied that any child or juvenile or young person brought before it is in need of protection or discipline the court may;

- a) Order him to be returned to his parent or guardian.
- b) Order his parent or guardian to execute a bond with or without sureties to exercise proper care and guardianship.
- c) Commit him to the care of a fit person, whether a relative of the child or juvenile or not, or an approved society willing to undertake his care.
- d) Commit him to the care of the appointed local authority, approved society or approved voluntary institution willing to undertake his care.
- e) Make an order placing him for a specified period not exceeding three years under the supervision of an approved officer, an inspector of the children officer, or some other person appointed for the purpose by the court.
- f) Commit him to an approved school.

(B) Criminal Cases

These include:

- a) Vagrants Who in the real sense are not criminals but are charged as such according to the Vagrancy Act of 1968. However the Vagrancy Act was abolished by the Seventh Parliament of the Republic of Kenya.
- b) Thefts
- c) Assault
- d) Drug possession and trafficking

Disposal of criminal offenders (Section 17 Cap 141):

- a) By unconditional discharge of the offender.
- b) By discharging the offender on his entering into a recognisance with or without sureties.
- By making a probation order against the offender under the provision of Probation Offenders Act.
- d) By committing the offender to the care of a fit person, whether a relative or not, or an approved society or approved volunteer institution, willing to undertake his care.
- e) If the offender is under sixteen years of age, by ordering him to be sent to an approved school suitable to his needs and attainment.
- f) By ordering the offender to undergo corporal punishment.
- g) By ordering the offender to pay a compensation or costs.
- h) By ordering the parent or guardian and the offender to give security for his good behaviour.
- i) By ordering him to be imprisoned subject to confirmation by the high court.
- j) By ordering or sending one to a borstal institution if over 15 years.

It should be noted that under Section 14 of the Penal Code a person under the age of eight years is not criminally responsible for the act or omission and that a person under the age of twelve years is presumed to be incapable of having carnal knowledge.

Probation officers and Children's Officers:

The functions of a Probation Officer are;

- a) To conduct social investigations on offenders e.g family background, past experience, formal education, employment and occupation, health, circumstances of offence and attitude towards offence.
- b) To rehabilitate those offenders placed on probation.

The function of a Children's Officer are similar to the ones of the probation officer except that the probation officer deals with criminal offenders whereas the children's officers deal with cases requiring discipline and protection.

Section 18 (Cap 141) of The Children and Young Persons Act States "If it appears to the court on the evidence of a medical practitioner that a child or young person, although not of unsound mind, requires or may benefit from mental treatment, the court when making a probation order against him, may require him to undergo mental treatment at the hands or under the direction of a medical practitioner for a period not exceeding twelve months, subject to review by the court, as a condition of the probation order".

CHAPTER FOUR METHODOLOGY

1. AIMS AND OBJECTIVES

- (i) To study the sociodemographic characteristic of the children and young persons appearing in the Nairobi Juvenile court.
- (ii) To study the prevalence and pattern of psychiatric disorders among children and young persons appearing in the Nairobi Juvenile court over a period of one month.
- (iii) To assess the accuracy in the recognition of psychiatric morbidity among the children and young persons by the probation officers and children's officers attached to the juvenile court.
- (iv) To look into the level of recidivism plus associated factors among the children and young persons appearing in the juvenile court.
- (v) To find out the general physical health of the children and young persons appearing in the juvenile court.
- (vi) To make recommendations so as to improve the recognition and disposal of the juvenile court cases who may have psychiatric morbidity.

2. HYPOTHESIS

- (i) NULL HYPOTHESIS There is no prevalence of psychiatric morbidity among children and young persons appearing in the Nairobi juvenile court.
- (ii) ALTERNATIVE HYPOTHESIS There is a significant amount of psychiatric morbidity among children and young persons appearing in the Nairobi juvenile court.

3. INCLUSION CRITERIA

Children and young persons between the age of 8 and 18 years who were brought to the juvenile court during the period of study.

4. EXCLUSION CRITERIA

- (i) All children below the age of 8 years and above 18 years.
- (ii) Children who are severely physically ill.
- (iii) Children not known by the court officers well enough to assist in the assessment (RQC).

5. INSTRUMENTS

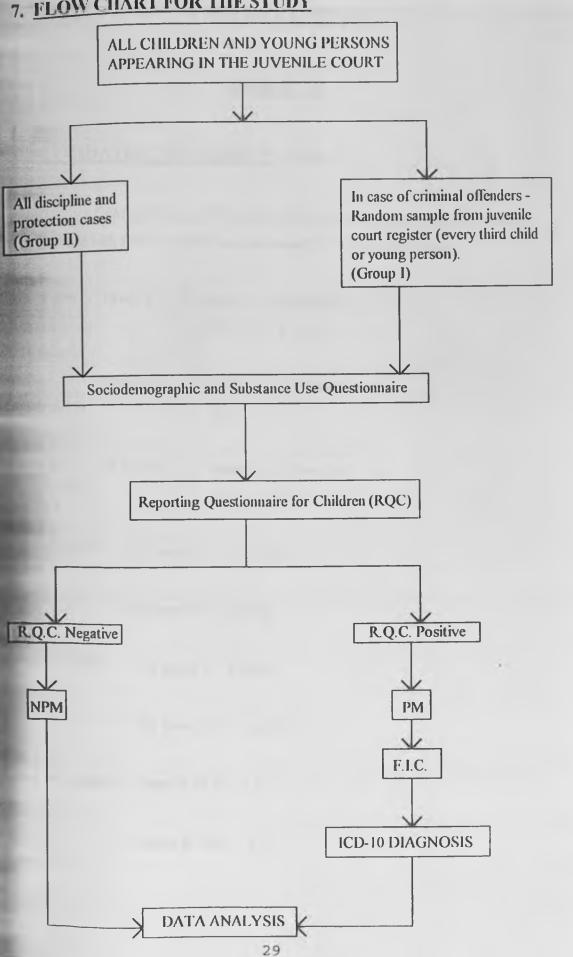
- (i) A questionnaire interview designed by the researcher to obtain sociodemographic data.
- (ii) A substance use questionnaire designed by the author to screen for substance use.
- (iii) Reporting questionnaire for children (RQC).
- (iv) Follow-up Interview for Children (FIC).

6. PROCEDURE

- (i) Authority to conduct research was obtained from the Office of the President.
- (ii) As all the children and young persons in this study were below the age of 18 years, consent for interviewing them was requested from the Office of the President.

- (iii) The relevant protocol through the Permanent Secretary, Ministry of Home Affairs, the Registrar of Courts, the Director of Children's Department and the Director of Probation was followed to enable the researcher
 - (a) to be present in the juvenile court.
 - (b) to be assisted by the probation officers and children's officers.
- (iv) The researcher was assisted by a probation officer and a children's officer while interviewing the children and young persons.
- (v) In criminal offenders, every third child or young person who appeared on the court register during the study period was interviewed and designated as Group I.
- (vi) All children and young persons appearing in the court for protection and discipline during the study period were interviewed and designated as Group II.
- (vii) A sociodemographic and substance use questionnaire was first administered, followed by the Reporting Questionnaire for Children (R.Q.C.). The latter was to screen for psychiatric morbidity. Children scoring one or more than one positive answers (RQC positive) were subjected to the second stage of screening; the Follow-up Interview for Children (F.I.C.). Psychiatric diagnosis was assigned according to the ICD-10.
- (viii) Data analysis was done by a computer using the SPSS version and a probability value of equal or less than 0.05 ($P \le 0.05$) was taken to be statistically significant.

7. FLOW CHART FOR THE STUDY



CHAPTER FIVE

RESULTS

1. **PSYCHIATRIC MORBIDITY** (Table 2)

In this study a CPM of 40 out of 90 (44.4%) children and young persons was obtained.

Among those with PM, 26 (65%) were males and 14 (35%) were females.

Sample size - Group I = 60 males - 45 females - 15
$$M:F - 3:1$$

Males with P.M. - (a) group 1 - 17 (28.9%)

Females with P.M. - (a) group I - 6 (10%)

Of the P.M. samples - Group I M:F - 3:1

- Group II M:F - 1.1:1

2. SOCIO-DEMOGRAPHIC FACTORS (Table 1)

Children and young persons included in this study were all between 8-18 years. The total sample size was 90. Those in the age group \le 12 years were 26 (28.7%), 13-15 years were 47 (52.2%) and 16-18 years were 17 (18.9%).

In the age group \le 12 years, PM was found in 10 out of the 90 children (11.1%) and comprised 5 (8.5%) males and 2 (3.4%) females of the 60 children in group I whereas 2 (6.7%) males and 1 (3.3%) female were from group II consisting of 30 children.

In the age group 13-15 years, PM was found in 20 out of the total 90 children (22.2%) and comprised of 8 (13.6%) males and 2 (3.4%) females of the 60 children in group I whereas 4 (13.3%) males and 6 (20%) females were part of the 30 children in group II.

In the age group 16-18 years, PM was found in 10 out of the total 90 children (11.1%) and comprised of 4 (6.8%) males and 2 (3.4%) females of the 60 children in group I whereas 3 (10%) males and 1 (3.3%) female came from the 30 children in group II.

3. STATISTICALLY SIGNIFICANT FINDINGS

Findings were statistically significant for crude substance use versus sex.

4. STATISTICALLY NON-SIGNIFICANT FINDINGS

Findings were statistically non-significant among age versus PM/NPM, level of education versus PM/NPM, appearances in court versus PM/NPM, parentage versus PM/NPM, number of siblings versus PM/NPM and occupation of caregiver versus PM/NPM.

AGE IN	COUNT		GRO	UP I			GROU	PII		TOTAL
YEARS	ROW %	P	М	N.	NPM		PM		NPM	
	TOTAL %	М	F	М	F	M	F	M	F	
≤12		5 19 29.5 5.6	2 7.6 33.8 2.2	5 19 18 5.6	4 14.2 44.4 4.4	2 7.6 22.2 2.2	1 3.8 12.5 1.1	7 26.6 70 7.8	0 0.0 0.0 0.0	26 (28.7%)
13 - 15		8 17.6 47.2 8.9	2 4.4 33.8 2.2	18 39.6 64.8 19.9	4 8.8 44.4 4.4	4 8.8 44.4 4.4	6 13.2 75 6.7	2 4.4 20 2.2	3 6.6 100 3.3	47 (52.2%)
16 - 18		4 23.6 23.6 4.4	2 11.8 33.8 2.2	5 29.5 18.0 5.6	1 5.9 11.1 1.1	3 17.7 33.3 3.3	1 5.9 12.5 1.1	1 5.9 10 1.1	0 0.0 0.0 0.0	17 (18.9%)
TOTAL		17 (18.9%)	6 (6.7%)	28 (31.1%)	9 (10%)	9 (10%)	8 (8.9%)	10 (11.1%)	3 (3.3%)	90 (100%)

Group I + Group II - $X^2 = 15.46$ DF = 10 P = 0.116 NS NS

Group I - $X^2 = 14.4$ DF = 10 P = 0.158 Group II - $X^2 = 7.4$ DF = 6 P = 0.286

NS

Findings statistically not significant

2. Children (<12 years) were 28.7%

3. Adolescents (13-18 years) were 71.3%

4. Crude mean age (all children) = 13.7 years

5. Crude mean age for all males = 13.8 years

6. Crude mean age for all females = 13.7 years

Mean age of males with PM = 13.4 years

Mean age of females with PM = 13.4 years

TABLE 2:	PSYCHIATRIC DISORDERS DETE	CTED	William District				
ICD-10 CODE		COUNT ROW %	GR	OUP I	GRO	OUP II	TOTAL
	DIAGNOSIS	COLUMN %	M	F	М	F	
791	CONDUCT DISORDERS		8 44.0 47.2 20.0	2 11.0 33.4 5.0	5 27.5 55.5 12.5	3 16.5 37.5 7.5	18 (45.0%)
792	MIXED DISORDERS OF CONDUCT AND EMOTIONS	30.50	3 37.5 17.5 7.5	0 0.0 0.0 0.0	3 37.5 33.3 7.5	2 25.0 25.0 5.0	8 (20.0%)
793	EMOTIONAL DISORDERS WITH ONSET SPECIFIC TO CHILDHOOD		1 12.5 5.9 2.5	3 37.5 51.1 7.5	1 12.5 11.1 2.5	3 37.5 37.5 7.5	8 (20.0%)
F30-F39	MOOD DISORDERS		4 80.0 23.6 10.0	1 20.0 16.7 2.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	5 (12.5%)
F90	HYPERKINETIC DISORDER	57.31	1 100.0 5.9 2.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 (2.5%)

17

(42.5%)

Findings not statistically significant PM ratio in M:F in group I is 2.8:1 PM ratio in M:F in group II is 1.1:1

TOTAL

6

(15.0%)

(22.5%)

40

(100.0%)

(20.0%)

coup I + Group II - $X^2 = 9.53$; DF = 5; P = 0.0897 NS

coup I - $X^2 = 6.23$ DF = 4 P = 0.182 NS coup II - Statistical analysis was not done due to the high number of zeros.

TABLE 3: CRUDE SUBSTANCE USE VS SEX

SEX	COUNT ROW % COLUMN % TOTAL %	YES	МО	TOTAL
MALES		33 51.1 84.6 36.7	31 48.4 60.8 34.4	64 (71.1%)
FEMALES		6 23.1 15.4 6.7	20 76.9 39.2 22.2	26 (28.9%)
TOTAL		39 (43.3%)	51 (56.7%)	90 (100%)

 $X^2 = 6.11$

DF = 2

P = 0.0134

SS

- 1. Findings statistically significant.
- 2. Crude substance use was 43.3%.
- 3. Substance use among males was 51.1%
- 4. Substance use among females was 23.1%
- 5. Male substance use rate of the study sample was 36.7%
- 6. Female substance use rate of the study sample was 6.7%

LINGRAIM	MEDIC
Y DB N	AL BIBRA
	ARY

CODE	DIAGNOSIS	COUNT ROW %		TOTAL			
		COLUMN %	M	ROUP I	M	OUP II	
F91	CONDUCT DISORDERS		7 43.8 28 18	2 12.5 66.7 5.2	5 31.3 62.5 13	2 12.5 66.7 5.2	16 (41.6%)
F92	MIXED DISORDERS OF CONDUCT AND EMOTIONS		2 40 8 5.2	0 0.0 0.0 0.0	2 40 25 5.2	1 20 33.3 2.6	5 (13.0%)
F30-F39	MOOD DISORDERS		3 100 12 7.7	0 0.0 0.0 0.0	0 . 0 . 0 . 0 . 0 . 0	0 0.0 0.0 0.0	3 (7.7%)
F-90	HYPERKINETIC DISORDER		1 100 4 2.6	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 (2.6%)
F-93	EMOTIONAL DISORDERS WITH ONSET SPECIFIC TO CHILDHOOD		0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 (0.0%)
NIL	NIL		12 85.2 48 31.2	1 7.1 33.3 2.6	1 7.1 12.5 2.6	0 0.0 0.0 0.0	14 (36.4%)
	TOTAL		25 (64%)	3 (7.7%)	8 (20.6%)	3 (7.7%)	39 (100%)

CITECUANCE HEEDS

^{2.} Of the substance users 63.6% had PM and 36.4% had NPM. 3. Of the total substance users; 84.6% were males and 15.4% females. 35

V) 49 24	5:	SUBSTANCE U	ISE VS	PSYCHIATRIC	MORBIDITY

SUBSTANCE		GROU	PI			GROU		SUMMED FREQ.	
	PM		NPM		PM		NPM		
	M	F	M	F	M	F	М	F	
NICOTINE	8	0	11	1	6	2	1	0	29
INHALANTS	9	2	4	1	2	0	1	0	19
CANNABIS	2	0	1	0	3	1	1	0	8
ALCOHOL	2	0	0	0	2	2	0	0	6
KHAT	2	0	1	0	1	1	0	0	5
SEDATIVES	1	0	0	0	2	0	0	0	3
TOTAL	24	2	17	2	16	6	3	0	70

- 1. The crude rate of substance use in this study was found to be 43.3%. (Table 3)
- 2. A total of 70 patterns of substance use among the users were noted.
- 3. Statistical analysis of substance use vs PM was not done due to high number of zero scores.
- 4. Multiple drug use is also evident from the table.

TABLE 5: COMORBIDITY - PSYCHIATRIC DIAGNOSIS VS TYPE OF SUBSTANCE USED

ICD-10	DIAGNOSIS			GRO	JP I					GROU	PII			
CODE		ALC	KHA	CAN	VH	NIC	SED	ALC	KHA	CAN	VH	NIC	SED	TOTAL
F91	CONDUCT DISORDERS	1	2	1	6	5	0	2	0	2	2	5	1	27
F92	MIXED DISORDERS OF CONDUCT AND EMOTIONS	1	0	1	1	2	1	2	2	2	0	3	1	16
F30-F39	MOOD DISORDERS	0	0	0	3	1	0	0	0	0	0	0	0	4
F90	HYPERKINETIC DISORDER	0	0	0	1	0	0	0	0	0	0	0	0	1
F93	EMOTIONAL DISORDERS WITH ONSET SPECIFIC TO CHILDHOOD	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	2	2	2	11	8	1	4	2	4	2	8	2	48

- 1. Statistical analysis was not done due to the high number of zeros.
- 2. Multiple substance use is evident.

HADDE /: AGE AT FIRST USE VS TYPE OF SUBSTANCE USER

AGE AT			GR	OUP I			GROUP II						
FIRST	NIC	VH	CAN	ALC	KHA	SED	NIC	VH	CAN	ALC	KHA	SED	SUMMED FREQ.
9 - 10	0	0	0	0	0	0	1	1	1	0	0	0	3
11 - 12	3	6	0	0	0	1	1	0	0	0	0	0	11
13 - 14	8	6	0	0	0	0	3	2	1	0	0	0	20
15 - 16	6	3	1	2	2	0	2	0	1	2	1	0	20
17 - 18	3	1	2	0	1	0	2	0	2	2	1	2	16
TOTAL	20	16	3	2	3	1	9	3	5	4	2	2	70

- 1. Substance use starts at a younger age (9-10 years) in group II as compared to group I (11-12 years).
- 2. Nicotine, volatile hydrocarbons and cannabis are the drugs of choice for first use in group II
- 3. Volatile hydrocarbons, nicotine and sedatives are the drugs of choice for first use in group I.
- 4. The peak drug initiation age was noted as 13-16 years in both groups.
- 5. Statistical analysis was not done due to the high number of zeros.

DEVIANT BEHAVIOUR		GRO							
		PM	1	IPM_	I	PM	1	NPM	FREQ.
	М	F	M	F	M	F	M	F	
LEFT SCHOOL	16	6	24	7	6	4	9	3	75
SUBSTANCE USE	13	2	12	1	7	3	1	0	39
RUNNING AWAY FROM HOME	16	2	6	2	3	2	0	0	31
BEGGING	10	3	15	2	0	0	0	0	30
PROBLEMS WITH PARENTS	7	3	2	0	4	5	1	0	22
STEALING/THEFTS/ROBBERIES	5	0	5	0	0	0	0	0	10
PROBLEMS WITH PEERS	5	0	2	0	0	1	1	0	9
PROBLEMS WITH TEACHERS	1	0	1	0	2	1	0	0	5
PROBLEMS WITH MEMBERS OF PUBLIC	0	3	0	1	0	1	0	0	5
PROBLEMS WITH POLICE/ADMINISTRATION	1	0	2	0	0	0	0	0	3
PROBLEMS WITH SIBLINGS	0	0	0	1	1	0	0	0	2
SEXUAL ABUSER (RAPIST)	1	0	0	0	0	0	0	0	1
POSSESSION OF DRUGS	0	0	3	0	0	0	0	0	3
SEXUALLY ACTIVE	2	2	0	1	1	0	0	0	6
SUICIDE ATTEMPT	0	1	0	0	0	1	0	0	2
TOTAL	77	22	72	15	24	18	12	3	243
					-				

Due to the large number of zeros, statistical significance was not evaluated. The table shows multiple deviant behaviours.

LEVEL OF	COUNT ROW %		GRO	OUP I			GROU	PII		1
EDUCATION	COLUMN %	PI	М	N	PM	PI	M	NPM	1	TOTAL
	TOTAL %	М	F	М	F	M	F	М	F	
NIL		4 16.7 23.6 4.4	3 12.5 50.0 3.3	5 20.6 17.4 5.6	4 16.7 44.4 4.4	3 12.5 33.3 3.3	5 20.9 62.5 5.6	0 0.0 0.0 0.0	0 0.0 0.0 0.0	24 (26.6%)
Std 1-4		6 19.9 35.4 6.7	1 3.3 16.7 1.1	8 26.6 27.8 8.9	1 3.3 11.1 1.1	3 10.0 33.3 3.3	1 3.3 12.5 1.1	8 26.6 80.0 8.9	2 6.7 66.7 2.2	30 (33.3%)
Std 5-8		7 21.8 41.3 7.8	2 6.2 33.4 2.2	15 46.8 52.1 16.7	4 12.5 44.4 4.4	1 3.1 11.1 1.1	1 3.1 12.5 1.1	1 3.1 10.0 1.1	1 3.1 33.3 1.1	32 (35.5%)
Form 1-2		0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 50.0 12.5 1.1	1 50.0 10.0	0 0.0 0.0 0.0	2 (2.2%)
Form 3-4		0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 100.0 22.2 2.2	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 (2.2%)
TOTAL		17 (18.9%)	6 (6.7%)	28 (31.1%)	9 (10.0%)	9 (10.0%)	8 (8.9%)	10 (11.1%)	3 (3.3%)	90 (100%)

^{1.} Statistical analysis was not done due to the high number of zeros.

^{2. 23.6%} males and 50% females with PM in group I had no education.

^{3. 33.3%} males and 62.5% females with PM in group II had no education.

Only 4.4% had been to secondary school. 50% of these had dropped out of school by Form 2.

TABLE 10: REASONS FOR BEIN	G BROUGHT TO THE	NAIROBI JUVENIL	E COURT	-1-5	
REASONS	GRO	UP I	GRO	UP II	TOTAL
	М	F	M	F	
BEGGING	13 (14.4%)	3 (3.3%)	0 (0.0%)	0 (0.0%)	16 (17.8%)
STEALING/THEFTS/ROBBERIES	12 (13.3%)	3 (3.3%	0 (0.0%)	0 (0.0%)	15 (16.7%)
UNFIT CAREGIVER	1 (1.1%)	1 (1.1%)	8 (8.9%)	4 (4.4%)	14 (15.5%)
DESTITUTE	3 (3.3%)	6 (6.7%	0 (0.0%)	3 (3.3%)	12 (13.3%)
INDISCIPLINE	2 (2.2%)	0 (0.0%)	7 (7.8%)	2 (2.2%)	11 (12.1%)
REFUSAL TO GO TO SCHOOL	1 (1.1%)	1 (1.1%)	3 (3.3%)	2 (2.2%)	7 (7.8%)
BAD ASSOCIATIONS	5 (5.6%)	1 (1.1%)	1 (1.1%)	0 (0.0%)	7 (7.8%)
POSSESSION OF PSYCHOACTIVE SUBSTANCE	3 (3.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (3.3%)
TRESSPASSING	2 (2.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (2.2%)
CAUSING GREVIOUS HARM	1 (1.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.1%)
POSSESSION OF AN OFFENSIVE WEAPON	1 (1.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.1%)
SEXUAL ABUSER	1 (1.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (1.1%)
TOTAL	45 (50%)	15	19 (21 1%)	11 (12 18)	90

APPEARANCES IN COURT	COUNT	GROUP I					TOTAL			
	ROW %	PM		NPM		PM		NPM		
	TOTAL %	M	F	М	F	М	F	M	F	
FIRST		11 15.4 64.9 12.2	6 8.4 100 6.7	18 25.2 62.5 19.9	9 12.6 100 10.0	9 12.6 100 10.0	8 11.2 100 8.9	10 14 100 11.1	3 4.2 100 3.3	74 (82.2%)
SECOND OR MORE		6 42.8 35.4 6.7	0 0.0 0.0 0.0	10 71.4 35.6 11.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	16 (17.8%)
TOTAL		17 (18.9%)	6 (6.7%)	28 (31.1%)	9 (10.0%)	9 (10.0%)	8 (8.9%)	10 (11.1%)	3 (3.3%)	90 (100%)

Group I + Group II - X^2 = 3.98; DF = 10; P = 0.948 NS Group I - X^2 = 4.45 DF = 5 P = 0.487 NS Group II - Statistical analysis was not done due to the high number of zeros

- 1. Findings not statistically significant
- 2. 64.9% males and 100% females with PM from group I appeared once in the court
- 3. 100% males and 100% females with PM from group II appeared once in the court
- 4. 35.4% males only with PM from group I appeared more than once in the court.
- 5. 35.6% males only from group I with NPM had appeared in the court twice or more.
- 6. In total 17.8% of the children and young persons appeared more than once in the court.

BROUGHT UP	COUNT	GROUP I					1			
BY	ROW %	PM		NPM		PM		NPM		TOTAL
	TOTAL %	M	F	М	F	М	F	M	F	
BOTH PARENTS		9 17.6 53.1 9.9	3 5.6 60.0 3.3	17 30.2 58.9 18.9	5 9.8 55.6 5.6	5 9.8 55.6 5.6	5 9.8 62.5 5.6	5 9.8 50.0 5.6	2 3.9 66.7 2.2	51 (56.6%)
MOTHER ONLY		1 4.4 5.9 1.1	2 8.8 33.4 2.2	9 39.4 31.2 10	1 4.4 11.1 1.1	3 13.1 33.3 3.3	1 4.4 12.5 1.1	5 21.9 50.0 5.5	1 4.4 33.3 1.1	23 (25.5%)
FATHER ONLY		1 33.3 5.9 1.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 33.3 1.1 1.1	0 0.0 0.0 0.0	1 33.3 12.5 1.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 (3.3%)
OTHER CAREGIVERS		6 46.2 35.4 6.7	1 7.7 16.7 1.1	2 15.4 33.2 2.2	2 15.4 22.2 2.2	1 7.7 11.1 1.1	1 7.7 12.5 1.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	13 (14.4%)
TOTAL		17 (18.9%)	6 (6.7%)	28 (31.1%)	9 (10.0%)	9 (10.0%)	8 (8.9%)	10 (11.1%)	3 (3.33%)	90 (100%)

Group I + Group II - X^2 = 21.86; DF = 15; P = 0.117 NS

Group I - $X^2 = 13.7$ DF = 15 P = 0.551 NS

Group II - Statistical analysis was not done due to the high number of zeros

1. The crude PM rate was 44.4%.

2. 15.5% of males with PM were brought up by both parents.

- 3. 8.9% of females with PM were brought up by both parents.
- 4. 4.4% of males with PM were brought up by mother only.
- 5. 3.3% of females with PM were brought up by mother only.
- 6. 7.8% of males with PM were brought up by other caregivers.
- 7. 2.2% of females with PM were brought up by other caregivers.
- 8. 56.6% of the children were brought up by both parents.
- 9. Single mother parenting was 25.5% and single father parenting was 3.3%.
- 10. Other caregiver parenting was 14.4%.

ICD-10	DIAGNOSIS	COUNT	BROUGHT UP BY								
CODE		COLUMN % TOTAL %	BOTH PARENTS		MOTHER ONLY		FATHER ONLY		OTHER CAREGIVER		TOTAL
			М	F	M	F	М	F	М	F	
F91	CONDUCT DISORDER		7 39.2 50 17.5	2 11.2 28.4 5	3 16.8 42.6 7.5	2 11.2 100 5	0 0.0 0.0 0.0	0.0	3 16.8 60 7.5	1 5.6 33.3 2.5	18 (45%)
F92	MIXED DISORDERS OF CONDUCT AND EMOTION		2 25 14.2 5	1 12.5 14.2 2.5	4 50 56.8	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 33.3 2.5	8 (20%)
F93	EMOTIONAL DISORDERS WITH ONSET SPECIFIC TO CHILDHOOD		2 25 14.2 5	4 50 56.8 10	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 12.5 50 2.5	0 0.0 0.0 0.0	1 12.5 33.3 2.5	8 (20%)
F30-F39	MOOD DISORDER		2 40 14.2 5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 20 50 2.5	2 40 40 5	0.0	5 (12.5%)
F90	HYPERKINETIC DISORDER		1 100 7.1 2.5	0 0.0 0.0 0.0	0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0.0	0 0.0 0.0 0.0	0.0	1 (2.5%)
TOTAL			14 (35%)	7 (17.5%)	7 (17.5%)	2 (5%)	O (0%)	2 (5%)	5 (12.5%)	3 (7.5%)	40 (100%)

^{1.} Statistical analysis was not done due to the high number of zeros.

^{2. 35%} males and 17.5% females with PM were brought up by both parents.

^{3. 17.5%} males and 5% females with PM were brought up by mother only.

^{4. 5%} females with PM were brought up by father only.

NUMBER	COUNT	GROUP I								
OF SIBLINGS	ROW % COLUMN %	PM		NPM		PM		NPM		TOTAL
	TOTAL %	M	F	M	F	М	F	M	F	
Equal or less than 4		10 19.3 59 11.1	2 3.9 33.6 2.2	16 30.9 57.6 17.8	4 7.7 44.4 4.4	7 13.5 77.7 7.7	6 11.6 75 6.6	6 11.6 60 6.6	1 1.9 33.3 1.1	52 (57.7%)
5 - 8		7 21.7 41.3 7.7	4 12.4 67.2 4.4	10 31 36 11.1	4 12.4 44.4 4.4	1 3.1 11.1 4.4	2 6.2 25 2.2	2 6.2 20 2.2	2 6.2 66.7 2.2	32 (35.5%)
9 - 12		0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 3.4 7.2 2.2	1 1.7 11.1 1.1	1 1.7 11.1 1.1	0 0.0 0.0 0.0	2 3.4 20 2.2	0 0.0 0.0 0.0	6 (6.7%)
TOTAL		17 (18.9%)	6 (6.7%)	28 (31.1%)	9 (10%)	9 (10%)	8 (8.9%)	10 (11.1%)	3 (3.3%)	90 (100%)

Group I + Group II -
$$X^2$$
 = 9.91 DF = 10 P = 0.45 NS
Group I - X^2 = 4.23 DF = 10 P = 0.936 NS
Group II - X^2 = 12.82 DF = 6 P = 0.046 SS

- 1. Findings statistically significant for Group II.
- 2. 57.7% of the study sample had \leq 4 siblings.
- 3. 35.5% of the study sample had 5-8 siblings.
- 4. 6.7% of the study sample had 9-12 siblings.

- - JOHN JAMES AND STREET OF CARLO VER VS PSYCHIATRIC MORBIDITE

OCCUPATION	COUNT									
OF CAREGIVER	ROW % COLUMN %	PM		NPM		PM		NPM		TOTAL
	TOTAL %	M	F	М	F	М	F	М	F	
Employed		13 18.9 76.7 14.4	4 5.8 67.2 4.4	21 30.5 75.6 23.3	5 7.3 55.5 5.5	9 13 100 10	7 10.2 87.5 7.8	10 14.5 100 11.1	2 2.9 66.7 2.2	71 (78.9%)
Unemployed		1 12.5 5.9 1.1	1 12.5 16.8 1.1	1 12.5 3.6 1.1	3 27.5 33.3 3.3	0 0.0 0.0 0.0	1 12.5 12.5 1.1	0 0.0 0.0 0.0	1 12.5 33.3 1.1	8 (8.9%)
Don't Know		3 29.7 17.7 3.3	1 9.9 16.8 1.1	6 59.4 21.6 6.6	1 9.9 11.1 1.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	11 (12.2%)
Total		17 (18.9%)	6 (6.7%)	28 (31.1%)	9 (10%)	9 (10%)	8 (8.9%)	10 (11.1%)	3 (3.3%)	90 (100%)

Group I + Group II - $X^2 = 2.89$ DF = 10 P = 0.984 NS

Group I - $X^2 = 5.17$ DF = 10 P = 0.88 NS

Group II - Statistical analysis was not done due to the high number of zeros.

- 1. PM was found to be 28.9% and 53.3% for group I and II respectively, whereby the caregivers were employed.
- 2. PM was found to be 3.4% and 3.3% for group I and II respectively, whereby the caregivers were unemployed.
- 3. PM was found to be 6.8% for group I whereby the occupation of the caregivers was not known.

CHAPTER SIX

DISCUSSION

1. LIMITATIONS

During the course of the study, the Vagrancy Act was scrapped by the Seventh Parliament of the Republic of Kenya leading to fewer children being arrested by the police under other statutes. Hence few children were brought to the juvenile court by the police and the probation department. This forced the author to extend the duration for data collection from one month to four months in order to get adequate number of children to include in the study.

Although the author is fluent in English and Kiswahili, some of the children and young persons did not understand either of the languages. These were excluded from the study. Since the parents or other caregivers of the children and young pesons were not available, the RQC was administered with the assistance of the probation and children's officers.

2. PREVALENCE OF PSYCHIATRIC MORBIDITY ICD-10 DIAGNOSIS

This study consisted of 90 children and young persons, formed of 60 offenders (Group II) and 30 others (Group II) in need of discipline and protection. It was found that 40 out of the 90, (44.4%), children and young persons in the whole sample had a psychiatric diagnosis. These 40 consisted of 26 (65%) males and 14 (35%) females. Of these forty, 23 (57.5%) were from group I and 17 (42.5%) were from group II. Of the 23 from group I, 17 (74%) were males and 6 (26%) were females. Of the 17 from group II, 9 (52.8%) were males and 8 (47.2%) females (Tables 1,2).

The CPM prevalance rate in this study (44.4%) was much higher than in other findings by researchers such as Gatangi (1987), Kang'ethe (1988), Mwangi S. (1996) and Mwangi N. (1996) in the Kenyan settings.

Gatangi (1987) in a study among 85 children and young persons admitted into an approved school in Nairobi found a PM prevalence rate of 24.8%. This prevalence could possibly have been low as a result of the influence of living in the approved school which would have strict rules and regulations.

In a study of 303 children (164 boys, 139 girls) aged between 5-15 years, attending a primary health care facility in a suburban township in Nairobi, Kang'ethe (1988) found a prevalence rate of 20% using the RQC and FIC.

Mwangi S. (1996) in a study among 78 children (37 males, 41 females) aged between 8-18 years, in a community based institution in Nairobi found a PM prevalence rate of 41% using the RQC and FIC.

Mwangi N. (1996) in a comparative study of psychiatric morbidity in rural (n = 144) and urban (n = 131) primary school pupils in Kenya found the crude PM rates to be 26.4% (rural) and 41.2% (urban) using the RQC and FIC.

Minde (1974, 1975) found that 18-24% psychiatric morbidity was present among Ugandan primary school children.

This study and the study by Mwangi S. (1996), show similarities in prevalence of psychiatric morbidity, being 44.4% and 41% respectively. This could be due to the similarity of the sample population studied in both groups in terms of age, socioeconomic factors, rearing patterns, low education levels and substance use.

(i) Conduct Disorders

Out of the total sample of 90 children, 18 (20%) had conduct disorders and were composed of 13 (14.4%) males and 5 (5.6%) females. Out of these eighteen, 10 (55.6%) were from group I and 8 (44.4%) from group II.

Of the 10 from group I, 8 (80%) were males and 2 (20%) females.

Of the 8 from group II, 5 (62.5%) were males and 3 (37.5%) females.

The crude M:F ratio for conduct disorders was 2.6:1 (group I, 4:1; group II, 1.7:1).

This shows that conduct disorders are more common in males than females in both groups but more so among males of group I.

Kang'ethe (1988) found a prevalence rate of 2.6% for conduct disorders and a male:female ratio of 5;1.

Mwangi N. (1996) in a comparative study of psychiatric morbidity in a rural (n = 144) and an urban (n = 131) primary school students in Kenya found a prevalence rate of 7.9% and 7.4% respectively for conduct disorders. The crude male:female ratio for conduct disorders was 5:1.

Mwangi S. (1996) reported a prevalence rate of 2.6% for conduct disorder and a male:female ratio of 1:1 in her study.

Gatangi (1987) did not document any conduct disorders in his study.

Rates for conduct disorders among children from other African countries have been reported as follows; from Ghana, Adamako (1973) reported rates of 3%, from Nigeria, Izuora (1970) reported 5.5% while Olatuwura and Odejide (1981) reported 10%; from Uganda Minde (1975) reported rates 14%.

In the Isle of Wight study, Rutter et al (1970), nearly two thirds of the 10-11 year olds with psychiatric disorders were found to have conduct disorders. Including the children with mixed neurotic and conduct disorders, the prevalence of conduct problem was 4%.

The differences in the prevalences of conduct disorders from different studies may be accounted for by the differences in research methodology, differences in the sample studied and socio-cultural factors in the respective studies.

(ii) Mixed Disorders of Conduct and Emotions

Out of the total sample of 90 children, 8 (8.9%) had mixed disorders of conduct and emotions and were composed of 6 (6.7%) males and 2 (2.2%) females. Out of these eight, 3 (37.5%) were from group I and 5 (62.5%) from group II.

From group I, all 3 (100%) were males.

Of the 5 from group II, 3 (60%) were males and 2 (40%) females.

The crude male: female ratio for mixed disorders of conduct and emotions was 3:1 (group I, 3:0 and 1.5:1 for group II).

This suggests that mixed disorders of conduct and emotions are more common in males than females in both the groups.

Mwangi N. (1996) in his study reported 13.2% of pupils from a rural primary school and 5.6% of pupils from an urban primary school with mixed disorders of conduct and emotions.

Rutter et al (1970) reports that it is relatively common for children and adolescents with deviant behaviour, and especially those with more widespread conduct disorders, to show emotional disturbances.

He further states that the pattern of changing symptomatology between middle childhood and adolescence may show a good deal of shift from conduct disorders to mixed disorders.

(iii) Emotional Disorders with Onset Specific to Childhood

Out of a total sample of 90 children, 8 (8.9%) had emotional disorders with onset specific to childhood and were composed of 2 (2.2%) males and 6 (6.7%) females. Of these eight, 4 (50%) were from group I and 4 (50%) were from group II.

Of the 4 from group I, one (25%) was a male and 3 (75%) were females.

Of the 4 from group II, one (25%) was a male and 3 (75%) were females.

The male:female ratio being 1:3 for both groups. Hence emotional disorders with onset specific to childhood were more common in females than males.

(iv) Mood Disorders

Out of the total sample of 90 children, 5 (5.6%) had mood disorders and were composed of 4 (4.4%) males and 1 (1.1%) female. All these five children were from group I and consisted of 4 (80%) males and 1 (20%) female.

Among the four males who suffered from mood disorders, 3 (75%) had features of depression and 1 (25%) had hypomania. The only female with a mood disorder had depression, a history of one suicide attempt and had been sexually molested twice.

Mwangi S. (1996) in her study found a prevalence rate of 14.1% for depressive disorders not otherwise specified.

In the Isle of Wight study, (Rutter et al, 1970), 13% of the children studied at the age of 10 years showed depressed mood at interview, 17% failed to smile and 15% showed poor emotional responses. At 14-15 years of age, over 40% reported feelings of misery and depression, 20% described feelings of self depreciation, 7% reported suicidal feelings and 25% ideas of reference.

(v) Hyperkinetic Disorder

This disorder was found only in one male from group 1.

Rutter et al (1983) reported a study among boys on probation, in Canada, suggesting that those who were hyperactive tended to be more antisocial.

3. SUBSTANCE USE

In this study only prevalence of psychoactive substance use was the factor assessed and psychiatric morbidity due to psychoactive substance use was not assessed (Tables, 3,4,5 and 6).

Crude rate for substance use in this study was found to be 39 out of the total sample of 90, (43.3%), children and young persons. Of these thirty nine, 33 (85.8%) were males and 6 (14.2%) were females.

The M:I' was 5.5:1.

Out of the total 39 substance users, conduct disorders were found among 16 (41.6%); mixed disorders of conduct and emotions among 5 (13.0%); mood disorders among 3 (7.7%); hyperkinetic disorder among 1 (2.6%). Of the 39 substance users found in this study, 14 (36.4%) had NPM (Table 4).

Using the W.H.O. Youth Survey Questionnaire, Wangari (1993) interviewed 952 secondary school students (males = 606, females = 346) from urban (n = 547) and rural (n = 405). The drugs commonly used by study sample were found to be alcohol, tobacco, inhalants, cannabis, amphetamines, opiates and cocaine.

Mwangi S. (1996) found 46.2% of the children in her study to have used a substance but did not report on substance use and psychiatric comorbidity.

(i) Nicotine Use

Out of the total sample of 90 children, 29 (32.2%) used nicotine and were composed of 26 (28.9%) males and 3 (3.3%) females. Out of these twenty nine, 20 (70%) were from group I and 9 (30%) were from group II.

Of the 20 from group I, 19 (95%) were males and 1 (5%) female.

Of the 9 from group II, 7 (77.8%) were males and 2 (22.2%) females.

The M:F was 8.5:1 (19:I for group I and 3.5:1 for group II). This shows that nicotine use was a major problem among males in both the groups.

Nicotine use and psychiatric co-morbidity, in the total sample of 90, was found among 16 (17.6%) and were composed of 14 (15.5%) males and 2 (2.2%) females. Out of these sixteen, 8 (50%) were from group I and 8 (50%) were from group II.

Of the 8 from group I, all were males.

Of the 8 from group II, 6 (75%) were males and 2 (25%) females.

Tobacco use was reported by Wangari (1993) as 34% among urban and 42.5% among rural secondary school students.

Mwangi S. (1996) reported 16.6% nicotine use in her study, this being about half of the 32.2% reported in the present study.

(ii) Volatile Hydrocarbons Use

This was the second most used substance. A total of 19 out of 90 (21.1%) used volatile hydrocarbons and were composed of 16 (17.8%) males and 3 (3.3%) females. Out of these nineteen, 16 (68.6%) were from group I and 6 (31.4%) from group II. Of the 16 from group I, 13 (81.2%) were males while 3 (18.8%) were females. Of the 3 from group II, all were males.

VH use and psychiatric comorbidity, in the total sample of 90, was found among 13 (14.3%) and were composed of 11 (12.2%) males and 2 (2.2%) females. Out of these thirteen, 11 (84.6%) were from group I and 2 (15.4%) were from group II.

Of the 11 from group I, 9 (81.8%) were males and 2 (18.2%) females.

Of the 2 from group II, all were males.

VH use was reported by Wangari (1993) as 20% among urban and 27.5% among rural secondary school students. Mwangi S. (1996) reported 28.2% use of VH.

The results reported by Wangari and Mwangi S. are nearly similar to the 21.1% use of VH as found in the present study.

(iii) Cannabis Use

This was the third most used substance. A total of 8 out of 90 (8.9%) used cannabis and were composed of 7 (7.8%) males and 1 (1.1%) female. Out of these eight, 3 (37.5%) were from group I and 5 (62.5%) from group II.

Of the 3 from group I, all were males.

Of the 5 from group II, 4 (80%) were males and 1 (20%) female.

Cannabis use and psychiatric comorbidity, in the total sample of 90, was found among 6 (6.7%) and were composed of 5 (5.6%) males and 1 (1.1%) female. Out of these six, 2 (33.3%) were from group I and 4 (66.7%) from group II.

Of the 2 from group I, all were males.

Of the 4 from group II, 3 (75%) were males and 1 (25%) female.

Wangari (1993) reported cannabis use as 19% among urban and 12.5% among rural secondary school students.

Mwangi S. (1996) reported 26.9% cannabis use. Ndetei et al (1997) reported 31.4% cannabis use among children in the age group of 10-15 years.

The lower percentage, 8.9%, of cannabis use in the present study could be a result of denial of use by the children, interviewed at the juvenile court, fearing more severe punishment.

(iv) Alcohol Use

A total of 6 out of 90 (6.7%) used alcohol and were composed of 4 (4.4%) males and 2 (2.2%) females. Out of these six, 2 (33.3%) were from group I and 4 (66.7%) from group II.

Of the 2 from group I, all were males.

Of the 4 from group II, 2 (50%) were males and 2 (50%) females.

Psychiatric comorbidity was found among all the alcohol users.

Alcohol use was reported by Mwangi S. as 2.6% but did not report any psychiatric comorbidity.

(v) Khat Use

A total of 5 out of 90 (5.6%) used Khat and were composed of 4 (4.4%) males and 1 (1.1%) female. Of these five, 3 (60%) were from group 1 and 2 (40%) were from group II.

Of the 3 from group I, all were males.

Of the 2 from group II, 1 (50%) was a male and 1 (50%) a female.

Khat use and psychiatric comorbidity, in the total sample of 90, was found among 4 (4.4%) and were composed of 3 (3.3%) males and 1 (1.1%) female. Out of these four, 2 (50%) were from group I and 2 (50%) were from group II.

Of the 2 from group I, all were males.

Of the 2 from group II, 1 (50%) was a male and 1(50%) a female.

(vi) Sedatives Use

A total of 3 out of 90 (3.3%), used sedatives and were composed of 1 (1.7%) male from group I and 2 (6.7%) males from group II.

All the 3 males showed psychiatric comorbidity. None of the females had used sedatives from either of the groups.

Sedative use reported by Mwangi S. (1996) was 2.5%.

Mwangi S. (1996) found 46.2% of the children in her study to have used a substance. The crude prevalence of substance use in Mwangi Susan's study and this study is similar. This could be possible due to the similarity in the study population.

In this study nicotine was found to have been used most followed by inhalants, cannabis, alcohol, khat and sedatives in group I. Among psychoactive substance users in group II, nicotine was found to have been used most followed by cannabis, alcohol, inhalants, khat and sedatives. This difference in group specific pattern of psychoactive substance use may be attributed to the availability of the substance and money for purchase of the psychoactive substance.

Mwangi S. (1996) found inhalants to have been abused most followed by cannabis, nicotine, alcohol and sedatives. Except for khat, the types of substances used in Mwangi S. study and this study are similar. The commonest drug of abuse in Wangari's (1993) study was alcohol followed by tobacco, inhalants, cannabis, amphetamines, opiates and cocaine.

4. AGE AT FIRST USE OF A SUBSTANCE

The age of first use of a psychoactive substance in group II in this study was in the age range of 9-10 years; with nicotine, VH and cannabis as the substances of first choice. In group I the age of first use of a psychoactive substance was in the range of 11-14 years with nicotine, VH and sedatives as the substances of first choice. In the 10-16 year age range the incidence of substance use increased but still with nicotine, VH and cannabis as the substances of choice in both groups. Age of first use of khat and alcohol ranged from 15-18 years in both groups (Table 7).

In a study by Ndetei et al (1997) the age of first drug use was in the age range of 0-9 years starting with volatile hydrocarbons and then cannabis. In the 10-15 year age group, the incidence of drug use increased but still with volatile hydrocarbons and cannabis as the drugs of first choice.

From this study and the study by Ndetei et al it is evident that age of first drug use is around 9 years and the commonest drugs used at this age are VH, nicotine and cannabis. Availability of the various substances could have played a major role in determining which substances were used and by whom.

Most of the users admitted experience with more than one substance.

5. **DEVIANT BEHAVIOUR**

A variety of deviant behaviours were reported in this study. The common deviant behaviours were premature leaving of school, substance use, running away from home, begging, problems with parents, problems with peers and stealing, thefts and robberies. (Table 8).

Deviant behaviour in terms of the children who had either not been to school or had left school without completing primary education, was found among 86 out of the 90 (95.5%) children (Table 9).

Drug use was found in 39 out of 90 (43.3%) children.

Those who had run away from home were 31 out of 90 (34.4%) and were composed of 25 (27.6%) males and 6 (6.7%) females. PM was found among 16 (27.2%) males and 2 (3.4%) females from group I and among 3 (10%) males and 2 (6.7%) females from group II.

In the study, 30 out of the 90 (33.3%) children, composed of 25 (27.6%) males and 5 (5.6%) females all from group I, confessed to have resorted to begging so as to earn a living. PM was found among 10 (17%) males and 3 (5%) females in this group.

Children claimed to have problems with their parents mainly in the form of physical abuse by parents, misunderstandings, very strict parents and non-caring parents. These were 22 out of 90 (24.4%) and composed of 14 (15.4%) males and 8 (8.9%) females. PM was found among 7 (11.9%) males and 3 (5%) females from group 1.

From group II, PM was found among 4 (13.2%) males and 5 (16.6%) females. Because parents were not interviewed in the study, their views concerning the children were not known.

Those found to have been involved in stealing, thefts or robberies were 10 out of 90 (11.1%) and consisted of males only from group I. PM was found only among 5 males from this group.

Chidren who had problems with peers mainly in the form of physical fights and arguments were 9 out of 90 (10%) and composed of 8 (8.9%) males and 1 (1.1%) female.

PM was found among 5 (8.5%) males, from group I and among 1 (3.3%) female from group II.

Children who had problems with their teachers stating that teachers disliked them and found the children to be disobedient were 5 out of 90 (5.6%) and composed of 4 (4.4%) males and 1 (1.1%) female. PM was found among 1 (1.7%) male from group II. From group II, PM was found among 2 (6.7%) males and 1 (3.3%) female.

Those who had problems with members of the public mainly in the form of physical fights and arguments were 5 out of 90 (5.6%), all being females. Those with PM were 3 (5%) from group I and 1 (3.3%) from group II.

Children found to have had problems with law enforcement officers frequently, mainly because of either being found begging or sleeping on the pavements of major streets of Nairobi, were 3 out of 90 (3.3%), all being males from group I. Of these, only 1 male had PM.

Those noted to have had problems with their siblings in terms of physical fights on regular basis were 2 out of 90 (2.2%) and were composed of 1 (1.1%) male from group I and 1 (1.1%) female from group II. Only the male from group II had PM.

Those arrested and brought to the juvenile court for being in possession of a psychoactive substance were 3 males, all from group I, and all had NPM.

One male from group I, with PM, was found to be a sexual abuser. Those sexually active were 6 out of 90 (6.7%) and consisted of 2 (2.2%) males and 4 (4.4%) females.

History of suicide attempt was reported by two semales, one each from group I and group II and both had PM.

None of the children volunteered information on being involved in commercial sexual activities.

As only the children and young persons were interviewed in this study, and corroborative history from parents or other caregivers was not available, the causes leading to deviant behaviour were not explored.

Deviant behaviours among ex-street children reported by Ndetei et al (1997) were problems with police (60%), with teachers (21.4%) and problems with peers and parents (50%).

Fergusson et al (1997) reported deviant behaviour in the form of property offences 44.7% (damaging property, breaking into houses, stealing cars and shoplifting), violent offences 15.5% (assault, fighting, cruelty to animals and using physical coercion) and traffic offences 22.8%.

Deviant behaviours in the form of damaging property, stealing cars, cruelty to animals and traffic offences do not seem to be a major problem in the study by Ndetei et al (1997) and the present study.

In the Kauai longitudinal study (1954-1986) among a multi racial cohort of 698 children from birth in 1955 to 1986, Werner (1987) reported that by age 18 years, 10% of the cohort had mental health problems. Fifteen percent (21% of males and 11% females) had contacts with the family court as well. Among the delinquent acts were second and first degree larceny; burglary; car theft; malicious injury; assault and battery; sexual misconduct; possession, sale and abuse of drugs; forgery and repeated acts of truancy, running away from home, curfew violations and unlawful hunting.

6. LEVEL OF EDUCATION

Children and young persons appearing in the juvenile court with nil education were 24 out of 90 (26.6%). Out of the total sample of 90 children, 62 (68.8%) had primary school education and only 4 (4.4%) had secondary school education (Table 9).

(i) Nil Education

Those who had no education were 24 out of 90 (26.6%) of whom 12 (13.3%) were males and 12 (13.3%) were females. Out of these twenty four, 16 (66.7%) were from group I and 8 (33.3%) from group II.

Of the 16 from group I, 9 (56.3%) were males and 7 (43.7%) females.

Of the 8 from group II, 3 (37.7%) were males and 5 (62.5%) females.

Those with PM were 4 (6.7%) males and 3 (5.0%) females from group I whereas 3 (10%) males and 5 (16.7%) females were from group II.

Mwangi S. (1996) in her study reported 75.6% to have attended school and 24.4% not to have attended school.

(ii) Education Level Std. 1-4

This comprised 30 out of 90 (33.3%) of whom 25 (27.8%) were males and 5 (5.6%) females. Out of these thirty, 16 (53%) were from group I and 14 (47%) from group II. Of the 16 from group I, 14 (87.5%) were males and 2 (12.5%) females.

Of the 14 from group II, 11 (78.6%) were males and 3 (21.4%) females.

Those with PM were 6 (10.0%) males and 1 (1.7%) female from group I and 3 (10%) males and 1 (3.3%) female from those in group II.

(iii) Education Level Std. 5-8

This consisted of 32 out of 90 (35.5%) of whom 24 (26.6%) were males and 8 (8.9%) females. Out of these thirty two, 28 (87.5%) were from group I and 4 (12.5%) were from group II.

Of the 28 from group I, 22 (78.6%) were males and 6 (21.4%) females.

Of the 4 from group II, 2 (50%) were males and 2 (50%) females.

Those with PM were 7 (11.9%) males and 2 (3.4%) females from group I and 1 (3.3%) male and 1 (3.3%) female from those in group II.

(iv) Education Level Form 1-2

This consisted of 2 out of the 90 (2.2%) children, all from group II, comprising I (3.3%) male and I (3.3%) female. Only I (3.3%) female from this group had PM.

(v) Education Level Form 3-4

This consisted of 2(6.7%) males from group II and both had PM.

The results of Mwangi S. (1996) study and this study are nearly similar possibly because the population studied in both studies was nearly similar.

7. APPEARANCES IN COURT

The various reasons for which children and young persons were brought to the court included begging, stealing/thefts/robberies, being brought up by unfit caregivers, being a destitute, indiscipline, refusal to go to school, bad association with others, possession of psychoactive substances, tresspassing, causing grevious harm to others, possession of offensive weapons and for being a sexual abuser (Table 10).

(i) First Appearance in Court (Table 11)

A total of 74 out of the 90 (82%) children had appeared in court for the first time and consisted of 48 (53.3%) males and 26 (28.9%) females. Out of these seventy four, 44 (69%) were from group I and 30 (31%) from group II.

Of the 44 from group I, 29 (66%) were males and 15 (34%) females.

Of the 30 from group II, 19 (62.7%) were males and 13 (37.3%) females.

PM was detected among 34 out of the 90 (37.7%), consisting of 20 (22.2%) males and 14 (15.5%) females. Out these thirty four, 17 (50%) were from group I and 17 (50%) were from group II.

Of the 17 from group I, 11 (64.7%) were males and 6 (35.3%) females.

Of the 17 from group II, 9 (52.9%) were males and 8 (47.1%) females.

(ii) Second or More Appearances in Court

Having appeared in the court more than once consisted of 16 out of 90 (17.7%); all 16 (27.2%) being males from group I. PM was found among 6 (10%) of the males from this group.

It is evident from these findings that only children and young persons from group I showed recidivism whereas those from group II appeared in the court only once.

As compared to the 17.7% recidivism in this study, Lugalla and Mbwambo (1995) reported 62% of the children to have been involved in confrontations with the police more than once, however, it was not reported what percentage of the children were taken to court.

8. PARENTAGE

Of the total sample of 90 children and young persons in this study, it was found that 51 (56.6%) of the children were brought up by both parents, 23 (25.5%) by mother only, 3 (3.3%) by father only and 13 (14.4%) by other caregivers (Tables 12,13).

(i) Brought Up by Both Parents

Those who were brought up by both parents were 51 out of 90 (56.6%) and consisted of 36 (40%) males and 15 (16.7%) females. Of these fifty one, 34 (66.7%) were from group I and 17 (33.3%) from group II.

Of the 34 from group I, 26 (78.8%) were males and 8 (21.2%) females.

Of the 17 from group II, 10 (53%) were males and 7 (47%) females.

Those found with PM were 9 (15%) males and 3 (5%) females from group I and 5 (16.7%) males and 5 (16.7%) females were from group II.

(ii) Brought Up by Mother Only

Those who had been brought up by their mother only were 23 out of 90 (25.5%) of whom 18 (19.9%) were males and 5 (5.5%) were females. Out of these twenty three, 13 (56.6%) were from group I and 10 (43.4%) from group II.

Of the 13 from group I, 10 (76.9%) were males and 3 (23.1%) females.

Of the 10 from group II, 8 (80%) were males and 2 (20%) females.

Those with PM were 1 (1.7%) male and 2 (3.4%) females from group I whereas 3 (10%) males and 1 (3.3%) female were from group II.

(iii) Brought Up by Father Only

Those brought up by their fathers only were 3 out of 90 (3.3%) of whom 1 (1.11%) was a male and 2 (2.2%) females. Out of these three, 2 (66.7%) were from group I and 1 (33.3%) was from group II.

Of the 2 from group I, 1 (50%) was a male and 1 (50%) a female.

From group II, was 1 (100%) female only.

Those with PM were 6 (10%) males and 1 (1.7%) female from group I whereas 1(3.3%) male and 1 (3.3%) female were from group II.

Mwangi S. (1996) in her study found 28.2% of the children to have been brought up by both parents, 47.4% by mother only, 1.3% by father only and 23.1% by other relatives.

(iv) Brought Up by Other Caregivers

Those brought up by other caregivers were 13 out of 90 (14.4%) of whom 9 (10%) were males and 4 (4.4%) females. Of these thirteen, 11 (84.7%) were from group I and 2 (15.3%) were from group II.

Of the 11 from group I, 8 (72.7%) were males and 3 (27.3%) females.

Of the 2 from group II, 1 (50%) was a male and 1 (50%) a female.

Those with PM were 6 (10%) males and 1 (1.7%) female from group I whereas 1 (3.3%) male and 1 (3.3%) female were from group II.

In a Tanzanian study which included 200 children, on the "children of the street", Lugalla and Mbwambo (1995) reported 33% children came from single parent, of these 71.2% had been living with either their biological or step mother only; 10.5% lived with other relatives.

The prevalence of child rearing by a single parent in this study was found to be 28.8% and nearly similar to the 33% reported by Lugalla and Mbwambo (1995). However, Mwangi S. reported 48.7% prevalence rate of child rearing by a single parent.

Adoption studies by Mednick et al (1983) had shown similarity in the prevalence of convictions between boys and their biological parents than between boys and their adoptive parents. Parental criminality was not a factor in this study due to lack of corroboration from parents.

9. NUMBER OF SIBLINGS

In this study of 90 children and young persons, 52 (57.7%) had 4 or less siblings whereas 38 (42.2%) had 5 or more siblings.

From group I, those with equal or less than 4 siblings, 12 (19.4%) had PM and consisted of 10 (16%) males and 2 (3.4%) females.

From group II, those with equal or less than 4 siblings, 13 (42.3%) had PM and consisted of 7 (22.3%) males and 6 (20%) females (Table 14).

From group I, of those with 5 or more siblings, 11 (18.7%) had PM and consisted of 7 (11.9%) males and 4 (6.8%) females.

From group II, those with 5 or more siblings, 4 (13.4%) had PM and consisted of 2 (6.7%) males and 2 (6.7%) females.

Ndetei (1997) in a study of illicit drug trend in Kenya reported that family size with the highest members of illicit drug users was that of more than 11 siblings (50%) followed by the family with 3-5 siblings (30%) then the family of 6-8 siblings (22%); that of 0-2 siblings (14%) and that of 9-11 siblings (14%).

Lugalla and Mbwambo (1995) reported 17% of the street children studied to have come from families with between 6-15 children.

10. OCCUPATION OF CAREGIVER

PM was found to be common among those who had a caregiver who was employed (Table 15).

Where the caregiver was employed, PM was found to be 33 out of 90 (36.6%). Of these thirty three, 17 (51%) were from group I and 16 (49%) were from group II.

Of the 17 from group I, 13 (72.4%) were males and 4 (23.6%) females.

Of the 16 from group II, 9 (56.2%) were males and 7 (43.8%) females.

The M:F ratio for those with PM and having a caregiver who is employed being 3.3:1 for group I and 1.3:1 for group II.

Where the caregiver was unemployed, PM was found to be 3 out of 90 (3.3%). Of these three, 2 (66.7%) were from group I and 1 (33.3%) was from group II.

Of the 2 from group I, 1(50%) was a male and 1 (50%) female whereas only 1 (100%) was a female from group II.

In cases where it was not known whether the caregiver was employed or unemployed, PM was found to be 4 out of 90 (4.4%). All the four were from group I and consisted of 3 (5%) males and 1 (1.7%) female.

11. SEXUAL EXPERIENCE

Active sexual experience was noted in 6 out of the 90 (6.7%) children, (Table 7). Of these six, 5 (83.3%) were from group I and I (16.7%) from group II.

Of the 5 from group I, 2 (40%) were males, one of whom was a sexual abuser and 3 (60%) females, all of whom had been subjected to violent sexual abuse. Only 1 (100%) male from group II was sexually active.

PM was found among 2 (33.3%) males and 2 (33.3%) females from group I and only 1 (16.7%) male from group II.

12. HISTORY OF MENTAL ILLNESS IN THE FAMILY

A total of 7 out of 90 (7.8%) reported a positive history of mental illness in the family. Of these seven, 6 (86%) were from group I while 1 (14%) was from group II. They consisted of 3 (5%) males and 3 (5%) females from group I whereas 1 (3.3%) was a male from group II.

The main mental illness in the family was alcohol related problems among relatives as reported by 5 out of the 90 (5.6%) children.

Only 1 out of 90 (1.1%) reported an epileptic mother and 1 out of 90 (1.1%) a mother with a major mental illness.

13. HISTORY OF SUICIDE

Only I (1.7%), a female from group I with a diagnosis of mood disorder, depressive, reared by a step mother, with poor class performance, had been sexually molested twice reported a single suicide attempt.

From group II, 1 (3.3%), a 15-year old female with a diagnosis of mixed disorder of conduct and emotion complained of suicidal ideations due to sexual advances by her step father.

No males from either of the two groups had attempted suicide or had suicidal ideations.

14. PHYSICAL ILLNESS

A general physical examination carried out by the author showed that 24 out of the 90 children (26.6%) had a physical illness. Of these twenty four, 18 (75%) were from group I and 6 (25%) from group II.

Those with wounds and sores on the feet consisted of 7 (11.9%) males and 2 (3.4%) females from group I and 1 (3.3%) male and 2 (6.7%) females from group II. Ear, nose and throat problems were found in 8 out of 90 (8.9%) mainly in the form of rhinitis and pharyngitis as causes of upper respiratory tract infection. Of these eight, 5 (62.5%) were males from group I whereas 2 (25%) males and 1 (12.5%) female were from group II.

Scabies was found among 2 out of 90 (2.2%), both being males from group I. Eye problems were found among two children, one male and one female from group I. One female child (1.1%) had a squint and the male (1.1%) had conjuctivitis.

In a study among 200 street children in Tanzania, Lugalla and Mbwambo (1995) reported 21.5% to have scabies and other skin related diseases and 3.5% to have suffered eye illnesses.

CHAPTER SEVEN

I. CONCLUSION

This study determined psychiatric morbidity among children and young persons appearing in the Nairobi Juvenile Court from February-May 1998. The total sample size was 90 children and young persons consisting of 60 (66.7%) criminal cases (Group I) and 30 (33.3%) having been brought to the court for discipline and protection purposes (Group II). Out of the total sample of 90 children and young persons, psychiatric morbidity was found among 40 (44.4%). Of those with PM, 23 (57.5%) were criminal cases (Group I) while 17 (42.5%) were in court for discipline and protection purposes (Group II). These findings disprove the null hypothesis because there was a significant amount of psychiatric morbidity, (44.4%), detected among children and young persons appearing in the juvenile court.

The high prevalence of psychiatric morbidity in this study can be attributed to the low socio-economic status, poor family support systems, low education levels and substance use among the children and young persons studied at the Nairobi Juvenile Court.

Section 18; CAP 141 of the Laws of Kenya; The Children's and Young Persons Act states 'fi t appears to the court on the evidence of a medical practitioner that a child or young person, although not of unsound mind, requires or may benefit from mental treatment, the court when making a probation order against him, may require him to undergo mental treatment at the hands or under the direction of medical practitioner for a period not exceeding twelve months, subject to review by the court, as a condition of the probation order."

This study has shown a high prevalence of psychiatric morbidity (44.4%), 15 different types of deviant behaviours and increased psychoactive substance use (43.3%) by the children and young persons appearing in the juvenile court. These children and young persons definitely need urgent psychological and psychiatric management as stipulated in Section 18, CAP 141 of The Laws of Kenya.

2. RECOMMENDATIONS

- (i) Probation and Children Department officials require more training in the field of psychiatry so as to be able to identify psychiatric morbidity in children on first contact. This will enable them to adequately advise the court in the proper referral of such cases for further psychiatric assessment and treatment as necessary.
- (ii) The juvenile court officers (Judiciary, Prosecution, Probation and Children Officers) should be more sensitised to recognise psychopathology more readily and dispose these cases, when and where indicated, as prescribed by relevant statutes for specialised psychiatric assessment and management.
- (iii) Forensic psychiatric input in the juvenile courts should be more regularly provided by qualified psychiatric personnel assigned to the court in order to screen for PM in the Children and Young Persons prior to disposal of the cases by courts. The aim should be the benefits from mental treatment and not just on the "soundness of mind" of the children appearing in the said court as per Section 18 CAP 141. This screening process shall assist in decongesting the juvenile court by expediting the disposal of the mentally disordered children and young persons as well as reducing recidivism in the same population.
- (iv) Rehabilitation centers should be established for those children and young persons who have a history of regular use of psychoactive substances.
- (v) Identification of the at risk child for deviant behaviour/PM and then early interventions.

- (vi) Children with delinquent behaviour and history of substance use should be identified in the school years and placed into community-based programmes which should include vocational training, increased recreational activities, teaching and enhancement of good social skills as well as life philosophy and theology so as to pre-empt maladjustment.
- (vii) Court appearances with suspended sentence as a deterrent to deviant behaviour should be introduced.
- (viii) Juvenile courts should be transformed into Family Courts in order to effectively execute court recommendations affecting in-community rehabilitation.

3. FURTHER RESEARCH

- ii) Since this was a point prevalence study, longitudinal studies could be done by assessing PM at the juvenile court and then changes of PM in the same population, over a period of time. This may involve institutional and community-based longitudinal studies of such study population groups.
- (ii) Since a high percentage of PM (44.4%) was found in this study, it is hereby recommended that a research on the prevalence of PM among children and young persons who are living in the streets as their natural habitat be conducted in order to further elucidate the degree and pattern of PM in the deviant youth in Kenya.

APPENDIX I

REFERENCES

- Adamakoh, C.C. (1973): "The Disturbed Child in Ghana".
 Paper Presented at the Association of Psychiatrists in Africa Workshop.
- Alm, P., Klinteberg, B., Humble, K., Leppert, J., Sorensen, S., Thorell, L., Lidber, L., Oreland, L. (1996): "Psychopathy, Platelet MAO Activity and Criminality Among Former Juvenile Delinquents".
 Acta Psychiatr. Scand (Denmark), Vol. 94: 105-111.
- 3. Alm, P., Oreland, L. (1996): "Criminality and Psychopathy as Related to Thyroid Activity in Former Juvenile Delinquents". Acta Psychiatr. Scand. (Denmark), Vol. 94:112-7.
- Arthur, A. (1986): "Children, Crime & Community Responsibility in Criminal Justice and Children". UNICEF/GK 1986.
- Balla, D., Lewis, D.O., Shanok, S., Sneel, L., Henisz, J. (1979): "Subsequent Psychiatric Treatment and Hospitalisation in Delinquent Population". Arch Gen. Psychiatry 30:
- Bond, M.R. (1984): "The Psychiatry of Closed Head Injury". Oxford University Press: Oxford.
- 7. Christiansen, K.O. (1977): "A Preliminary Study of Criminality Among Twins: Biosocial Basis of Criminal Behaviour". Gardener Press;

 New York, Pg.89 108.
- 8. United Nations (1991): Conventions on the Rights of the Child.
- 9. Exner, F. (1939): "Kriminal biologie in inhere Grundziigen". Hamburgh.

- Eysenck, H.J. (1964): "Crime & Personality".
 Routledge & Kegan Paul, 3rd Edition: London.
- Ferguson, D.M., Lynskey, M.T., Horwood, L.J. (1997): "ChristChurch Health and Development Study". New Zealand, Journal of Child Psychology/Psychiatry, Vol. 24:533-553.
- Gatangi, A.S.M. (1987): "Psychiatric Morbidity in Children and Young Persons Admitted into an Approved School in Nairobi".
 M.Med. (Psych.) Dissertation U.o.N.
- Gelder, M., Gath, D., Mayuo, R. (1993): Oxford Textbook of Psychiatry,
 2nd Edition. Oxford University Press, Oxford.
- 14. Grand Basam Forum (1985): In "Street Kids and Drugs in Sub-Saharan Africa". International Institute for Prevention of Drug Abuse, Thematic Dossier, Causi-Cowrie, Paris.
- 15. Gunn, J., Taylor, P.J. (1995): "Forensic Psychiatry Clinical, Legal and Ethical Issues". Buttersworth, Heinemann, London.
- Irungu, J.M. (1993): "A Comparative Study of Psychiatric Morbidity in a Rural and an Urban Secondary Schools in Kenya".
 M.Med. (Psych.) Dissertation, U.o.N.
- Izuora, G.E.A. (1970): "Mental Health of Children in Developing Countries". Proceedings, 2nd Pan African Psychiatric Workshop, Mauritius.
- 18. Jalali, R. (1981): "The Mental Health of Children".

 Psychiatric Annals Vol.5, No.6.: 11-25.

- Kang'ethe, R.N. (1988): "The Frequency, Pattern and Recognition of Childhood Psychiatric Morbidity Among Children Attending Kawangware Health Centre". M.Med. (Psych.) Dissertation, U.o.N.
- 20. Kaplan, H.I., Saddock, B.J., Grebb, J.A. (1994): Synopsis of Psychiatry, 7th Edition, Williams and Wilkins, Baltimore.
- 21. League of Nations (1929): Child Welfare Committee Document, Geneva.
- 22. Lucien, B. (1957): "Psychiatric Aspects of Child Delinquency". Bulletin of the World Health Organization, Vol. 3:63-162.
- 23. Lugalla, J., Mbwambo, J. (1995): "The Culture of Surviving and Its Implication on Children's Health". Street Children and Street Life in Urban Tanzania (Unpublished).
- 24. Martinez, B. (1991): "Understanding Drug Prevention".U.S. Office of National Drug Control Policy White Paper, Washington.
- McCord, J., McCord, W. (1959): "Origins of Crime".
 Columbia University Press. New York.
- McCord, J. (1979): "Some Child-Rearing Antecedents of Criminal Behaviour in Adult Men". Journal of Personality and Social Psychology, Vol. 37: 1477-1486.
- 27. McCord, J. (1982): "A Longitudinal View of the Relationship Between Parental Absence and Crime, Abnormal Offenders, Delinquency and the Criminal Justice System". Wiley, Chichester.

- 28. Mednick, S.A., Gabriel, W.F., Hutchings, B. (1983): "Genetic Influences on Criminal Behaviour; Evidence From an Adoption Cohort". Prospective Studies of Crime and Delinquency, Kluwer Nijhoff, Boston.
- 29. Minde, K. (1976): "Child Psychiatry in Developing Countries".

 Journal Child Psychology Psychiatry, Vol. 17: 79-83.
- 30. Moffit, T.E., Silva, P.A. (1988): "IQ and Delinquency: A Direct Test of the Differential Detection Hypothesis". Journal of Abnormal Psychology, Vol. 97:330-333.
- 31. Munene, J. (1994): "Juvenile Delinquency in Kenya". LL.B. Thesis U.o.N.
- Mwangi, N. (1996): "A Comparative Study of Psychiatric Morbidity in Rural and Urban Primary School Students".
 M.Med. (Psych.) Dissertation, U.o.N.
- 33. Mwangi, S. (1996): "Psychiatric Morbidity Among Children in Undugu Society of Kenya Homes". M.Med. (Psych.) Dissertation, U.o.N.
- 34. Mwita, J.M. (1985): "Pattern of Child Psychiatric Disorders as seen at Mathari Hospital, Kenya". M.Med. (Psych.) Dissertation, U.o.N.
- Ndetei, D.M., Kathuku, D.M., Otieno, C.J. (1997):
 "Economic-Social-Political Aspects of Illicit Drug Use in Kenya 1997".
 Dept. of Psychiatry, University of Nairobi, Kenya (Personal communication).
- 36. Olatawura, M.O., Odejide, (1976): "Child Psychiatric Disorders in Ibadan Nigeria". Nigeria Journal of Paediatrics, 3:9.

- 37. Robbins, L. (1966): "Deviant Children Grown Up". The Waverly Press Inc., Baltimore.
- 38. Russel, D.H. (1975): "Juvenile Delinquency". Psychiatry Annals Vol. 5, No.1:3-13.
- 39. Rutter, M., Tizard, J., Whitmore, K. (1970): "Education, Health and Behaviour". Longmans London.
- 40. Rutter, M., Giller, H. (1983): "Juvenile Delinquency Trends and Perspectives". Penguin Publication, Middlesex.
- 41. Snyder, C. (1996): "Future Child". Winter, Vol. 3: 140-146.
- 42. Spreen, O. (1981): "The Relationship Between Learning Disability, Neurological Impairment and Delinquency". Journal of Nervous and Mental Disease. Vol. 169: 791-799.
- 43. Stein, A., Friedrick, K. (1975): "Review of Child Development".
 University of Chicago Press. Research Vol.5: 183-256.
- 44. Telfert (1968): "Incidence of Gross Chromosomal Errors Among Tall, Criminal Americans", Science.
- 45. The Children and Young Persons Act (1963): Laws of Kenya Chapter 141, The Kenya Gazette Vol. VIII, Supplement No.8: pg. 73-118, Government of Kenya.
- 46. The Juvenile Offenders Ordinance (1933): Ordinance No.XV, Vol. XII pg 38 53. Colony and Protectorate of Kenya.

- 77. The Juvenile Offenders Ordinance (1934): Ordinance No. XXII, Vol. XIII, pg 94 120. Colony and Protectorate of Kenya.
- 48. Torome, S.T. (1985): "Delinquent Child in Proceedings of Kenya

 Paediatric Association Scientific Seminar". UNICEF/Government of Kenya.
- Treiman, D.M., Delgado-Escueta, A.V. (1983): "Violence and Epilepsy: A Critical Review". Recent Advances in Epilepsy Vol. 1: 38-43.
- Wakube (1983): "Pattern of Childhood Psychiatric Disorders at K.N.H. Child Psychiatry Clinic". M.Med. (Paed.) Dissertation, U.o.N.
- 51. Wangari, M.K. (1993): "Drug Use Among Urban and Rural Secondary Students in Kenya". M.Med. (Psych.) Dissertation, U.o.N.
- Warren, D. (1958): "The Juvenile Court Contradictory Orientation in Processing Offenders Laws and Contemporary Problems". Journal of Child Psychology, Psychiatry, Vol. 6: 141-160.
- Werner, E. (1987): "Vulnerability and Resiliency in Children at Risk for Delinquency"; Prevention of Delinquent Behaviour. Sage: Beverly Hills.
- West, D.J., Farrington, D.P. (1973): "Who Becomes Delinquent?" Heinemann: London.

APPENDIX II

Definitions according to the Children and Young Persons Act (Chapter 141 Laws of Kenya).

- (a) "Age" where actual age is not known, means apparent age.
- (b) "Child" means a person under the age of fourteen years.
- (c) "Young person" means a person who is of the age of sixteen years or more and is under the age of eighteen years.
- (d) "Juvenile" means a person who is of the age of fourteen years or more and is under the age of sixteen years.
- (e) "Guardian" in relation to a person under eighteen years of age, includes anyone who, in the opinion of the court, has charge or control of that person.
- (f) "Juvenile court" without prejudice to the powers and jurisdiction of the High Court, means a court constituted in accordance with section 3 of this Act
- (g) "Authorised officer" means a police officer, administration police officer, administrative officer, inspector of children, children's officer and approved officer and a chief or subchief appointed under the Chief's authority Act;

 The chief inspector of children, children's officer and the inspector of children are persons appointed as such under section 54 of this Act.
 - An approved officer means a person appointed under section 64 of this Act.
- (h) "Home" means, in respect of any person under eighteen years of age, the place where in the opinion of the court having cognisance of any case relating to him or in which he is concerned, his parent or guardian permanently resides, or if there is no parent or guardian living, his parent or guardian last permanently resided: Provided that -
 - (i) In the case of a parent or guardian having, or having had, more than one permanent place of residence, such parent or guardian shall be presumed to be or to have been, permanently resident at that place of his principal permanent residence;

- (ii) Where the court is unable to determine the home of any such person he shall be deemed for the purposes of this Act to have his home in the area of jurisdiction of the local authority in whose area he is found.
- 'Juvenile remand home" means a remand home established for the detention of persons under sixteen years of age or an institution agreed to be used as a juvenile remand home under section 36 of this Act.
- "Nursery" means any institution or place at which for the time being, five or more children under the age of seven years are received and cared for regularly for reward
- "Place of safety" means any mission, institution, hospital or other suitable place whether or not similar to the foregoing, the occupier of which is willing to accept the temporary care of a child or juvenile, and where no such place is available a juvenile remand home or police station shall be deemed a place of safety for the purpose of this Act.
 - "Voluntary institution" means a home or institution for the care of persons under eighteen years of age, whether for reward or not, supported wholly or partly by voluntary contributions or endowments, not being a school within the meaning of the Education Act.

APPENDIX III

SOCIO DEMOGRAPHIC AND SUBSTANCE USE OUESTIONNAIRE

Register Number:

2 Age:
3. Sex:
4. Current Residence:
5. Place of Birth
6. If 4 & 5 are different then probe the reasons for change of residence:
7. Have you run away from home?
Yes No If yes:
[a] When
[b] Why
8. Give details relating to your current arrest
Probe [a] Where arrested
[b] Date of arrest
[c] Duration of stay in police custody

9. What did you do that led to your being brought to the juvenile court this time
Specify

10. Current official charge:
Specify: [a] Give statute/section contravened
[b] Disposal by court
,

How many times have you appeared in the juvenile court prior to current appearances? ecify number of appearances.... L Do you know your parents? No Both Yes Only mother Yes Only father No Yes 3. Are both your parents alive? Don't know Yes No Mother Probe deceased Father Cause of death..... 14. If both your parents are alive are they? [a] Married [b] Cohabiting [c] Separated [d] Divorced [e] Living separate [f] Others, specify 15. Does your father have more than one wife? [c] Don't know [b] No [a] Yes [d] Have no father 16. Do you have step parents?.... If yes [a] Specify step parent..... [b] Is the step parent in any way responsible for your being brought to the juvenile court?.... If yes, Probe the involvement..... 17. Occupation of parents/other caregiver [a] Mother..... [b] Father..... [c] Other Caregiver.....

8.	Number of siblings: Brothers
	Sisters
19,	Birth order: [a] Among all siblings
	[b] Among brothers
	[c] Among sisters
20.	Who brought you up?
	[a] Both parents [b] Mother along
	[c] Father alone [d] Others, specify
21.	Have you attended school? Yes No
	If yes specify school: Rural Urban Urban
22.	Are you attending school now?
	[a] Yes specify: School: Rural Urban Urban
	Class:
	[b] No
23	If out of school, which problems caused you to leave school?
	[a] Financial reasons - Probe - the nature of financial problems

	[b] Some of my friends had also left school
	[c] Problems at school - Probe - the nature of school problems
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	[d] School was far from home
	[e] Others - specify

2	4. If out of school, at what level did you leave school?
	[a] Primary - state class
	[b] Secondary - state class
2	5. What was your worst experience?
	[a] In street life
	[b] At home
	[c] Other situations - specify

16	Have you had problems before with;
	[a] Siblings
	[b] Parents/other family members
	[c] Peer/other street children
	[d] Police/local administration
	[e] Members of the public
	[f] Teachers at school
	If any of the above is Yes - probe

27.	Have you ever been involved in criminal acts e.g., thefts, robbing,
	housebreaking, rape etc.
	If yes - specify
28.	Have you ever had any sexual experience?
	Yes No No
	If yes state:
	[a] Consented
	[b] Forced
	[c] Protected
	[d] Unprotected
	[e] Age at first sexual experience
29	. History of mental illness in the family
	Yes No
	If yes specify
30). History of suicide
	[A] Have you ever had any suicidal ideas?
	Yes No
	If yes probe:
	[a] Age of onset
	[b] Causative factor (stressor)
	[c] What was the method(s) thought for committing suicide

[B] H	Have you ever attempted suicide?	
Yes	No.	0
Ify	yes probe:	
[a]	Age at first attempt	
[b]	Number of attempts	
[c]	What was the method(s) used	

Which of the following drugs have you ever tasted?			Used Within the periof of			Quantity per session currently	Quantity per session previously	Starting age	
			One One month		One week				
		Yes	No						
1.	Alcohol								
2.	Amphetamines								
3.	Khat								
4.	Caffeine								
5.	Cannabis								
6.	Cocaine								
7.	Hallucinogen								
8.	Inhalants								
9.	Nicotine								
10.	Opioides								
11.	Phencyclidine								
12.	Sedatives								
13.	Hypnotics								
14.	Anxiolytics								
15.	Others								

	(1) Type of muhatance
	[ii] Duration of substance use
[b]	Source of money to buy the substance:
	Specify e.g. begging, robbing/stealing, prostitution etc.
[c]	Reason(s) for substance use e.g. peer pressure, ignorance, father or other family members were using the substance etc.
	Specify

APPENDIX IV

A.	REPORTING OUESTIONNAIRE FOR CHILDREN (RC	C)	
	Date: Register Number Father's name: Mother's name: Child's age: Sex: Male School: Child never attended. Still att		
1.	Is the child's speech in any way abnorma	1	
	(retarded, incomprehensible, stammering?	Yes	No
2.	Does the child sleep badly?	Yes	No
3.	Did the child ever have a fit or fall to		
	the ground for no reason?	Yes	No
4.	Does the child suffer from frequent		
	headaches?	Yes	No
5.	Does the child steal things from home?	Yes	No
6.	Does the child run away from home		
	frequently?	Yes	No
7.	Does the child get scared or nervous		
	for no good reason?	Yes	No
8.	Does the child appear in any way		
	backward or slow to learn as compared		
	with other children of about the same		
	age?	Yes	No
9.	Does the child nearly never play with		
	other children?	Yes	No
10.	Does the child wet or soil itself?	Yes	No
	TOTAL SCORE		

FOLLOW UP INTERVIEW IF ONE OR MORE 'YES' IS RECORDED

ENDIX V

UP INTERVIEW FOR CHILDREN (F.I.C) Symptoms Duration of symptoms Less than six months.... 6 to 11 months 12 to 23 months 24 to 35 months Not known Symptoms present in last year Disturbances of emotions(anxiety, depression etc.).......... Obsessions, compulsions or rituals..... Stereotypes..... Austistic-type abnormality in..... Disturbed relationship with family..... Disturbed relationship with peers..... Anti-social behaviour (non delinquent)..... Delinquent acts Hyperkinesis Enuresis or Encopresis Retardation or abnormality in speech or language..... Eating difficulty Sleeping difficulty Somatic symptoms thought to be of emotional origin Retarded in educational attainments Other symptoms specify MEDICAL LIBRARY UNIVERSITY OF NAIROBI



UNIVERSITY OF NAIROBI

College of Health Sciences
FACULTY OF MEDICINE

WITMENT OF PSYCHIATRY

ami National Hospital |Box 19676 |CBI, Kenya. Telegrants: "Medken" Nairobi.

Direct Line: 721053

27th November, 1997

The Permanent Secretary, Office of the President, P.O. Box 30510, MAIROBI.

Dear sir,

RE: DR. H.H. MARU

This is to introduce Dr. H.M. Maru who is on the Master of Medicine Programma in this department. Dr. Maru is to undertake on behalf of himself and as part of the Master of Medicine in Psychiatry dissertation and on behalf of the department a research on the "Psychiatric Morbidity of Children and Young Persons Appearing in the Juvenile Court of Nairobi.".

As the age group of the children and young persons in the study is below 18 years, consent is being requested from your office to interview them.

I would be most grateful for any assistance you accord him. It will be fully acknowledged in the dissertation.

Yours falthfully,

PROFESSOR OF PSYCHIATRY

CHAIRIAN, DEPT. OF PSYCHIATRY



OFFICE OF THE PRESIDENT

PROVINCIAL ADMINISTRATION AND INTERNAL SECURITY

Telegraphic Address: "RAIS" Telephone: Nairobi 227411

When replying please quote

Ref. No. OP 13/001/27c 192/

P.O. Box 30510 NAIROBL

18th December 19 97

Dr. H. M. Maru P. O. Box 10139 NAIROBI

Dear Sir,

RESEARCH AUTHORIZATION

Following your application for authority to conduct research on "Psychiatric Morbidity in children and young persons appearing in the Juvenile courte of Nairobi", I am pleased to let you know that your application has been considered and approved.

You are therefore authorised to conduct research in Nairobi as from December 1997 to June 1998. You are advised to pay a courtesy call to the Provincial Commissioner Nairobi before embarking on your research project.

You are further advised to avail two copies of your fist research report to this office upon completion fo your research project.

Yours faithfully,

A.G. KAARIA for: PERMANENT SECRETARY/ PROVINCIAL ADMINISTRATION