PSYCHIATRIC MORBIDITY IN CHILDREN AND YOUNG PERSONS ADMITTED INTO AN APPROVED SCHOOL IN NAIROBI.

A DISSERTATION PRESENTED IN PART FULFILMENT FOR THE DEGREE OF MASTER OF MEDICINE (PSYCHIATRY) IN THE UNIVERSITY OF NAIROBI, COLLEGE OF HEALTH SCIENCES.

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D E C L A R A T I O N

I, DR. A.S.M. GATANG'I, DECLARE THAT THIS DISSERTATION IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR A DEGREE IN ANY OTHER UNIVERSITY.

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SUMMARY

As in other parts of the World, the problem of juvenile delinquency seems to be on the increase and is currently causing a lot of concern not only to the authorities but also to teachers, parents and health workers.

Since it is known that juvenile delinquency can be a symptom or a result of emotional disturbance in the adolescent, this study was designed to investigate possible psychiatric disorders in children commited to an Approved School in Nairobi, Kenya, as well as to describe the socio-demographic background of such children with the overall objective of making recommendations to the Children's department, depending on the findings.

Every other child in the Approved school was randomly selected from the school Register and examined by the author.

The main findings were: -

(1) 24.8% of the children had psychiatric illnesses mainly the psychoneuroses.

(2) The majority of the children were physically healthy and those with physical illness (i.e. 16.4%) had mainly Upper Respiratory Tract Infection which is usually common in Kenya during the cold months of the year.

(3) The major psychiatric illnesses i.e. Schizophrenia, affective psychosis and epilepsy constituted only 1.2% each.

(4) Contrary to findings elsewhere, the majority of the children came from intact, though large families (65% of the parents were married at the time of the study).

It is recommended that a multidisciplinary approach towards dealing with juvenile delinquency together with decentralization of services for such children along Primary Health Care cencepts and the setting up of a Juvenile Court in each District in the country would be more beneficial to the children.

Title:

PSYCHIATRIC MORBIDITY IN CHILDREN AND YOUNG PERSONS ADMITTED INTO AN APPROVED SCHOOL IN NAIROBI.

INTRODUCTION:

The concept of Juvenile delinquency has been known to man for many centuries. Socrates in 500 B.C. stated that:

> "Children now love luxury. They have bad manners and contempt for authority. They show disrespect for their elders and love to chatter in place of exercise".1

The development of gunpowder had a great impact on European society and law. It allowed monarchs to end the power and autonomy of their nobles. It also changed the nature of crime and gave rise to new forms of anti-social behaviour. The highwayman entered the scene, gangsters would later use this new tool to dominate and terrorize America's cities.

Throughout the evolution of theories of criminology, students have concentrated their efforts and studies in the areas known as traditional crimes. These are usually associated with the more serious common-law crimes such as rape, burglary, larceny and murder. As a result, a legal structure has evolved that addresses essentially to these types of offenses only.

One of the fathers of modern criminology was Cesare Beccaria (1738-1794). He was a reformer more than a scholar. He studied the inequities of his own society and proposed reforms to assist the poor and the weak. Beccaria, and others who followed him viewed crime in terms of the "poor". There was no effort to study or address the problem of crimes among the better educated and the more affluent members of society. These were viewed as moral perversions.[2]

Jeremy Bentham (1748-1832) spoke of sanctions against criminals, designed to bring them into conformance with the dictates of society.[3] However, Bentham's sanctions were also aimed at the poor and ignorant. There was no attempt to evolve a legal system to deal with all socio-economic classes equally. Edward Livingstone (1764-1836) in America proposed a quasi-religious approach to deal with criminals but this again was aimed at the poor and ill-educated.[3]

Isaac Ray (1807-1881) another noted American criminologist and scientist suggested that criminal behavior might be the product of mental illness.[3] He was instrumental in developing a legal approach to crime as an illness, thus the rise of the "Medical Model" in later years. Henry Maudslely (1835-1918) followed this same path and used the example of Epilepsy and other physical and environmental causes to explain criminal behaviour.[3]

The Italian, Enrice Ferri (1856-1929) stressed the role and influence of anthropological factors.[3] The legal structures that evolved both in America and Europe were an outgrowth of concern with crimes of the poor.[3]

However by the turn of the century this pattern had began to change. American criminologists began to examine the problems of crime by the non-poor, the educated and the sophisticated in society.[3] In the 1940's Edwin H. Sutherland began a vigorous attack on traditional approaches to criminology. He pointed out that:-

> "Crime is in fact not closely correlated with poverty or with the psychopathic and sociopathic conditions associated with poverty; and an adequate explanation "... must proceed along quite different lines.[3]

There is increasing anxiety being felt all over the world concerning present trends in juvenile delinquency.[4] In some countries there is no doubt good cause for concern, but, in others, in which youth appears to behave very much as it has done for several decades, concern is often felt that this may not long remain true. In Kenya concern is felt about the increased use of drugs like cannabis (bhangi) and alcohol especially in some estates in the urban areas by the school attending youth.[5]

Since 1981 the trend in Juvenile delinquency has shown a steady increase in Kenya according to the figures shown on table I.[6]

TABLE I

ADMISSION OF CHILDREN TO NAIROBI JUVENILE REMAND HOMES AWAITING COURT ACTION

(SOURCE: NAIROBI JUVENILE REMAND HOME)

YEAR	3-4 yrs.	5-7 yrs.	8-11 yrs.	12-15 yrs.	16-18 yrs.	Totals
1981	-	31	256	543	54	884
1982	-	48	251	557	44	900
1983	-	99	301	552	44	996
1984	6	80	380	688	69	1,223
1985	7	90	311	638	66	1,112
TOTAL	13	348	1,499	2,978	277	5,115

A 26% increase took place in the number of cases reported between 1981 and 1985. During the same period the child population 7 - 18 years increased at an annual rate of about 4.4%. This is significant taking into consideration that 50 per cent of Kenya's total population is under 15 years of age .

The rate of increase in juvenile delinquency has exceeded by more than six times the rate of population

increase. If this trend continues, more than 10,000 youngsters can be anticipated in the juvenile courts in the near future.

TABLE II : NUMBER OF CASES REGISTERED AT THE JUVENILE COURT

YEAR	NUMBER OF CASES REGISTERED		TOTAL
	CRIMINAL	PROTECTION & DISCIPLINE	
1981	1380	124	1504
1982	1199	136	1335
1983	1435	47	1482
1984	1740	76	1816
1985	1627	54	1681

But not all children, nor even the majority of children are delinquent. In the U.S.A. only about 2% of the children age 7 - 18 years have a court contact in any one year [8]. Although the volume of delinquency countrywide is substantial only a small minority are apprehended by the law enforcement agents [3, 28]. Therefore the actual number of cases that a psychiatrist may expect to find within his practice will be small. Far more boys than girls commit offences which bring them to attention of courts. In Kenya between 1981 and 1984 the ratio was 5:1 (7359 boys to 1588 girls) [9]. This is in agreement with figures in the United States of America as found by Kvaraceus et al (1958).

The ten most common offenses committed by Juvenile and young offenders in Kenya are stealing (general property, food etc.), assault causing actual bodily harm, breaking into a building and commiting felony, Housebreaking, stealing by servant, damaging property, Indecent assault on females, Grevious harm, Robbery and possession of bhang (Cannabis, Marihuana)[9].

The rates of delinquency vary from neighbourhood to neighbourhood and from community to community. In over-crowded, deteriorating and neglected neighbourhoods where social disorganization, rulelessness and contradicting value systems are common, larger numbers and higher percentages of delinquents can be expected (8)'.

The juvenile delinquent is a child generally full of hate and hostility, the rature of this difficulty, as evidenced by his overt aggressiveness, is such as to elicit little sympathy from an offended and irritated community. The result is that the hostile delinquent is met with equal hate and hostility on the part of the community.

Operating on the principle that the delinquent is first a child and secondly a delinquent, that he is seldom delinquent twenty four hours a day and for a full seven day week, and that there is no such a thing as human rubbish, all professional workers including teachers, preachers, psychiatrists, psychologists, probational workers, social workers,

administrators, and the police and so on; must distinguish the sin and the sinner. In rejecting delinquency, the social worker should not reject the delinquent. Yet there is considerable evidence available that the public and even some professional workers are not so much attacking juvenile delinquency as they are attacking the delinquent himself. Instead of a helping hand the delinquent gets the back of the community's hand. Like any non-delinquent, the young offender is much in need of approval, security and acceptance, but he is least likely to feel these unless they are forthcoming through insightful planning on the part of some special community agencies like schools and health units[16].

Legally a youngster under eighteen is a delinquent only when a court adjudicates him to this effect[10].

The term delinquent may also include those children who are wayward or habitually disobedient, the habitually truant from home or school and the children who habitually behave so as to impair or endanger the morals or health of self or others[8, 11].

This study was done with the foregoing in mind as an attempt to search into the background and psychiatric morbidity in our juvenile delinquents and young persons committed into an approved school in Kenya. It is known that a symptom of psychiatric or emotional disturbance in

children can exhibit itself as delinquent behaviour.[12, 15, 24] In developed countries children and young persons who break the law are first referred for thorough assessment by a psychologist, social worker or a psychiatrist.[12, 13] Here in Kenya no such assessment is currently being done. Thus a child with emotional problems may get admitted into an approved school where he is not likely to get the treatment he requires. Early detection of psychiatric and emotional problems in such children would ensure appropriate disposal and would facilitate rehabilitation. Approved schools should be left for children who require correction.

AIMS AND OBJECTIVES

1. To find out the prevalence and nature of psychiatric illness in children and young persons admitted into an approved school in Nairobi in 1986.

2. To find out the socio-demographic background of children and young persons admitted into the approved school in Nairobi.

3. To find out the general physical health of the children and young persons admitted into the approved school so as to bring it into attention of the authorities managing the school.

4. Based on the above findings to devise ways and means (Psychiatric, psychological or social) of assisting such children.

5. To make recommendation to the children's Department towards establishment of an integrated multidisciplinary services for Juvenile delinquents in Kenya.

LITERATURE REVIEW

DEFINITION OF JUVENILE DELINQUENT

In Kenya a juvenile delinquent is a child between the statutory juvenile court age of seven and sixteen years who commits an act which, when committed by persons beyond this statutory juvenile court age would be punishable as a crime, or an act injurious to other individuals or the public, that is, the state or the government[11].

The age limit of children is defined differently by different societies or countries. In Kenya a person is considered an adult when he is nineteen years old and above. At this age, if he commits a crime he is tried in court as an adult.

When one is between sixteen and eighteen years of age he or she is referred to as a young person.

Crime may be defined as infraction of a law as defined by the state. A criminal is a person who has intentionally (with full knowledge of the nature of his act) committed an antisocial act, and who has been apprehended, tried by a court of law, proved guilty of the offence and finally punished by the state.

All crimes committed by people below the age of criminal responsibility, (crimes ranging from murder to rape and embezzlement) can be legally defined as juvenile delinquency

Section 14 of the penal code of Kenya states that:-

> A person under the age of seven years is not criminally responsible for any act or omission. A person under the age of twelve is not criminally responsible for an act or omission, unless it is proved that at the time of doing the act or making the omission he had capacity to know that he ought not to do the act or make the omission.
>
> A male person under the age of twelve years is presumed to be incapable of having carnal knowledge.

Juvenile delinquency is prevalent all over the world. Differences in the incidence and distribution are markedly influenced by reporting policies. For example delinquency is more openly reported in United States of America than in the Soviet Union. An example quoting an American Educator.

> "The bad boy of America has no counterpart in any other part of the world. In Europe, youth is docile and respectful; in Asia and Africa, childhood is at least in keeping with its surroundings; but the bad boy of America is an anachronism, he is savagely growing up in the midst of civilization, impiety mocking at religion, lawlessness whistling defiance at law and order, and license masquerading in the costume of liberty. His language is slang and profanity. His amusement is violence, his education is blank, and his name a terror to society."[5]

However concern has been felt everywhere. A workshop on Extension of Family and Child Welfare Services within Community Development Programmes (United Nations Economic and Social Council, Economic Commission for Africa, Third session meeting in Accra, November 21 to December 3 1960) reported:

> " The problem of juvenile delinquency though not particularly serious in African countries, has been tending to claim increasing attention from most governments in Africa in recent years; and; since with the present general trend towards rapid economic and social change the problem is likely to become more acute, particularly in the main centres of population, the opportunity afforded to participants in this workshop to examine various policies and methods for prevention or solution was most welcome."

The workshop members were probably rolling up their sleeves, rubbing their hands and saying: "Quick, now, bring on those African delinquents-to-be!!" when they were not sure exactly what to do with the activists in America, Belgian and Polish delinquents who had been legally labelled and classified.

Literature dealing with prevalence of psychiatric morbidity among delinquent children is scarce and painfully ellusive. This is probably due to the difficulty in differentiating delinquent behaviour from other child psychiatric problems in the form of behaviour disorders. It is known that a psychiatric illness in an adolescent can present itself as delinquent behaviour[24].

Over 150 years ago a committee was set up in London "for investigating the causes of the alarming increase in juvenile delinquency in the Metropolis". Periodic alarms have continued ever since and the conclusions of the numerous subsequent committees have usually reinterated the findings of that report of 1816 which blamed "The improper conduct

of parents, the want of education and the want of suitable employment". One of the latest of these reports was published in 1965. It concluded that "inadequacy or breakdown in the family" was the main cause of juvenile crime. This can be interpretted in many ways. For example breakdown in the family may mean little or no communication between spouses, between spouses and offspring, between offspring themselves and so on[22]. However these poor communicationscan be alleviated by education which brings about increased socialization and shortens interpersonal distance. Inadequacy may mean lack of food, clothing, good shelter, love and so on. Lack of these have been shown by sociologists to be ingredients in the making of a delinquent.

Juvenile crime continues to increase despite industrialization, affluence and educational achievements of the citizens. There is evidence, however, that it is not only the children who are increasingly convicted of crime in Great Britain; adult crime is on the increase too.

Delinquents are heterogenous group. Some of them will show medical conditions which will require medical treatment to reverse the delinquent behaviour. Ogden in Portland Borstal found that the correction of cosmetic disfigurements, for example "crooked and ugly nasal deformities", combined with friendly support, increased the chances of reformation[16]. Healy's dictum of 1915 stated that "it ought to be generally realized, in all

common sense, that any physical peculiarities, defects or diseases of the offender which stand in the way of social success should be as efficiently treated as possible".

A study by E.W. Wallace in 1940 of 200 juvenile delinquents found them to be more physically mature than average school children but showing a greater incidence of physical defects and comparatively poor general hygiene.[16]

The Relative Significance of Physical, Mental and Social Factors

No direct relationship can be claimed between physical illnesses (especially those that have been perpetuated by neglect or inadequate attention) and delinquency; It seems likely that in many cases, the delinquency, along with faulty hygiene, failure to use social and medical services, uneconomical budgeting, abuse of alcohol, continuous child-bearing and other forms of social inadequacy, is merely a reflection of deeper factors[16].

BRAIN INJURY

Marked change in personality may follow brain injury from infection or trauma. The most characteristic changes include anti-social behaviour, anxiety, deterioration of school work, sudden changes of mood for no apparent reason, difficulty in maintaining mental concentration, hyperkinesis and aggressiveness. Children unlike adults rarely show

headaches, dizziness, irritability, tinnitus, poor memory and excessive liability to fatigue after concussions[16].

J. and W. McCord in 1959 surveyed a large group of "underprivileged" youths and found that of all physical illnesses and abnormalities in adolescents (even including enuresis)[20] only acne and definite neurological handicap correlated significantly with delinquency[18].

EPILEPSY

It is a very interesting fact that although epilepsy almost always indicates brain pathology, yet epileptics are not particularly prone to crime, and when they do commit crime they do not (despite the older textbooks) show any particular predilection for murder, rape or arson[16]. However, up to 90 per cent of children with aggressive destructive behaviour have been shown to have abnormal Electroencephalography (EEG) recordings and some evidence of brain damage[24].

BRAIN LESIONS AND BEHAVIOUR PATTERNS

It has been argued that those who persistently behave in socially deviant ways to their manifest detriment and in absence of frank mental illness are qualitatively different in respect of their lack of appropriate anxiety, their lack of guilt and their inability to anticipate consequences. It has further been suggested that these qualities are due

to an inactive autonomic nervous system which fails to bring about the normal physiological respenses in situations of danger, and, of course, a lesion of the central nervous system might bring about or contribute to such an inactivity. If the trouble arose sufficiently early, the subject's interpretation of his environment might be faulty, leading to disordered adjustment[16].

PRENATAL AND PERINATAL FACTORS

The McCords[18] in 1959 found no significant relationship between prematurity, difficult birth, caesarean section, the child's general health or even prolonged enuresis, on the one hand, and delinquency on the other.

MENTAL ILLNESS AND DELINQUENCY

Among adult offenders who are examined by psychiatrists (always a considerably selected sample) the usual finding is a proportion of between 10 and 20 per cent with a recognised psychiatric diagnosis, a smaller number, in the region of 5 per cent, who appear to be entirely healthy, and the remaining large majority with scattered mental symptoms in a setting of abnormal personalities, which together do not amount to mental illness, psychopathy or subnormality.

No outstanding relationship exists between psychiatric diagnosis and type of offence[16, 18 (p. 114)].

A constant finding with adult offenders, even though

they may be mentally well at the time of the examination, is a high proportion with a history of mental disorder with or without admission to a mental hospital in the past. The size of this proportion will depend on the degree of selection. A sample referred for examination in a remand prison or clinic will probably contain some 20 to 30 per cent who have been treated previously by psychiatrists.

Working with children referred from Juvenile Courts, Lewis and Balla[19] (1976) found that children who commit acts of delinquent behaviour have serious underlying psychiatric disorders. 1/3 of the children referred had clear psychopathology. 18 out of 285 referrals had symptoms suggestive of Temporal Lobe epilepsy. 16 out of 18 of the children experienced paranoid delusions and 50 per cent committed "offenses against the person". They also found that many of the parents of the court referred population were psychiatrically ill themselves with diagnoses tending to be sociopathy and alcoholism, the diagnoses traditionally associated with parents of delinquents.

In Gibbens' 1963[16] study of 200 boys in the 17 to 21 age range, 27 per cent were mentally abnormal and 59 per cent normal, the remaining 14 per cent "presenting a complex mixture of social and individual causes for their behaviour". The mentally abnormal group was interpreted rather more widely than West's[20] and included 13 neurotics, four dramatic hysterics, five unstable homosexuals, seven

severely disturbed personalities and a small number of psychopaths, defectives and markedly immature lads. There was only one psychotic and one epileptic. A very much smaller proportion of the lads (13 per cent) had a history of psychiatric treatment than in recidivist adults, but in view of their shorter time at risk it is still striking.

In boys aged between 13 and 15 years, Scott[16] found that the incidence of frank mental disorder was very low. Of 149 consecutive admissions, none was admitted to a psychiatric hospital during his stay (Average 18 months) in the school, nor in the following three years. Nineteen of the boys had been treated in psychiatric clinics before admission, usually for behaviour disorders. Only one firm psychiatric diagnosis had been made in 149 cases. This was a boy labelled as organic brain damage from early tuberculous meningitis; however, he showed no sign of this during his training and it was noted that one of his brothers had a similar history of behaviour disturbance without any history of brain damage.

Despite the notable absence of psychiatric illness and of subnormality, the incidence of marked disorders of personality was very high (60 per cent). Twenty-six of the sample were, for example, markedly immature and childish, 26 were habitually apathetic or depressed, 25 distrustful and timid, 19 sensitive and persecuted and 11 withdrawn and unable to make relations.

In general some 40 per cent of approved school boys will become adult recidivists, though many more will carry their criminality temporarily beyond 17 years of age.

While we cannot be sure of the relationship between those mental disorders and delinquency, and even though we may consider that both the crime and mental disorders have common roots in environment and inheritance rather than any direct causal link, yet we cannot deny that these offenders, especially those who have been admitted to institutions are a very severely handicapped group. One often wonders how they have managed to make as satisfactory an adjustment as they have, and it is clear enough that they need some protection from a competitive world; despite their faults and weaknesses and their burden of unhappy experiences, there are very few who cannot respond to such protection. For the most seriously handicapped it should often be continued far beyond the brief period of an approved school or Borstal institution; further research will no doubt disclose their needs more accurately, but the present indication is not so much for psychiatric treatment aimed at "cure", as for long term friendly support with very gradual restoration of responsibility" P.D. Scott[16].

THE IMPACT OF DEPRESSED PARENTS ON THEIR CHILDREN

The nature of the association between parental depressive illness and disturbance in the child is complex, variable and interactional. Maternal depression can itself

be precipitated by child's difficult temparament. Children in turn react with disturbed behaviour to parental ill health[26]. Moreover, personality disorders predisposing mothers to develop depressive illnesses will contribute also to their children's vulnerability.

Perhaps the commonest circumstances in which child psychiatrists encounter depressed parents, especially mothers are when a child is referred with a conduct disorder, one or both parents have a history of gross childhood deprivations, there are marital tensions, financial hardship, sometimes excessive drinking, sometimes suicidal attempts and in addition the parents are struggling to bring up a number of closely spaced children.

Most depressed parents are irritable. Some begin drinking excessively. Others take fateful actions they later regret, such as abandoning husband and children or entering into extra-marital relationships.

Rare but with more far reaching consequences for the children are the catastrophes occasionally precipitated by parental depression. These disasters are all the more tragic because they are theoretically preventable.

Infanticide is a well known risk of psychotic depression in the puerperium. Child abuse taking the form of non-accidental injury or neglect can also occur, although rarely,

in the setting of a psychotic depression. Sometimes such mothers present the child spontaneously and repeatedly to doctors with vague complaints and are very distressed by the feelings that something is wrong with the child and by their awareness of their own lack of affectional responsiveness or even hatred for their child. It is disturbing that the majority of cases of suspected child abuse or neglect are not referred to a psychiatrist (often because they do not have appropriate treatment resources) and are dealt with by paediatricians, social workers, and family doctors, who may fail to make a diagnosis of depression and provide appropriate treatment.

Parental suicide of course has far reaching effects on children but more common and more damaging for the children's future self image is the murder of one parent by another. This very occasionally occurs when the murderous parent is psychotically depressed, and the children may then be objects of attacks also[26].

Incestuous behaviour by fathers towards their daughters, which may be totally out of character, also occasionally occurs when the father is clinically depressed. The depression often follows some physical disability and/or unemployment and the incestuous approach is often made under the influence of alcohol.

THE CHILDHOOD ORIGINS OF DELINQUENCY AND ANTISOCIAL BEHAVIOUR

Misbehaviour is a matter of degree. When sufficiently frequent to lead to repeated court appearances or to be perceived by teachers and parents as problematic and warranting referral to a psychiatrist, this already differentiates the individual from the majority of his social peers[27]. The results of self-report delinquency studies show that the majority of normal youngsters engage in a surprising amount of delinquency, and that only a small fraction of delinquent incidents come to official notice[13, 28].

However, these studies have also shown that the admission of unusually frequent or serious misconduct in response to self-report questionnaires is associated with having or subsequently acquiring an official conviction record[29].

A recidivist delinquent is in fact a deviant among his social peers. At school, even in so-called delinquent neighbourhoods, such children are recognized by classmates as troublemakers and tend to be unpopular[27]. Just as depressive symptoms, according to quality and severity, can be a sign of "normal" grief response, a temporary reactive illness, or a major psychotic breakdown, so can delinquent behaviour, according to degree, signify normal assertiveness, temporary social maladjustment or a malignant personality disorder.

Aggressive and antisocial acts may begin in childhood as an understandable and apparently healthy response to erratic parental discipline or frustrating social conditions, but this can develop into such an all embracing and socially inappropriate pattern of behaviour that the youngster's education, employment, and personal relationships are permanently impaired. Martin Roth in 1972[30] argued very persuasively that persistent delinquents whose antisocial behaviour pervades their whole life-style are not just ordinary members of the under privileged section of society or persons with an unpopular scale of values. They exhibit a definable syndrome that would bring them into conflict in any society.[27]

The syndrome"has a characteristic sex distribution family history of similar symptoms and disorders, and family constellations and influences that show a considerable measure of consistency in their course and outcome". The syndrome manifests in varying degree of severity, terms such as "sociopath" and "psychopath" merely refer to points along this continuum".

METHODOLOGY:

The study was carried out in one of the approved schools in Kenya. There are currently eight approved schools in the country, namely; Kabete, Dagoretti, Getathuru, Kakamega, Likoni, Othaya, Wamumu and Kirigiti. There are nine juvenile remand homes in the country. These are at Kakamega, Kiambu, Kisumu, Likoni, Nairobi, Nakuru, Nyeri, Eldoret and Murang'a.

Kabete Approved school was chosen for this study because it was easily accessible to the researcher who had very limited financial resources. It is situated only nine Kilometers from Nairobi City centre. In addition it is the oldest approved school in Kenya, established in 1908 as a reformatory school by the colonial government.

The school is supervised by the Director of Children's Department in the office of the Vice-President and Ministry of Home Affairs. It is situated at the periphery of the city of Nairobi near Kenya Institute of Administration. There is a Manager in charge of administration and day to day running of the school. He is assisted by a Deputy Manager, eight instructors, two children's officers working as social workers, two probation officers, one clinical officer a nurse and several subordinate members of staff.[19] The school is trades development orientated, although it offers academic courses for the students up to form II level. Among the trades the students learn are carpentry,

blacksmith, tailoring, agriculture and animal husbandry, tractor driving, mechanics, sign writing, electronics and cooking.

There is a health service unit to look after the children's health and school hygiene. Agriculture and animal husbandry departments supply most of what the children feed on thus making the school more or less self sufficient in food production. Other activities in the school include athletics, football and volleyball.

All the boys admitted into this school pass through the children's department. The school had one hundred and sixty nine children at the time of study. Eighty five of these were subjected to a questionnaire eliciting information on demographic, social and medical data, the Self Rating Questionnaire and Standardized Psychiatric Interview. The interviews were conducted by the author himself during the month of April 1986 and the respondents were randomly chosen from the school register. Every other student was chosen as his name appeared in the register.

It was the intention of the author to do some basic routine laboratory investigations like haemogram, urinalysis, stools for ova and cysts etc., but this was not possible as the finances were indeed very limited and there were difficulties obtaining specimen containers from Kenyatta National Hospital laboratories. In addition the approved school dispensary

did not have the facilities for carrying out such investigations. However thorough physical examination was conducted on each student at the end of each interview.

Each student took approximately an hour to interview and to examine. There was no difficulty in communication as each respondent could understand English and/or Kiswahili. All the respondents came from classes ranging from standard five to secondary school Form II and they were aged between eleven and twenty two years. Interviews were conducted in an office far from the classrooms with only the author and the respondent present.

RESULTS

TABLE III: TABLE SHOWING AGE DISTRIBUTION

AGE	AGE NOT KNOWN	CHILDREN UNDER 14 YEARS	JUVENILE 14-16 YRS.	YOUNG PERSONS 16 YEARS AND OVER	TOTAL
NUMBER (n=85)	2	4	34	45	85
PERCENTAGE	2.3	4.7	40	53	100%

- The youngest boy interviewed was 11 years old. There were no boys below age of 10 years in the Approved school.

- The oldest boy interviewed was 21 years. He had been to several other approved schools in the country and was in Form II.

TABLE IV: PARENTAL MARITAL STATUS

	NUMBER	PERCENTAGE
PARENTS LIVING TOGETHER (MARRIED)	56	65.9
SEPARATED OR DIVORCED	6	7.0
ONE PARENT DEAD	20	23.6
SINGLE PARENT UNMARRIED, NEVER MARRIED	3	3.5
TOTAL	85	100

Note: Many parents were reported as living together even if they were staying in different towns but reported by respondents as married.

TABLE V: PARENTAL AGE AT TIME OF COMMITTAL

	(NOT KNOWN) PARENT DEAD	DON'T KNOW (ALIVE)	30-40 YRS.	41-50 YRS.	51 & OVER YRS.	TOTAL
	%	%	%	%	%	%
Father	3 (3.5%)	49 (57.7%)	9 (10.6)	14 (16.5)	10 (11.8)	85 (100%)
Mother	-	55 (64%)	25 (29.4)	5 (5.9)	-	85 (100%)

Note: - All mothers whose ages were known were below 50 years old.

- Ten of the fathers were above 50 years with two in their seventies.

- Majority of the children did not know the ages of their parents.

TABLE VI: TYPE OF DELINQUENT ACT IN RELATION TO AGE.

TYPE OF DELINQUENT ACT	AGE DISTRIBUTION							
	Under 14 Years		14-16 Yrs.		Over 16 Years		Total	%
	No.	%	No.	%	No.	%		
Running away from school	5	5.9	24	28.3	34	40.0	63	74.2
Running away from home	2	2.3	5	5.9	16	18.8	23	27.0
Theft	4	4.7	9	10.6	20	23.6	33	38.8
Drugs	-		2	2.3	2	2.3	4	4.7
Joining gang	1	1.2	-	-	2	2.3	3	3.5
Needed care	2	2.3	-	-	-		2	2.3
Murder	-		-	-	1	1.2	1	1.2
TOTAL	14	16.5	38	44.7	75	88.3		

Note: Some children had more than one type of delinquent act e.g. Running away from school and theft. One of the children who needed care was taken to the children's department by his father who was unemployed had three other children and their mother had died. He was incapable of rearing them.

TABLE VII BIRTH ORDER IN RELATION TO FAMILY SIZE

BIRTH ORDER	FAMILY SIZE					
	1 - 3	4 - 6	7 - 9	10 - 12	Total	%
1	10 (11.8%)	11 (13.0%)	6 (7.0%)	-	27	31.8
2	3 (3.5%)	14 (16.5%)	8 (9.4%)	-	25	29.4
3	0 (0.0%)	10 (11.8%)	3 (3.5%)	2 (2.3%)	15	19.6
4	-	4 (4.7%)	-	-	4	4.7
5	-	3 (3.5%)	2 (2.3%)	3 (3.5%)	8	9.4
6	-	0	3 (3.5%)	2 (2.3%)	5	5.9
7	-	-	1 (1.2%)	-	1	1.2
TOTAL	13 (15.3%)	42 (49.5%)	23 (27.1%)	7 (8.2%)	85	100

Note: - Majority were either 1st 2nd or third born in their families ranging from 1 - 12 siblings (80.8%).

- There were very few last borns in these families 4 (4.7%) of the total population.

TABLE VIII PROVINCE OF ORIGIN

Province	Number
Nairobi	5 (5.9%)
Central	25 (29.4%)
Eastern	10 (11.8%)
Coast	7 (8.3%)
Western	13 (15.3%)
Nyanza	10 (11.8%)
Rift Valley	15 (17.7%)
North Eastern	0

- Percentages in brackets.
- Majority of the children in the Approved School originally came from central province [18, 17]

TABLE VIII PROVINCE OF ORIGIN

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Rift Valley	15 (17.7%)
North Eastern	0

- Percentages in brackets.
- Majority of the children in the Approved School originally came from central province [18, 17]

TABLE IX PARENT'S OCCUPATION - Father

	No.	%
Employed	39	(45.9%)
Self Employed	7	(8.2%)
Unemployed	32	(37.7%)
Don't know	7	(8.2%)

Note: Among the employed was an Engineer, clinical officer, clerk, driver, soldier, teachers, police officers, bus conductor, sailor, watchmen and cook.

Self employed included businessmen, hotelier, butcher vendors.

Unemployed included peasants, landless, and people with no gainful employment, Among the unemployed 2 were reported dead.

Several students did not know the occupation of their fathers.

TABLE X PARENT'S OCCUPATION - Mother

	No.	%
Employed	18	21.2
Self Employed incl. tailor vegetable vendors	9	10.6
Unemployed. incl. peasants/ housewife	54	63.5
Don't know	4	4.7

TABLE XI RELATIONSHIP BETWEEN TYPE OF DELINQUENT BEHAVIOUR AND FAMILY SIZE

	1 - 2	3 - 4	5 - 6	7 - 8	Over 8	Total	Percentage
THEFT	2 (2.3)	6 (7.6)	9 (10.6)	7 (8.3)	9 (10.6)	33	38.8
RUNNING AWAY FROM HOME	0	6 (7.0)	6 (7.0)	2 (2.3)	8 (9.4)	22	25.8
RUNNING AWAY FROM SCHOOL	5 (5.9)	10 (11.8)	28 (33.0)	6 (7.0)	13 (15.3)	62	73.0
CAUGHT WITH DRUGS ALCOHOL BHANGI	1 (1.2)	2 (2.3)	3 (3.5)	-	-	6	7.1
Other Joining gang Assault Needed care	0 (	2 (2.3)	2 (2.3)	2 (2.3)	1 (1.2)	7	8.3
TOTAL	8	26	38	17	31		
Percentage	(9.4)	(30.6)	(44.8)	(18.8)	(36.5)		

Note: Some boys had more than one type of delinquent behaviour.

TABLE XII RELATIONSHIP BETWEEN TYPE OF DELINQUENT BEHAVIOUR AND PARENTAL STATUS (i.e. Marital, Alive or Dead)

	PARENT TOGETHER	SINGLE PARENT	SEPARATED/ DIVORCED	DEAD	TOTAL	PERCENTAGE
THEFT	24 (28.3)	2 (2.3)	5 (5.9)	2 (2.3)	33	38.8
RUNNING AWAY FROM HOME	15 (17.7)	2 (2.3)	-	3 (3.5)	20	23.6
RUNNING AWAY FROM SCHOOL	47 (55.3)	3 (3.5)	4 (4.7)	10 (11.8)	64	75.3
DRUGS	2 (2.3)	-	-	2 (2.3)	4	4.7
Other: Joining gang needed care Assault	3 (3.5)	-	-	2 (2.3)	5	5.9
TOTAL	91	7	9	19		

Note: Majority of the students came from families where both parents were living together.

C.F. Some students had more than one type of

TABLE XIII: PSYCHIATRIC AND PHYSICAL MORBIDITY

		%
(Hypochondriasis)	4	4.7°
Anxiety neurosis	4	4.7
Neurotic depression	10	11.8
Epilepsy	1	1.2
Manic Depressive Psychosis (M.D.P.)	1	1.2
Schizophrenia	1	1.2
		24.8%
Physical:		
Upper Respiratory Tract Infection	10	11.8
Acne	2	2.3
Gastroententis	2	2.3
		16.4%

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DISCUSSION OF RESULTS

Table III shows the age distribution of the respondents. According The Laws of Kenya children are defined as those under 14 years old; juveniles are between 14 and 16 years old, young persons between 16 years and 18 and adults over 18 years old. In the tabulation of the results the age distribution is analysed under the same categories (See also Table VI on page 27)

The majority of the respondents were 16 years old and over. This comprised of 53 per cent of the sample. This is not surprising as many of these boys had been to other approved schools in the country and some of them had earlier been to ordinary schools prior to commital into the approved school. Other studies have found that delinquents tend to be more physically mature and weigh heavier than their non-delinquent counterparts.[4] Boys of the same age-range would be in higher classes in normal secondary schools. However, the lower educational level in the delinquents can be accounted for by the classes repeated in the ordinary schools due to truancy and the period lost while in remand awaiting placement into the approved schools. In addition to this some of them spend a long time in approved schools with an average duration of three years.

Juveniles accounted for 40 per cent of the sample while children made up 4.7per cent. Two (2.3%) did not know their ages. Adding up to the population above 14 years one is struck by the finding that 93 per cent were in classes between standard five and Form two. This shows that delinquents have a

disadvantage in that they are late at the age at which they finish school compared with their non-delinquent counterparts. Ordinarily, in Kenya's educational system the majority of children start Standard 1 at the age of six years, sit for Kenya Certificate of Primary Education at the age of 14 years, sit for Kenya Certificate of Education (O-Levels) at the age of 18 years; do Kenya Certificate of Advanced Education at the age of 20 and proceed to University at 21 years. Under newly introduced educational system (8: 4: 4), pupils spend 8 years in Primary school, 4 in secondary school and 4 at the University. Again the school entry age is six years. Thus the majority could finish University education at the age of 22, the age at which one finds some young persons in form II in the approved school.

In developed countries the peak age of delinquency is reported to be between 13 and 15 years.[10] In our setting there is a delay in apprehending the delinquents and there is a delay in processing their cases as there is only one juvenile Court in Kenya. There is also delay in placing them into approved schools due to lack of vacancies. In addition those admitted take a long time, sometimes up to five years before they are repartriated into the community. In the Western setting the average duration of stay in approved school is eighteen months.[9]

The oldest boy interviewed was 21 years old. He had been to several other approved schools in the country and was still in Form II. Kabete is the only approved school in the country offering secondary school education. The youngest boy

interviewed was 11 years old and he was in primary school Standard five. He was brought to the school because he was destitute and needed care.

Table V shows parental age at the time of commital. The majority of the respondents did not know the ages of their parents. When asked how old is your father? 3.5 per cent replied that they did not know as father had died, 57.7 per cent did not know; 16.5 per cent were between 41 and 50 years old; 11.8 per cent were 51 years and over while 10.6 per cent were between 30 and 40 years old. In the case of mothers 64 per cent did not know the ages of their mothers, 29.4 per cent had mothers between 30 and 40 years while 5.9 per cent were between 41 and 50 years old. It was noted that all mothers whose ages were known were below the age of 50 years. It is known that elderly mothers may give birth to babies with congenital defects like Down's syndrome and mental subnormality. They may also find it difficult to bring up children due to lack of energy and financial support as they normally would be having large families. This would reduce the attention needed to bring up a child adequately. Some children may therefore get out of control of their elderly parents and involve themselves with delinquent acts. However, this did not come up clearly in this research as the majority of the respondents did not know the ages of their parents.

Table IV shows the marital status of parents of the respondents. 65.9 per cent were reported as married, 23.6 per cent had one parent dead, while 7.0 per cent were

separated or divorced and 3.5 per cent were single and had never been married. Erasto Muga[11] in 1970 found 41 per cent of the parents of delinquents in approved schools in Kenya as married, and 59 per cent (691 out of 1,171 families) in which both parents did not live together because of death of one or both parents, divorce and separation. Thus in this study the rate of parents being married was higher than in Muga's. There are no figures on marital status of Kenya population in general but one would expect lower marriage rates for parents of delinquents .. as delinquents tend to come from poor, large, broken homes often headed by a woman.[10] Even when there is a husband he tends to be submissive and not in control of the discipline of the family. It has been suggested that some parents of delinquents are themselves criminals and the nature of their activities keeps them away from their parental responsibilities. It is important that data on parental age and marital status should be recorded in the sociodemographic data of all the children dealt with by the Children's Department. It was noted that parents of many of the respondents reported as married were living in different towns. One boy who reported his parents as married and live in Nairobi also reported that his mother was living at Kawangware and his father at Uthiru, both estates here in Nairobi. Thus even though some respondents come from homes where parents were married, these marriages could be having very stormy with poor family dynamics.

In Kenya there are frequently stable marriages even when parents are not living together. These are cases where one partner, usually the husband has a job in the city and

his wife and children live in the rural areas. The husband visits his family over the week-end, middle or end of the month to participate in his family's welfare.

Table VI relates the type of delinquent act to age. The commonest delinquent acts were running away from school and stealing and these were more common in the young persons sixteen years and over. 40 per cent had run away from school and 23.5 per cent had stolen property. The corresponding rates for the other age-groups were 28.3 and 10.6 per cent for 14 - 16 years and 5.9 and 4.7 for under 14 years. Running from school was commonest for all ages 74.2 per cent followed by stealing 38.8 per cent, Running away from home 27.0 per cent, Drugs (alcohol, smoking bang 4.7 per cent; joining ngang 3.5 per cent needed care 2.3 per cent and murder 1.2 per cent. Some children had more than one type of delinquent act and the percentages were calculated by adding each item as often as it occured and taking the percentage of the total sample. For example five boys below the age of 14 years had been brought to the approved school because of running away from their previous school. This is 5.9 per cent of the total sample.

For all delinquents acts committed by those over sixteen were responsible for 75 of them, 38 were attributed to those 14 - 16 years and 14 to those under 14 years. It appears that the older boys tended to run away from school, and home, steal more and get involved with drugs and murder than the younger boys who tended to be in need of care or join gangs.

Table VIII shows birth order in relation to family size. Family size ranged between one (and only) child to 12 children. 49.5 per cent of the total sample came from families with 4 - 6 children, 27.1 per cent from those with 7 - 9 children 15.3 per cent from those with 1 - 3 children and 8.2 per cent from the families with 10 - 12 children. In these families 31.8 per cent were first borns, 29.4 per cent second borns, 19.6 per cent third borns 9.4 per cent fifth borns 5.9 per cent sixth borns, 4.7 per cent fourth born. First borns in a family of 1 - 3 children were the majority 11.8 per cent followed by second borns in the same family size 3.5 per cent. The last borns in the samll family size were not present in the sample. Therefore it seems safer to be born last born in a small family, than to be first born as far as the risk of delinquency is concerned. In the case of a large family like 4 to six siblings the second borns were found to be more implicated in delinquency than any other birth order. 16.5 per cent were second born followed by 1st born(13.0%) , 3rd born (11.8%) 4th born(4.7%) and 5th born (3.5%) In families larger than six siblings the same pattern follows, for example in families with 7 - 9 siblings the birth order, in order of frequency, were second, first, third, sixth, fifth and seventh. In the very large families the earlier one is born in birth order the more one is spared the predisposition to delinquent behaviour. Thus none of the first or second born in families with 10 to 12 siblings was among the young persons interviewed. The fifth (3.5%) and 2 (2.3%) seem to be the ones who commit

delinquent acts most frequently.

This may be explained by the fact that in the African society we tend to have large families and the first born become responsible very early in life as they are ones who take care of their younger siblings. They therefore have no time to be exposed to delinquency like the first and second borns in small families. These small families also tend to consist of single parents who again lack adequate time and resources to bring up the children properly.

Thus the majority (80.8%) tended to be either first, second or third born with minority being fourth and last born in large families. There were very few last borns in the sample 4.7 per cent of the total population. One would have expected the last born to be more represented being the one associated with the spoilt child. However, the extra attention he gets from parents tend to protect him from being apprehended for delinquent behaviour. Perhaps he would be more represented in the community than in the approved school as the parents may protect him from apprehension by law enforcement agents.

Table VIII shows the province of origin of the respondents. Central province is more represented, 29.4 per cent followed by Rift Valley, 17.7 per cent, Western Province 15.3 per cent, Nyanza Province and Eastern 11.8 per cent each. Coast 8.3 per cent, Nairobi 5.9 per cent and North Eastern which was unrepresented. The distribution follows the distribution of police posts and population density. Erasto Muga.[11] found similar distribution in 1970.

Tables IX and X show the occupation of the parents and found that the majority of parents were unemployed,and that those reported as employed held low paid jobs like watchmen, cooks, bus conductors and so on. 45.9 per cent of the fathers were employed compared to 21.2 per cent of mothers. Over 37.7 per cent of the fathers were unemployed while 63.5 per cent of the mothers were unemployed. These figures do not include those who were reported as self-employed and those reported as not known.

Table XI shows the relationships between type of delinquent act and family size. While theft and running away from school tended to occur in all family sizes running away from home occurred more commonly in larger families. Those caught with drugs like alcohol (Chang'aa) and bhang were the ones from smaller families. Running away from school was most common in those who come from families with 5 to 8 siblings (33.0%) followed by families with over 8 siblings (15.3%). Families that had one to two siblings had none that ran away from home or joining gang or admitted because he needed care. When all the delinquent acts are considered the smaller the family size the less delinquency is found. Thus 44.8 per cent were families with 5 to 6 siblings, 36.5 per cent with over 8 siblings and 9.4 per cent with 1 to 2 siblings.

Table XII shows the relationship between type of delinquent act and parental marital status. This has partly been covered by comments on table IV. However, looking at the figures shows that even if parents are married this does

not seem to spare the child from being delinquent. What is important is likely to be the quality of marriage and interpersonal relationships in the family. It is clear that the majority of those who stole, ran away from school and home were from where parents were 'living together' and are by far in excess of those whose parents are either single, separated, divorced or dead as would be expected. In the sample none had ran away from home or was caught with drugs in families with separated or divorced parents. Those young children caught with drugs are likely to have come from families whose parents were unemployed or brew liquour as a means of earning a living.

Table XIII shows the distribution of psychiatric and physical morbidity.

The interviews were conducted in the month of April when the weather was quite cold in Nairobi and there was increased incidence of upper respiratory truct infections(U.R.T.I.). Therefore it was not surprising to find 11.8 per cent of the sample with running noses, sneezing and slight cough. These were referred to the school health clinic for management. Two cases of severe acne were found and these were given referral letters to Kenyatta National Hospital dermatology clinic as were the cases of gastroentertis who required stool examination at the National hospital since the school clinic did not have facilities for investigations.

Ten cases of Neurotic Depression were diagnosed. This formed 11.8 per cent of the sample. It was not surprising as majority of these boys had been away from home for a long time and many of them had been moved from one approved school to another.

Many of them broke into tears when asked whether they had recent episodes of breaking into tears in the self rating questionaire question. This added stigma of being labelled a delinquent may be a contributory factor. Schizophrenia and Manic Depressive Psychoses contributed 1.2 per cent each and these were already on treatment prescribed at Kenyatta National Hospital psychiatric outpatient clinic. The boy suffering from Schizophrenia had been admitted into Mathare Mental Hospital twice since the time he had been at juvenile remand home at Gitathuru and the authorities in the school knew about his illness. These percentages fall in the expected range in general population 0.85 per cent for schizophrenia and between 0.6 to 1.0 per cent for manic Depressive psychosis.[12]

Epilepsy contributed 1.2 per cent of the total population and the boy also presented with paranoid persecutory delusions. He was on carbamazapine 200mg three times a day and phenobarbitone 30mg noctre which he was collecting from the school clinic at monthly intervals.

CONCLUSION

This research has confirmed that there is some degree of psychiatric morbidity in children admitted into an approved school in Nairobi. These were mainly cases of neurotic Depression which had not been recognized and were not being treated. There is need for multidisplinary assessment of these children involving teachers, psychiatrists, psychologists, probation officers, social workers, administrators and the police before the children are taken to the juvenile court. The magistrate at the Juvenile court should also receive some training in social sciences. This would enable him to recognize those children with psychiatric problems who should then be referred for appropriate treatment.

Another suggestion being made here is that juvenile courts should be established in line with District Focus For Rural Development so that cases are dealt with in their local areas, near their homes, where the important sociodemographic information can be obtained as soon as the first contact is made with the child.

Focus on the child himself should include improvement of the residential institutions by providing more staff including psychologists, social workers, occupational therapists and teachers; Child guidance clinics and other programmes designed to modify attitudes and behaviour patterns of Juveniles thought likely to engage in deviant behaviour are essential.

The District focus policy which is very much in tune with Primary Health care policy also would mean decentralisation, intersectoral collaboration (i.e. between the psychiatrist, the teachers, and social services and police) and integretion of mental health care into existing health and other Socio-economic development programme going on within the District. This would mean the Juvenile delinquent can be assessed, and rehabilitated in his own community.

Other measures aimed at prevention of Juvenile delinquancy such as family life education, support for vulnurable families, reduction of stresses within the community, provision of schools and other amenities. Emphasis should also be put on training of the necessary personnel who can counsel such children especially social workers and psycholcgists and teachers.

REFERENCES

1. Freedman, A.M. and Kaplan, H.I. Comprehensive Textbook of Psychiatry The Williams and Wilkins Company 1967.

2. Bequai A. Computer Crime
Lexington Books
Lexington Massachusetts Toronto 1978.

3. Mannheim H. Pioneers in Criminology
Montclair N.J.
Patterson Smith 1972.

4. Gibbens T.C.N. Trends in Jevenile Delinquency
W.H.O., 1961.

5. Acuda S.W. Mental Health in Schools: a Psychiatrist viewpoint Edited by Barnabas Otaala, Kenyatta University Press 1979.

6. Muturi J.M. The role of Children's Department in Rehabilitation and Protection of Children in Proceedings of UNICEF/GK Workshop on Criminal Justice and Children (PRESS)

7. Mbiti J.M. The role and procedure in Juvenile Courts. Proceedings of the UNICEF/GK Workshop on Criminal Justice and Children (Press).

8. Kvaraceus W.C. Juvenile Delinquency: What Research says to the Teacher (No. 15): Department of Classroom Teachers and American Education Research Association. National Education Association 1958.

9. The Principal Probation Officer, Kenya. Probation as an alternative to Imprisonment with specific reference to children. In proceedings of the UNICEF/GK Workshop on Criminal Justice and Children (Press).

10. Onyango P.M. Juvenile Delinquency and the Approved School: The Underprivileged in Society; Studies on Kenya. Journal of East African Research and Development Vol. 13, 1983.

11. Muga E. Crime and Delinquency in Kenya. East African Literature Bureau 1975.

12. Wolff S. Psychiatric Disorders of Childhood in
Companion to Psychiatric Studies
Kendell R.E. and Zeally A.K.
Churchill Livingstone 1983.

13. Lewis D.O. and Balla D.A. Delinquency and
Psychopathology. Grune and Stratton 1976.

14. Mushanga T.M. Crime and Deviance. An Introduction to
Criminology. East African Literature Bureau 1976.

15. Pierce C.M. Enuresis: Psychiatric Disorders of
Childhood in Comprehensive Textbook of Psychiatry.
Freedman A.M. and Kaplan H.I. Williams and
Williams Company 1967.

16. Scott P.D. Medical Aspects of Juvenile Delinquency.
British Journal of Psychiatry. Special Publication
No. 9 1977.

17. Robins L.N. and O'Neal P. Mortality, Morbidity and
Crime.
Am. Sociol. Rev. 23 162 1958.

18. McCord J. and McCord W. Origins of Crime: New York;
Columbia University Press 1959.

19. Balla D. Lewis D.O. Shanok S. Snell L. and Honisz J.
Subsequent Psychiatric Treatment and Hospitalization
in Delinquent Population. Arch. Gen. Psychiatry 30:
243-245.

20. West D.J. The Habitual Prisoner. London Macmillan 1963.

21. Michaels J.J. The need for a Theory in Delinquency
Enuresis in Delinquent Boys.
Archives of General Psychiatry Vol. 10 1964 Pg. 182.

22. Westman J.C. Cline D.W. Swift W.J. and Kramer D.A.
The Role of Child Psychiatry in Divorce.
Archives of General Psychiatry Vol. 23 Nov. 1970

23. World Health Organization. International Classification
of Diseases 9th Edition 1978.

24. Acuda S.W. Practical Therapeutics: The Management of Child Psychiatric Disorders. East African Medical Journal Vol. 59 No. 1 Jan. 1982.

25. Kvaraceus W.C. Anxious Youth: Dynamics of Delinquency Charles E. Merril Publishing Company Columbus Ohio 1966.

26. Wolff S. Impact of Depressed Parents on Their Children in Handbook of Psychiatry 4 Editors Russell G.M.F. and Hersov L. Cambridge University Press 1983.

27. West D.J. The Childhood Origins of Delinquency and Antisocial Behaviour in Handbook of Psychiatry 4. Editors Russell G.M.F. and Hersov L. Cambridge University Press 1983.

28. Hood R. and Sparks R. Key Issues in Criminology London Weidenfeld and Nicolson 1970.

29. Farrington D.P. Delinquent Behaviour Modification in Natural Environment. Brit. J. Criminol. 19 353-372 197[illegible].

30. Roth M. Human Violence as Viewed from the Psychiatric Clinic. Amer. J. Psychiat. 128 1043-86 1972.

APPENDIX I

I C D - 9 DEFINITION OF TERMS

312 Disturbance of conduct not elsewhere classified.

Disorders mainly involving aggressive and destructive behaviour and disorders involving delinquency. It should be used for abnormal behaviour, in individuals of any age, which gives rise to social disapproval but which is not part of any other psychiatric condition. Minor emotional disturbances may also be present. To be included, the behaviour - as judged by its frequency, severity and type of associations with other symptoms - Must be abnormal in its context. Disturbances of conduct are distinguished from an adjustment reaction by a longer duration and by a lack of close relationship in time and content to some stress. They differ from a personality disorder by the absence of deeply ingrained maladaptave patterns of behaviour present from adolescence and earlier.

312.0 Unsocialized disturbance of conduct

Disorders characterized by behaviours such as defiance, disobedience, quarrelsomeness, aggression, destructive behaviour, tantrums, solitary stealing, lying, teasing, bullying and disturbed relationships with others. The defiance may sometimes take the form of sexual misconduct.

312.1 Socialized disturbance of conduct.

Disorders in individuals who have acquired the values or behaviour of a delinquent peer group to whom they are loyal and with whom they characteristically steal, play truant, and stay out late at night. There may also be promiscuity. Includes group delinquency.

312.2 Compulsive conduct disorder.

Disorder of conduct or delinquent act which is specifically compulsive in origin.
Includes Kleptomania.

312.3 Mixed disturbance of conduct and emotions

Disorders involving behaviours listed for 312.0 and 312.1 but in which there is also CONSIDERABLE emotional disturbance as shown for example by anxiety, misery or obsessive manifestations.
Includes Neurotic delinquency.

312.8 Other

312.9 Unspecified.

312.1 Socialized disturbance of conduct.

Disorders in individuals who have acquired the values or behaviour of a delinquent peer group to whom they are loyal and with whom they characteristically steal, play truant, and stay out late at night. There may also be promiscuity. Includes group delinquency.

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Includes Neurotic delinquency.

312.8 Other

312.9 Unspecified.

APPENDIX II

QUESTIONNAIRE

DR. A.S.M. GATANG'I
MBChB (UON)

PSYCHIATRIC MORBIDITY IN CHILDREN AND YOUNG PERSONS ADMITTED INTO AN APPROVED SCHOOL IN NAIROBI

Name: ______________________________

School Number: ______________________________

Age: years Height [ ] Weight [ ]

Tribe: ______________

Home District: ______________

Education level — Primary School [ ] Secondary School [ ]

Parents: A Father
1. Age
2. Educational level
3. University
4. Lives where

B Mother
1. Age
2. Education level
3. University
4. Lives where

Parents:
1. Living together?
2. Separated
3. Divorced
4. Dead

Occupation of 1. Father 2. Mother

Other siblings 1. Birth order (Respondent)

2. No of brothers 1 2 3 4 5 6 7 8 9 Other [ ]

3. No of sisters 1 2 3 4 5 6 7 8 9 Other [ ]

Level of Education of siblings

	1	2	3	4	5	6	7	8	9	10	Other
Primary											
Secondary											
University											

How do you get on with your 1.. Father 2.. Mother 3. Brothers 4.. sisters

Source of referral into approved school

1...
2.
3.
4.

Reason for referral

1..
2.
3..
4.
5.
6.
7.
8.
9.
10.

Medical symptoms

Now I am going to ask you some questions about how you have been feeling during the last year ....

0 Never during the last year
1 Less than monthly
2 Monthly
3 Weekly
4 Daily or almost daily

GASTROINTESTINAL SYMPTOMS

Gas/flalulance	☐
Nausea	☐
Vomiting	6 ☐
Abdominal pains	☐

Diarrhoea

Heart burn, cardialgia

OTHER PHYSICAL COMPLAINTS

Difficulties breathing

Heart palpitations

Back pains

Muscle cramps

Headaches

Difficulty concentrating

Difficulty falling asleep or waking up

Hands shake, tremor

Fits (convulsions, syncopes)

Sexual problems 1
2
3

(girls only) menstrual problems

(girls only) other gynaecological problems

SUBJECTIVE COMPLAINTS

Irritability

Nervousness, anxiety

Feeling sad

Poor appetite

Fatigue

Have you ever smoked?

1. cigarettes
2. bangi

Have you ever drank?

1. beer
2. changaa
3. traditional liquor

Have you ever inhaled petrol?

Have you ever taken drugs regularly?

Have you ever been admitted into any hospital in your life?

Were you ill three months prior to being committed into remand home?

Has any member of your family been admitted into hospital?

1. Father
2. Mother
3. Brother
4. Sister

Has any member of your family been committed into any remand home/ prison?

MENTAL STATE SELF RATING QUESTIONNAIRE

4. Neurotic symptoms

1. Do you often have headaches?
2. Is your appetite poor?
3. Do you sleep badly?
4. Are you easily frightened?
5. Do your hands shake?
6. Do you feel nervous, tense or worried?
7. Is your digestion poor?
8. Do you have trouble thinking clearly?
9. Do you feel unhappy?
10. Do you cry more than usual?
11. Do you find it difficult to enjoy your daily activities?
12. Do you find it difficult to make decisions?
13. Is your daily work suffering?
14. Are you unable to play a useful part in life?
15. Have you lost interest in things?
16. Do you feel that you are a worthless person?
17. Has the thought of ending your life been in your mind?

18. Do you feel tired all the time?
19. Do you have uncomfortable feelings in your stomach?
20. Are you easily tired?

(b) Psychotic Symptoms

1. Do you feel that somebody has been trying to harm you in some way?
2. Are you a much more important person than most people think?
3. Have you noticed any interference or anything else unusual with your thinking?
4. Do you ever hear voices without knowing where they come from or which other people cannot hear?
5. Have you ever had fits convulsions, or falls to the ground with movements of arms and legs, biting of your tongue or loss of consciousness?

Mandatory Questions on SP I - Symptoms

1. Somatic Symptoms

(i) Have you noticed anything else wrong with your health apart from the things that you have already told me?

(ii) In the past week, have you been troubled with headache or indigestion? Anything else?

2. Fatigue

(i) Have you noticed that you get tired easily?

(ii) Or that you seem to be lacking in energy?

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3. Sleep disturbance

   1. What about sleep?
   2. Have you lost sleep in the last week?
   3. Do you have difficulty dropping off?
   4. Are you restless at night?
   5. Do you wake easily?

4. Irritability

   1. Do you find that you are easily upset or irritable with those around you?
   2. Do you lose your temper or get angry easily?

5. Lack of concentration

   1. Do you find it difficult to concentrate?
   2. Do you get muddled or forgetful?

6. Depression/unhappiness

   1. How have you been feeling in your spirits in the past week?
   2. Have you at times felt sad, unhappy or miserable?

7. Worry/anxiety

   1. Do you find that you get anxious or frightened for no obvious reason?
   2. Do you worry a lot on trivial matters?

8. Phobias

   1. Are you scared or frightened of certain things or situations for no good reason?
   2. When? Where?

9. Bewitchment

   1. Do you think that bewitchment, spirits or witchcraft are responsible for your present condition or sickness?
   2. How?