PREVALENCE OF PSYCHIATRIC MORBIDITY AMONG SEXUALLY ABUSED CHILDREN AND ADOLESCENTS AGED 7-17 YEARS AT THE NAIROBI WOMEN'S HOSPITAL IN NAIROBI, KENYA

A DISSERTATION PRESENTED IN PART FULFILMENT FOR THE AWARD OF THE DEGREE OF MASTER OF MEDICINE IN PSYCHIATRY OF THE UNIVERSITY OF NAIROBI

BY

CATHERINE MUNANIE SYENGO – MUTISYA,
MBChB (Nrb)

DEPARTMENT OF PSYCHIATRY

JULY 2006

DECLARATION

I Dr. Catherine Munanie Syengo-Mutisya do hereby declare that this dissertation is my original work carried out in part-fulfillment of the requirements for the award of the Degree of Master of Medicine in Psychiatry (MMed. Psych.) of the University of Nairobi, and further, that I have not presented the same for the award of any other degree or to any other University.

Author	Signature	Date
Dr. Catherine M. Syengo - Mutisya	.....	10/7/06

SUPERVISORS' APPROVAL

This dissertation has been submitted for examination with our approval as the University supervisors.

Signature Date

Dr.Major (Rtd) Dammas M.Kathuku 11/07/06

MBChB (Makerere), MMed Psych (Nrb), FS (USAF-SAM)

Senior lecturer, Department of Psychiatry,

University of Nairobi.

Signature Date

Prof. David Musyimi Ndetei 22/8/06 3.45PM

MBChB (Nrb), D.P.M (London),M.R.C.Psych, F.R.C.Psych.(U.K), MD(Nrb)

Certificate in Psychotherapy (London)

Professor of Psychiatry, University of Nairobi.

ACKNOWLEDGEMENT

The following people and organizations are acknowledged for their contribution in the preparation and execution of this study.

- Dr. Major (Rtd) Dammas M. Kathuku for his support, guidance, availability and professional advice during the development of the proposal and through out the study.
- Professor David M. Ndetei for assisting me to search for the study instruments, develop the proposal and consolidate the final draft.
- Dr. Caleb Othieno for reviewing and correcting the proposal and the final draft.
- The Board of directors especially Mrs. June Koinange and the C.E.O of the Nairobi Women's Hospital Dr. Sam Thenya for allowing the study to be carried out there.
- The staff of the Nairobi Womens Hospital GVRC (2004): Lucy, Elizabeth, Alberta, Penina and Darlene for their co operation and assistance during the data collection.
- Dr. Lukoye Atwoli for his assistance in the statistical analysis.
- My colleagues in the department of psychiatry for their encouragement and support throughout the study.
- My husband Martin Mutisya for all the support and logistical assistance he gave me throughout the study.

DEDICATION

To all children and adolescents

Especially my children

Bill Muthengi

and

Daniel Syengo

TABLE OF CONTENTS

LIST OF TABLES

TABLES **PAGE**

ABBREVIATIONS

ADHD	Attention Deficit Hyperactivity Disorder
ASD	Acute Stress Disorder
AIDS	Acquired Immunodeficiency Syndrome
CAP	Chapter
CSA	Childhood Sexual Abuse
DDNOS	Depressive Disorder Not Otherwise specified
DSM	Diagnostic Statistical Manual
GVRC	Gender Violence Recovery Centre
KDHS	Kenya Demographic Health Survey
KNH	Kenyatta National Hospital
KSHS	Kenya shillings
n	Sample size
NIS-3	Third National Incidence Study
NOS	Not Otherwise specified
NPM	No Psychiatric Morbidity
Nrb	Nairobi
NWH	Nairobi Women's Hospital
ODD	Oppositional Defiant Disorder
P	Value for Significance level
PM	Psychiatric Morbidity
PTSD	Post-Traumatic Stress Disorder
SAP	Sexual Assault Profile
SS	Statistical Significance
SPSS	Statistical Package for Social Sciences.
STD	Sexually Transmitted Disease
UON	University Of Nairobi
USA	United States of America
x^2	Chi square

ABSTRACT

Introduction: For the last three years, the number of sexually abused children and adolescents reporting to the Nairobi Women's Hospital (NWH) has been increasing. Despite the fact that these children and adolescents have experienced trauma, no studies have been done to assess the psychiatric morbidity among such survivors in the hospital and in the entire country.

Objectives: 1.To describe the social demographic profile of the sexually abused children and adolescents aged 7 – 17 yrs attending NWH

2. To determine psychiatric morbidity among these persons.

3. To determine if there is any relationship between the PM and the sexual abuse variables used in the study.

4. To make any necessary recommendations on prevention of childhood sexual abuse and treatment of those abused.

Design: Cross-sectional descriptive survey using consecutive sampling.

Setting: The study was carried out at the Nairobi Women's Hospital GVRC.

Method: A consecutive sample of 61 survivors meeting the inclusion criteria was interviewed using a structured social demographic questionnaire and a sexual assault profile questionnaire. The sample was also subjected to a DSM IV-TR manual guided psychiatric evaluation. Data was analyzed using SPSS version 12.

Results: Out of the 61 subjects studied, the male to female ratio was 1:9; the age range was 7-17 years with 75% of the sample being in the age group of 7-12 years (children) and 25% being in the age group of 13 – 17 years (adolescents). The mean age was 11.1 years; the standard deviation was 3.3 while the age mode was 7 years and the median age 11 years. The prevalence of psychiatric morbidity among the subjects studied as measured by the DSM IV- TR was found to be 69%. The following DSM IV-TR diagnoses were found: depressive disorder not otherwise specified NOS (41%), acute stress disorder (23%), post traumatic stress disorder (22%), dysthymic disorder (5%), oppositional deviant disorder (3%), attention deficit hyperactivity disorder (2%), conduct disorder (2%) and bipolar 1 disorder (2%). Suicidal ideation was found to be present in 3% of the cases. Factors like whether a subject knew own parents, whether parents were alive, parental marital status, whether subject had a step parent, whether subject attended school, who brought up the subject, social economic status and how family sorted out disagreements were used to measure family stability. Results showed that 62% of subjects' parents/caregivers were unskilled laborers whereas none of the abused subjects' parents were professionals. Sixty nine percent of the subjects' families had no history of mental illness but 66% of the parents used substances of abuse. A large portion of the survivors (67%) had less than 3 siblings. On the socio demographic profile, the only factor that showed a statistically significant relationship with psychiatric morbidity was the family's way of sorting out their disagreements ($p= 0.045$). Majorities (82%) of the subjects were abused by a non stranger (neighbor, caregiver or a parent) and only 18% were abused by strangers. Most (90%) of the abused survivors were subjected to vaginal or anal penetration. More than half (64%) of the survivors were abused for extremely short periods e.g. a day while 36% were abused for longer periods. More than half (66%) of the abuse was discovered within 48 hrs after the last abuse, while 34% was discovered later. Majority (93%) sustained physical injuries ranging from mild to severe as a result of the abuse. Less than half (46%) made efforts to resist the

assault while the rest either passively submitted or pretended it was not happening. Some (12%) rated the abuse as disgusting, 68% found the abuse painful while 20% found the abuse scary. Majority (82%) felt that they were not responsible for the abuse while 18% attributed either partial or full responsibility to self. .Over half (62%) of the care givers reacted supportively while 37% reacted negatively/unsupportive. Most (91%) of the perpetrators used either verbal or physical force whereas 8% did not use force. Few survivors (11.5%) participated by performing some sexual acts during the abuse while 88.5% did not perform any sexual act. None of the sexual abuse profiles studied showed a statistically significant association with PM.

Conclusions: The prevalence of psychiatric morbidity among the subjects studied as measured by the DSM IV - TR was found to be 69%. The DSM IV-TR diagnoses were: depressive disorder not otherwise specified, acute stress disorder, post traumatic stress disorder, dysthymic disorder, oppositional deviant disorder, attention deficit hyperactivity disorder, bipolar 1 disorder and conduct disorder. Although these findings were similar to those found in other studies, the study did not establish whether sexual abuse alone was the cause of the PM. Family pathology and especially the family way of sorting out disagreement could have contributed to the PM. Majority of the survivors sustained physical injuries as a result of the abuse with most of the abuse being penetrative. More females than males were abused. Abuse in the studied sample occurred in both stable and broken families and regardless of the guardian/ parental economic status. Most of the survivors were abused by acquaintances such as neighbors, caregivers and parents. The authoritarian, indulgent- neglectful and the indulgent permissive parent child/adolescent relationships were associated with higher rates of PM. A significant number of the survivors' parents were abusing psychoactive substances even though abuse variables and social

demographic variables did not predict either presence or absence of PM. Only 66% of the abuse was discovered within the first 48 hours.

Recommendations: 1. Clinicians need to be well sensitized on recognizing symptoms and signs of PM associated with past history of sexual abuse in children and adolescents.

2. Sexually abused children and adolescents need to be assessed by the various professionals in order to take care of their mental and physical health.
3. All parents/care givers, children and adolescents regardless of their social economic status need to be sensitized on childhood sexual abuse and the fact that majority of the perpetrators are acquaintances.
4. All children and adolescents who have been sexually abused need to be evaluated for PM regardless of their social demographic and abuse profiles.
5. Parents and caregivers need to be sensitized on the good ways of sorting out disagreements in the family and also of the dangers of parental substance abuse in relation to child/adolescent sexual abuse.

CHAPTER ONE: INTRODUCTION

DEFINITIONS

The oxford dictionary (1) defines sexual abuse as forceful sexual act without consent. However, legally persons aged less than 18 years cannot give consent and therefore any exploitation of such a person by an adult for sexual gratification whether said to be with consent or without consent is indeed sexual abuse. Feltoe (2) defined child sexual abuse as the exploitation of a child for the sexual gratification of an adult.

According to the Government of Kenya Children Act 2001(3), `child' means any human being under the age of 18 years and child abuse includes physical, sexual, psychological and mental injury. Most studies have classified this age group into children (Ages less than 12) and adolescents (ages 12-17 years). In this study the classification of children and adolescents will be followed so that comparison with other studies can be made.

According to the Kenyan penal code (4), childhood sexual abuse has been addressed in several sexual offences.

a) Defilement of girls under sixteen years (any person who unlawfully and carnally knows any girl under the age of sixteen years is guilty of a felony and is liable to imprisonment with hard labor for life).

b) Indecent assault on females (any person who unlawfully and indecently assaults any woman or girl is guilty of a felony and is liable to imprisonment with hard labor of twenty one years)

c) Indecent assault of boys under 14 years of age (any person who indecently assaults a boy under the age of eighteen years of age is guilty of a felony and is liable to imprisonment for twenty one years

d) Incest by males (any male person who has carnal knowledge of a female person who is to his knowledge his grand daughter, daughter, sister or mother is guilty of felony and is liable to imprisonment for five years.

BACKGROUND

Internationally all forms of child abuse are covered in the UN convention on the rights of the child(5) which states that : 'The state shall protect the child from all forms of maltreatment by parents or others responsible for child care and establish appropriate social programmes for the prevention of child abuse and treatment of victims (Art 19) ; Children shall have the right to protection from the use of narcotic and psychotropic drugs and from being involved in their production and distribution (Art 33) ;The child shall be protected from work that threatens their health; education or development. The state shall set minimum ages for employment and regulate working conditions (Art 32); the state shall protect children from sexual exploitation, prostitution and involvement in pornography (Art 34)'

This is supplemented by the African Charter on the rights and welfare of the child (6) which compliments the UN convention but pays attention to special issues prevailing in Africa and facilitates the implementation of the UN Convention. The Government of Kenya Children Act (7)

further states that "A child shall be protected from sexual exploitation and use in prostitution, inducement or coercion to engage in any sexual activity, and exposure to obscene materials.

Although child sexual abuse is a prevalent and debilitating trauma, Lalor (8) concluded that child sexual abuse is under-researched in Tanzania and Kenya and that most UN agencies focused on the commercial sexual exploitation of children to the neglect of more pervasive abuse in children's own communities by family, relatives and neighbors. Nduati and Muita (9) did a retrospective study at Kenyatta National Hospital Kenya, and found that 21 cases of sexual abuse of children ranging from 4 months to 18 years had been reported between 1984 and 1988. Sixty seven percent were 5-15 years and all were females. Majority (71.4%) were admitted within 2 days of the incident with 47% being abused by a stranger while majority (53%) was abused by an acquaintance. Most (90%) incidents occurred after dark while on a parent motivated errand and the place of victimization was usually close to the survivor's home in cases where the assailant was known. The youngest children sustained the most severe injuries. Lema (10) while studying the determinants of sexuality among adolescent school girls in Kenya found that out of 1751 secondary school girls aged 12-19 years in Nairobi Kenya, 23.8% reported to have had sexual contact at the time of the study. Few (4%) had started having sexual contact below 10 years some of whom had been "raped". Majority had started coitus within 1 to 2 years after attaining menarche.

As indicated by the Nairobi Women's hospital records (11) where this survey was conducted, the number of sexually abused children and adolescents, reporting to the hospital for treatment has been increasing over time ('2002 – 2003, increase by 31% and between 2003 – 2004 increase by 42 %.)The police records have also shown this increase as indicated by their report of crime statistics in Kenya (12) which showed that in 2001, rape cases were 1987; in 2002 they were 2005

and in 2003 they were 2308. According to a country wide survey by Tony (13), 7% of Kenyan women and girls reported a rape while 35 % reported sexual assault.

Greater rates of mental health referral and utilization have been reported for sexually abused as compared to non-abused children (14). Though not all children display emotional disturbance as the result of sexual abuse (15), the experience of sexual abuse has been linked to a variety of specific clinical problems for the affected child (16).

A study done by Onyancha–Nyabuto (17) in NWH to establish psychiatric morbidity among sexually abused female adults in the hospital found the prevalence of PM to be 74%. However no such study has been done to assess the psychiatric morbidity in the sexually abused children and adolescents attending the same hospital. In the western countries, many studies have been done to assess/survey psychiatric morbidity in sexually abused children and adolescents to the extent that what is being focused on now are comparison studies to show how the sexually abused children compare with the non- abused. A search by this researcher in the local universities and the internet websites did not reveal any study of the psychiatric morbidity in sexually abused children and adolescents in Kenya as well as the whole East African region.

This study of psychiatric morbidly in sexually abused children and adolescents in a Kenyan population is expected to contribute to the body of knowledge in this field and compare the results with those that have been found in the Western populations.

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

Follow up studies of sexually abused children have investigated both short term and long term effects. Bietchman et al. (18) reviewed 42 studies for short term effects among children and adolescents at various ages.

Effects on school – aged children

Bietchman et al. (18) noted that CSA victims suffered from academic problems at school. Their skills and performance were measurably below grade/age level in a number of cases. However, the authors noted that none of these studies used control groups, so it was not possible to determine whether the difficulties were attributable to sexual abuse per se. Furthermore, the authors wrote that the causality could have operated in the reverse direction; children who were developmentally delayed may have been at greater risk for sexual abuse. The studies did not investigate this possibility.

The studies also yielded ambiguous results regarding the hypothesis that children who experienced CSA had a higher incidence of behavioral or emotional problems. It was unclear whether they manifested any general psychopathologies more frequently than the general population of school aged children (18).

The one effect for which CSA seemed to be implicated was increased sexual behavior among school – aged children. Sexually abused children of both sexes were more likely to manifest

inappropriate sexual behavior (e.g. excessive masturbation, sexual preoccupation and sexual aggression) than did both normal and clinical controls (18).

Effects on adolescents

The authors made the general observation that; majority of studies examining the short – term effects of child sexual abuse were based on samples drawn from child protective services or psychiatric facilities, hence they may over estimate the prevalence and severity of symptomatology associated with child sexual abuse in the general population. With the exception of sexualized behavior, most of the symptoms found in child and adolescent victims of sexual abuse were characteristics of clinical samples in general (18).

In the same review (18) one study found that adolescent CSA victims experienced depression, low self esteem, suicidal feelings, truancy, alcohol or drug abuse and promiscuity, and ran away from home at higher rates than other adolescents. However, victims of CSA in that study tended to come from lower income families than was typical in the general population of adolescents this age, so it was unclear to what extent family background rather than CSA might account for some of these differences.

Another study (18) showed that adolescent boys who experienced CSA were likely to be involved in "sexrings", used drugs, compulsively masturbated, engaged in prostitution, fought and commited crimes. The study also reported that these boys were more likely to be homosexuals later on, but it was not clear whether a developing homosexual orientation itself predisposed boys to homosexual contact with adults.

Links between CSA and post traumatic stress disorder (PTSD), examined in several studies, were weak. The studies (18) varied in how they defined PTSD, and reliability procedures were weak or non existent.

Findings about the age of the child at onset of CSA were inconclusive but some studies (18) found differences between experiences of boys and girls

- Boys experienced threats for violence more often than girls.
- Boys were less likely to be removed from their homes.
- Boys were more likely to experience physical abuse.
- Boys were more likely to be abused by strangers.
- Male perpetrators of CSA were more likely to be imprisoned than female perpetrators were.

The difference in ethics of CSA studies for boys and girls was unclear because no study attempted to examine this issue systematically (18).

The following factors were highly associated with negative effects of CSA experiences (18):

- A biological or step - father as a perpetrator
- A longer duration of abuse experiences
- Having multiple abusers
- Use of force
- Invasive acts (involving penetration)

The authors (18) concluded the following general comments on the studies they reviewed:

There was a high prevalence of marital breakdown and psychopathology in the histories of sexual abuse victims. Since many of the victims reported in the literature tended to characterize children and adolescents from disturbed families in general, to attribute outcomes in these samples solely

to effects of sexual abuse was difficult. Matching of sexually abused and control subjects on families and demographic variables is necessary if we are to fully comprehend the impact of sexual abuse over and above the effects of a disturbed home environment.

Swanston et al. (19) did a comparative study of sexually abused children 9 years after the abuse. They showed that, as young persons this group of children had many more problems than a matched non-abused comparison group. The sexually abused young people performed more poorly than non-abused young people on psychometric tests of depression, self-esteem, anxiety behavior and despair. They were also more likely to have a history of bingeing, self induced vomiting, smoking cigarettes and using amphetamine, ecstasy and cocaine. Potential risk factors were in two groups; family and child. Family factors were family functioning, parental drug/alcohol problems, mother's sexual abuse history, mother's depression and socio economic status. Child factors were: despair and hopelessness, number of negative life events, ratings of father's care, previous notifications for child sexual abuse and placements in out of home care by the statutory child protection authority. In presence of other risk factors, child sexual abuse was a significant predictor of poor self esteem, abnormal behavior and bingeing. The authors concluded that rather than focus on the individual child sexual abuse treatment we may also need to address the family's function and individual's feeling of despair.

Price et al. (20) in a six year follow up case control of sexually abused boys concluded that boys who had previously suffered sexual abuse did not utilize primary health care services more than a group of age matched controls. They did not present with psychological or somatic problems different from those of non-abused. However abused boys were more likely to complain of

persistent somatic or psychological problems lasting more than a year. This pattern appeared to persist after the abuse stopped and the perpetrators imprisoned.

Cotgrove and Kolvin (21) drawing on literature reviews of Zanarian et al, (22), Brown et al. (23) and Mclear and Deblinger (24) concluded that there were five main long term associations with CSA. These were psychological symptoms consisting of depression, anxiety, low self esteem and guilt, sleep disturbance and dissociate phenomena. Psychiatric disorders particularly depression and anxiety, eating disorders and borderline personality in adult hood, problem behaviors; including self harm, drug use, sexual behavior problems, running away and conduct disorder, and social relationship problems such as social withdrawal, sexual promiscuity and revictimization. It was recognized that these problems were more likely to be reported by clients in long term therapy or those referred to psychiatric or social services.

A study done by Jodi et al. (25) to determine predictors of attributions of self blame and internalizing behavior problems using the Child Behavior Checklist in sexually abused children concluded that different child and abuse characteristics predicted the two sequels often associated with CSA. Although self blame attribution and internalizing behavior problems were often considered similar consequences of sexual abuse there was a need to distinguish the two types of outcomes following sexual victimization in childhood.

Bal et al. (26) studied avoidant coping as a mediator between self reported sexual abuse and stress related symptoms in adolescents using a Trauma Symptom Check List, Self Description Questionnaire and "How I cope under pressure scale". Participants who reported sexual abuse reported more traumatic symptoms and more avoidant coping strategies than the adolescents who

reported another type of stressful event. Results revealed that avoidant coping was a mediator between sexual abuse and severity of symptoms. The conclusions from this study were that sexually abused adolescents exhibited more symptoms and used more avoidant coping strategies than adolescents in other groups. Avoidant coping was seen as a mediator between a sexual stressful event and the consequent stress-related symptoms. Results revealed the importance of assessment and consideration of coping strategies in prevention and in therapeutic interventions.

Merry and Andrews (27) carried a study to assess psychiatric status of sexually abused children aged 4—16 years 12 months after the disclosure of recent sexual abuse. Sixty six children and adolescents were assessed for psychiatric diagnosis on DSM-III-R using data from parents, teachers, and children 12 months after the disclosure of abuse. Overall 63.5% of the children warranted a diagnosis on Axis I. There was a wide range of diagnoses, with particularly high rates of anxiety disorders (30.3%), oppositional defiant disorder (19.6%), post-traumatic stress disorder (18.2%), attention-deficit hyperactivity disorder (13.6%) and depressive disorders (12.1%). Boys had a higher rate of diagnosis than girls. Abuse and social variables did not predict diagnoses but mother's mental health status rated on the General Health Questionnaire did. Subjects not located at follow-up were more often male and more likely to be social economically disadvantaged.

In Africa- Zimbabwe, Karla (28) described the effects of sexual abuse in children as including depression, distorted self image, inability to sustain relationships with men, sexual preoccupations self destructive behaviors, substance abuse, promiscuity, physical injury leading to infertility and AIDS. The family reaction was noted to be often hostile to the abused children. In 30% of their cases the children were punished or beaten for being victims. If pregnant, the child would be

abandoned. STD's occurred in 52% of sexual abuse cases studied and 48% of rape victims had STD, while 7.4% were HIV positive. Children were often not able to be properly tested for HIV as it required two tests due to the window period and the children did not return for the second test. Children in the study suffered pregnancy and physical injury (genital or a head injury) as well as social consequences, such as teasing and rejection.

In summary the literature review showed that there was increased PM among the sexually abused children and adolescents compared to those otherwise abused or non-abused. However most of this literature was from the western countries. This study sought to find out the rate of PM in sexually abused children and adolescents in one of the African countries, Kenya, and compare this with what has been found in the western countries.

CHAPTER THREE

STATEMENT OF THE PROBLEM

This study was necessitated by the increasing numbers of childhood sexual abuse cases reported in Kenya (11, 12) and by the lack of studies assessing the psychiatric morbidity in children and adolescents who had been sexually abused in Kenya.

JUSTIFICATION

There was a need to study the PM in sexually abused children and adolescents in Kenya. This was because the literature available on this subject was mainly from the western countries and also because of the fact that the number of sexually abused children and adolescents at the hospital the study was carried had been increasing (11). It was therefore not known whether the situation observed among children and adolescents of the western countries was the same with the African children and adolescents and more so the Kenyan children and adolescents. The instruments used could only be administered to persons who could communicate well verbally and so the 7-17 years cut off was made considering the fact that sexually abused adults in the same hospital had already been studied (17).

CHAPTER FOUR: RESEARCH SCOPE

STATEMENT OF OBJECTIVES

GENERAL OBJECTIVE

To identify psychiatric morbidity in sexually abused children and adolescents aged 7 – 17 yrs attending the Nairobi Women's Hospital - Kenya

SPECIFIC OBJECTIVES

1. To describe the social demographic profile of the sexually abused children and adolescents aged 7 – 17 yrs attending NWH
2. To determine psychiatric morbidity among these persons.
3. To determine any relationship between the PM and the sexual abuse variables.
4. To make any necessary recommendations on prevention of childhood sexual abuse and treatment of those abused.

RESEARCH QUESTION

What is the prevalence of psychiatric morbidity among sexually abused children and adolescents aged 7 – 17 yrs attending the Nairobi Women Hospital, Kenya?

THE NULL HYPOTHESIS

There is no statistically significant difference in psychiatric morbidity rate among sexually abused children and adolescents aged 7-17 years reporting to the NWH and that found among similar studies (64%) in the developed world (25).

THE ALTERNATIVE HYPOTHESIS

There is a statistically significant difference in the psychiatric morbidity rate among sexually abused children and adolescents aged 7-17 years reporting to the NWH and that found among similar studies in the developed world.

CHAPTER FIVE: METHODOLOGY

STUDY DESIGN

This was a cross-sectional descriptive study.

STUDY AREA

The study was carried out in the Nairobi Women's Hospital Gender Violence Recovery Centre (GVRC).

NWH GVRC background information

The GVRC is a healing centre for survivors of gender based violence, providing for physical and emotional well being. It is based at the Nairobi Women's hospital in Hurlingham, Nairobi - Kenya.

The Nairobi women's hospital is situated within the Nairobi province of Kenya about five kilometers from the Nairobi City Centre. This hospital was started in the year 2001 and is privately owned. It offers various medical specialties for both outpatients and inpatients. Initially it started as an in-patient hospital for women but later opened up for men and children.

STUDY POPULATION

The study population was all the survivors of sexual abuse aged 7-17 years seeking treatment at the NWH during the period of the study and whose parents were willing to consent for the study. .

SAMPLE SIZE

Sampling method

All the children and adolescents aged 7-17 yrs presenting at the NWH whose main complaint was sexual abuse and who met the inclusion criteria. The sample size was based on the number of the survivors reporting to the hospital at the time of the study.

Number of sexually abused children and adolescents treated at NWH in the years 2002-2004. (Aged 0-17 yrs)

2002 - 152

2003 - 293

2004 - 509

Total number for the three years = 954

Average for the three years = 318

318 per month = 26.5 patients per month

12

Average number of sexually abused children aged 0-17 years in three months (The study period)

= 26.5 x 3 = 79.5 = 80

On average children aged below 7 years over this period were about 20.

Therefore the population size for this study was 60 after excluding the children aged 0-6 years.

(80-20=60)

DEFINITION OF CASES

Any child or adolescent aged 7-17 years and who had been sexually abused irrespective of the duration since the time of abuse

INCLUSION CRITERIA

Sexually abused children and adolescents aged 7-17 years reporting to the NWH who were willing to participate in the study and whose parents/guardian were willing to give consent for the study and could communicate understandably.

EXCLUTION CRITERIA

Sexually abused children and adolescents aged 7-17 years reporting to the NWH who either were not willing to participate in the study or those whose parents/guardian were not willing to give consent for the study or could not communicate understandably. The sexual Assault Profile questionnaire used in this study is applicable only to individuals who can communicate effectively. All the children aged less than 7 years were therefore excluded.

DATA COLLECTION

Instruments

1. Social-demographic questionnaire. A questionnaire developed by the researcher.
2. Sexual Assault Profile (SAP) adopted from Jodi et al. (25).
3. History taking and clinical evaluation guided by the DSM IV-TR manual to make a DSM IV TR diagnosis in all cases

THE PROCEDURE

The children and adolescents were selected by consecutive sampling – which consisted of sampling every survivor who met the defined eligibility criteria until the pre-determined sample size (60) was achieved. The children were interviewed after getting medical care and the counseling services. The social demographic and the sexual assault profile questionnaires were administered followed by a psychiatric evaluation guided by the DSM IV-TR manual.

DATA ANALYSIS AND PRESENTATION.

Data was keyed into a microcomputer using the statistical package for social sciences (SPSS) for windows version 12 then validated and analyzed. The results were presented in tables and descriptive form.

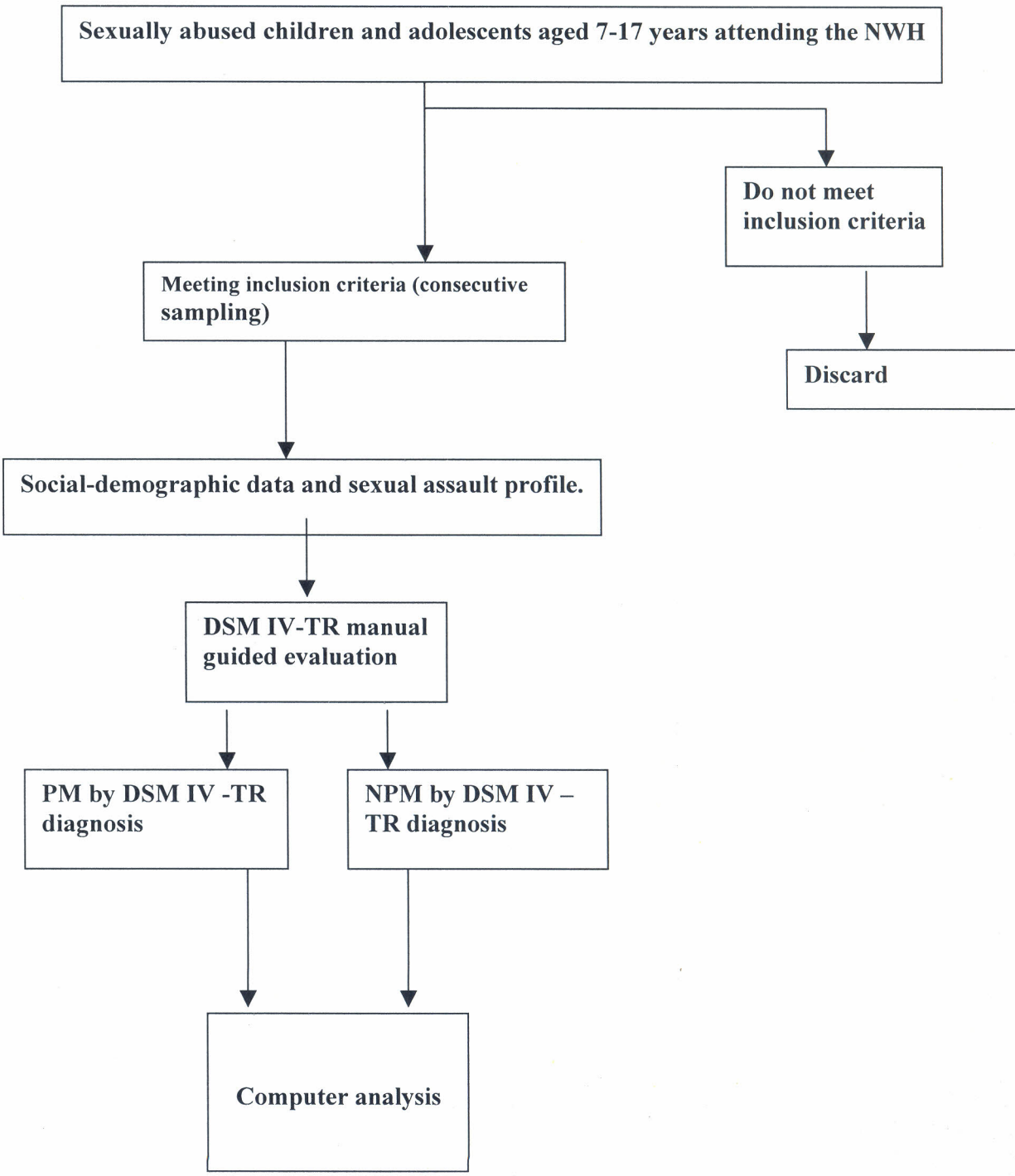
ETHICAL CONSIDERATIONS

Permission to carry out the research was given by the ethics committee of KNH and the Board of directors of NWH after the approval of the proposal by the department of psychiatry UON.

All respondents together with their parents / guardians were explained the purpose of the research and the consent of their parents / guardians obtained. The consent form explained that clients were not to be victimized for declining to participate or withdrawing from the study. After being read for and being explained the content of the consent form the participants were allowed to ask questions and clarifications made before signing of the consent form.

All patients confirmed to be in need of long term psychiatric services were referred to the hospital's psychiatric services for follow-up

FLOW CHART


Sexually abused children and adolescents aged 7-17 years attending the NWH
Do not meet inclusion criteria
Meeting inclusion criteria (consecutive sampling)
Discard
Social-demographic data and sexual assault profile.
DSM IV-TR manual guided evaluation
PM by DSM IV -TR diagnosis
NPM by DSM IV – TR diagnosis
Computer analysis

CHAPTER SIX: RESULTS

Table 1: age distribution

age	Frequency	Percentage
7.00	19	31.1
8.00	7	11.5
9.00	9	14.8
10.00	3	4.9
11.00	3	4.9
12.00	5	8.2
13.00	2	3.3
14.00	4	6.6
15.00	4	6.6
16.00	3	4.9
17.00	2	3.3
Total	61	100.0

Mean = 11.1, SD = 3.3, Mode = 7.0, Median = 11.0, Range = 10.0

Table 2: Age when abuse began

age	frequency	percentage
5.00	1	1.6
6.00	1	1.6
7.00	20	32.8
8.00	9	14.8
9.00	6	9.8
10.00	2	3.3
11.00	4	6.6
12.00	4	6.6
13.00	2	3.3
14.00	3	4.9
15.00	4	6.6
16.00	3	4.9
17.00	2	3.3
Total	61	100.0

Mean = 10.9, SD 3.5, Mode = 7.0, Median = 11.0, Range = 12

Table 3: Age when abuse ended

age	frequency	percentage
7.00	19	31.1
8.00	7	11.5
9.00	10	16.4
10.00	2	3.3
11.00	4	6.6
12.00	4	6.6
13.00	2	3.3
14.00	4	6.6
15.00	3	4.9
16.00	3	4.9
17.00	3	4.9
Total	61	100.0

Mean = 11.1, SD 3.4, Mode = 7.0, Median = 11.0, Range = 10.0

Table 4: Age when abuse was reported to authority

age	frequency	percentage
7.00	19	31.1
8.00	7	11.5
9.00	10	16.4
10.00	2	3.3
11.00	3	4.9
12.00	5	8.2
13.00	2	3.3
14.00	4	6.6
15.00	3	4.9
16.00	3	4.9
17.00	3	4.9
Total	61	100.0

Mean = 11.1, SD 3.4, Mode = 11.0, Median = 11.0, Range = 10.0

The mean value of the subject's number of siblings was 3; with a standard deviation of 2, a mode of 7.0 and a range of 9.

The mean parental daily income was USA $ 4.75, with a standard deviation of 5.99, a mode of USA $ 4.6 and a range of USA $ 32.4. Only 26.7% earned less than a dollar a day.

The USA $ was calculated at Kshs 72 and used as the cut off point for poverty (29)

Table 5: Social demographic variables versus PM or NPM

variable	frequency & percentage	PM	NPM	x2	p
Age group	7-12 years, n=46 (75%)	34	12	2.234	0.99
	13-17years, n=15 (25%)	8	7		
Sex	Male, n =6 (10%)	4	2	0.015	1.00
	Female, n =55 (90%)	38	17		
Place of abuse	Nairobi n =31 (51%)	20	11	0.553	0.582
	Outside Nairobi n =30(49%)	22	8		
Number of siblings	<or equal to 3n =41 (67.8%)	29	12	0.206	0.770
	> 3 n =20 (32.8%)	31	7		
School Attendance	Yes n =48 (80%)	33	15	0.553	0.582
	No n =12 (20%)	8	4		
Who brought the child up?	Both parents n =32(52.5%)	21	11	0.327	0.593
	Others n =29 (47.5%)	21	8		
Child knew both parents?	Both n =46 (75%)	31	15	0.18	0.757
	One parent n =15 (25%)	11	4		
Parents were alive?	Yes n = 38 (68%)	26	12	0.17	1.0
	No n =18 (32%)	12	6		
Whether child had a step parent	Yes n =8 (14.5%)	7	1	1.48	0.41
	No n =47 (85.5%)	3	1		
Parental marital status	Married n=31 (51%)	20	11	0.553	0.58
	Not Married n =30 (49%)	22	8		
Occupation of caregiver	Unskilled n =38 (65.5%)	26	12	0.015	1.5
	Skilled n =20 (34.5%)	14	6		
Daily parents / guardians income	< A $ a day n =16 (26.7%)	11	5	0.16	1.0
	> or equal than a $ n =44 (73.3)	31	13		
Family's history of mental illness	Yes n =17 (29%)	11	6	0.70	0.511
	No n = 42 (71%)	29	13		
Parent use of substances of abuse?	Yes n = 39 (66%)	29	13	0.135	0.771
	No n =20 (34%0	14	5		
Family's way of sorting out disagreements	**Well n =23 (38%)**	**12**	**11**	**4.789**	***0.045**
	Not well n =38 (62%)	**30**	**8**		
Parent experienced similar trauma?	No n =37 (61%)	26	11	0.088	0.784
	Don't know n=24 (39%)	16	8		

Degree of freedom (df) in all variables in the table above is one (1)

* Means that the p value is statistically significant

On the socio demographic profile, the only factor that showed a statistical significant difference in predicting presence or absence of psychiatric morbidity was the family's way of sorting out their disagreements (p = 0.045)

WELL= the authoritative – reciprocal parent-child relationship

NOT WELL= the authoritarian, indulgent-neglectful or indulgent permissive parent child relationship

Table 6: Sexual abuse profile versus PM or NPM

Variable	Frequency& Percentage	PM	NPM	X^2	P Value
Childs relationship to the perpetrator	Stranger n =11(18%)	8	3	0.975	1
	Non stranger n =50 (82%)	34	16		
Acts performed by the perpetrator	Vaginal/anal Penetration n =55 (90%)	38	17	0.015	1.00
	Others n =6 (10%)	4	2		
Whether the perpetrator used any force	Yes n =56 (92%)	38	18	0.316	1.00
	No n = 5 (8%)	4	1		
Duration of abusive incidents recorded	<or equal than a day n =39 (64%)	26	13	0.241	0.424
	> a day n=22 (36%)	16	6		
Extend of the physical injury the child sustained	No injury n =4 (7%)	3	1	0.075	1.00
	Injury n =57 (93%)	39	18		
Delay between the last abuse and discovery	48 hours n =40(66%)	27	13	0.099	1.00
	> 48 hours n =21 (34%)	15	6		
Acts performed by the child during the abuse	No acts n = 54 (89%)	37	17	0.024	1.00
	Any acts n =7 (11%)	5	2		
Coping strategies used	Making efforts to resist n =28(46%)	19	9		
	Passively submitting & denial n =33 (54%)	23	10	0.024	1.00
How the child perceived the abuse	Unpleasant n = 61 (100%)	Not valid			
	Pleasant n = 0 (0%)				
Attribution of responsibility of abuse	No responsibility to self n =50 (82%)	33	17	0.052	0.476
	Some responsibility to self n =11 (18%)	9	2		
Whether child's caregiver was supportive	Yes n =38 (62%)	25	13	0.441	0.578
	No n =23 (38)	17	6		

None of the sexual abuse profiles used showed a statistically significant association with PM.

Degree of freedom (df) in all variables was 1

Table 7: PM or NPM by DSM-IV-TR manual diagnosis

	Frequency	Percent
PM	42	68.9
NPM	19	31.1
Total	61	100.0

Table 8: DSM IV diagnosis

CODE	DIAGNOSIS	FREQUENCY	% OF TOTAL PM
311	Depressive disorder not otherwise specified	24	41%
308.3	Acute stress disorder	14	23%
309.81	Post traumatic stress disorder	13	22%
300.4	Dysthymic disorder	3	5 %
313.81	Oppositional defiant disorder	2	3%
314.01	Attention deficit hyperactivity disorder	1	2%
296.4x	Bipolar 1 disorder	1	2%
312.81	Conduct disorder	1	2%
	Total	59	100

The depressive disorder not otherwise specified in this study was minor depressive disorder.

Suicidal ideation was present in 3 cases (5%)

Twenty nine 29% of the AXIS-I DSM-IV TR diagnoses were co-morbidities (Multiple DSM IV- TR diagnosis)

Table 9: Co-morbidities (Multiple DSM 1V-TR diagnoses)

code	diagnosis	frequency
308.3 311	acute stress disorder with depressive disorder not otherwise specified	8
309.81 311	post traumatic stress disorder with depressive disorder not otherwise specified	3
309.81 300.4	post traumatic stress disorder with dysthymia	2
311 309.81	suicidal ideation with depressive disorder not otherwise specified and post traumatic stress disorder	2
309.81 313.81	post traumatic stress disorder with oppositional defiant disorder	1
308.3 311	Suicidal ideation with acute stress disorder and depressive disorder not otherwise specified	1
	Total	17

Table 10: Hypothesis binomial test

Group	Category	n	Observed prop.	Test prop.	Asymp. sig. (1-tailed)
1	NPM	19	.31	.36	.258(A,B)
2	PM	42	.69		
TOTAL		61	1.00		

A Alternative hypothesis states that the proportion of cases in the first group < .36.

B Based on Z Approximation.

The null hypothesis is accepted and the alternative rejected.

CHAPTER SEVEN: DISCUSSION

PSYCHIATRIC MORBIDITY

The prevalence of psychiatric morbidity among the children and adolescents in the present study as measured by DSM IV-TR was found to be 69%. This concurs with the Merry (27) study that found a PM of 63.5%. Onyancha – Nyabuto (18), though studying adults only and using DSM IV TR found a prevalence rate of 74% among sexually abused female adults in the same hospital.

The study found the following DSM IV - TR diagnoses; depressive disorder not otherwise specified NOS (41%), acute stress disorder (23%), post traumatic stress disorder (22%), dysthymic disorder (5%), oppositional deviant disorder (3%), attention deficit hyperactivity disorder (2%), conduct disorder (2%) and bipolar 1 disorder (2%). Suicidal ideation was found to be present in 3% of the cases. Some subjects had multiple DSM IV-TR diagnoses. These diagnoses were similar to those found in other studies although the prevalence rates of each diagnosis differed from study to study. Merry (27) using DSM III had found the most prevalent diagnosis to be: Anxiety disorder (30.3%) followed by ODD (19.6%), PTSD (18.2%), ADHD (13.6%) and depressive disorder 12%. Swanston et al. (19) in a 9 year follow up comparative study found sexually abused persons to be performing poorly than non-abused persons on depression, self-esteem, anxiety behavior, young adult self-report and despair. Cotgrove (21) drawing from literature review described the long term psychological symptoms of sexually abused children to consist of anxiety, depression, low self-esteem, guilt, sleep disturbance and dissociative phenomenon. Current study seems to confirm mood, anxiety and conduct disorders as the main psychiatric conditions associated with sexual abuse among children and adolescents.

SOCIAL DEMOGRAPHIC PROFILE AND FAMILY FACTORS

Majority (75%) of the sample were in the 7 – 12 years age group while (25%) were in the 13 – 17 years age group (Adolescents). This differs with NIS-3 (31) which indicated that the rate of sexual abuse was very low for ages 0 to 2 years but relatively constant for ages 3 and older in the United States of America. Majority (90%) of those abused were girls. This concurs with the NIS-3 (31) finding that girls were sexually abused 3 times more than boys. However the ratio in the present study was high (9:1) and the author speculates that some people may think that the NWH was a "women's only" hospital and so they may hesitate to bring sexually abused boys. It was also noted that 51% of the subjects were from Nairobi while 49% were from outside Nairobi. This could be because of the fact that the NWH is located in Nairobi and so survivors from other areas were opting for alternative hospitals.

In the present study factors like whether a subject knew his or her parents, whether parents were alive, parental marital status, whether subject had a step parent, whether subject attended school, who brought up the subject and how family sorted out disagreements were used to measure the stability of the families. Results showed that majority were from relatively stable homes. This is contrary to Bietchmans et al review (18) that showed that majority of sexually abused children were from broken marriages. The author speculates that this difference could be because in the society the present study was carried out divorce is not socially acceptable and so couples will remain "married" even when the marriage is dysfunctional.

Of importance to note is the fact that the only factor that showed a statistically significant difference in predicting presence or absence of psychiatric morbidity was how the family sorted out

their disagreements (p = 0.045) "Sorting out disagreements well" in this study constituted the authoritative – reciprocal parent-child relationship while "Not sorting out disagreements well "constituted the authoritarian, indulgent-neglectful or the indulgent permissive parent child relationship. Research (30) has shown that the later has been associated with low self reliance, poor impulse control, aggression and social withdrawal.

More than half (62%) of the parents/caregivers were unskilled laborers. None of the abused subjects' parents were professionals. This could be explained by the fact that according to the KDHS (32) only 7% of the women and 10% of men work in the professional, technical, or managerial fields. Another speculation could be that professionals may prefer to take sexually abused children and adolescents to privately practicing physicians and mental health professionals since they can afford to pay for private services. The NIS-3 (31) associated lower caregiver's income to increased risk of sexual abuse of their children. This was not the case in this study because only 27% of the parents/ guardians earned less than a dollar a day considering the fact that earning less than a dollar in this setup is what is considered very poor (29). However earning just a dollar or just more than a dollar in practice is not enough to pay for the constant supervision of children needed to reduce childhood sexual abuse and so this classification of poverty needs to be revised. Even though Swanston (19) had identified low socio-economic status as a risk factor for psychopathology after sexual abuse, both income and occupation in the present study were not found to be risk factors for psychiatric morbidity.

Three quarters (71%) of the interviewed subjects' families had no history of mental illness. This differs with Beitchman review (18) which indicated that there was increased psychopathology in sexually abused children's families. It was also noted that in the present study, family history of

mental illness was not related to presence or absence of PM. Swanston et al (19) identified mother's depression as a risk factor for increased psychiatric morbidity where as Merry et al. (27) concluded that mother's mental status and general health could predict presence or absence of PM in sexually abused children and adolescents. This could be explained by the fact that in the society that the present study was done, medical evaluation is not easily available to everybody and also by the fact that mental health is stigmatized and so parents might not have made honest disclosures.

It was also noted that 66% of the parents of the sexually abused subjects used substances of abuse. However this variable wasn't a risk factor for PM in this study. This differs with Swanston et al (19) study that identified parental drug/alcohol abuse as one of the risk factors for psychiatric morbidity in sexually abused children.

Minority (33%) of the survivors had 3 or more siblings. However the number of siblings in this study was not a risk factor for PM. This differs with NIS-3 (31) findings that associated large families with increased rate of abuse the explanation being that the caregiver may be overwhelmed and hence not be able to supervise every child in the family. Other studies (33) have associated large families (of 4 or more children) with more conduct disorder and slightly lower verbal IQ than those from smaller families.

None of the survivors' parents had a history of being sexually abused. However 39% of the survivors were not aware whether either of their parents had or had not been sexually abused. This variable did not seem to affect presence or absence of PM. This differs with Swanston. et al (19) who identified mother's history of sexual abuse as a risk factor for psychiatric morbidity. The

author's explanation for this is that in the setup the present study was carried, sexual assault is not openly discussed and so there might have been an underreporting of mothers history of sexual abuse.

SEXUAL ABUSE PROFILE VERSUS PM

None of the sexual abuse profile variables used in the present study was found to determine presence or absence of PM.

About half (53%) of the subjects were abused by an acquaintance, 10% were abused by a parental caregiver (biological) while 5% were abused by a parental caregiver non-biological. Only 18% were abused by strangers. This concurs with other studies (31).

Majority (90%) of the abused sample were subjected to vaginal or anal penetration. However this variable wasn't associated with either increased or decreased PM. This is contrary to other studies (18) which associated invasive acts (penetrative) with increased PM.

More than half (64%) of the survivors were abused for a relatively short period e.g. a day while 36% were abused for longer periods. This factor was also not directly associated with either increased or decreased PM. This differs with other studies (18) which associated longer duration of abuse with increased PM. The author speculates that this difference could be because generally, awareness on childhood sexual abuse is lower in the developing countries compared to the developed countries.

Majority (93%) sustained injuries ranging from mild to severe injuries. Only 7% of the survivors did not sustain an injury as a result of the abuse. However the extend of physical injuries sustained did not predict presence or absences of PM in this study.

Less than half (46%) of the survivors made efforts to resist, 48% passively submitted while only 7% pretended it was not happening. This variable did not determine presence or absence of PM. This differs with Bal et al. (26) study which found out that avoidant coping (pretending it is not happening) tended to predict increased PM.

Majority (82%) of the survivors felt that they were not responsible for the abuse while 18% attributed either partial or full responsibility to self. This variable wasn't associated with either presence or absence of PM in the present study. This concurs with Jodi's study (25) which found that self blame attribution (attributing either partial or full responsibility) and behavior problems (psychiatric morbidity) are not always similar consequences of child sexual abuse.

It was noted that 66% of the abuse was discovered within 48 hrs after the last abuse while 36% was discovered later. This variable did not determine presence or absence of PM. This differs with other studies (18) which associated longer duration of abuse before discovery with increased PM. However efforts should be made to increase the percentage of discovery within the first 48 hrs as this has an implication on the post exposure prophylaxis against HIV/AIDS.

Most (62%) of the mothers or care givers were supportive after discovering the sexual abuse while only 37% were unsupportive. This variable did not determine presence or absence of PM. However

efforts need to be done to encourage all mothers and caregivers to be supportive in case of an abuse.

Majority (91%) of the perpetrators used either verbal or physical force. However this was not associated with either increased or decreased PM. This differs with Bietchman et al. (18) review that showed that use of force tended to predict increased PM. The author speculates that the difference could be because some of the cultures where the present study was done considered use of force to gain sexual "consent" as "normal".

LIMITATIONS

I. The sample size was small (61) and so the findings can not be generalized to the general population
II. The study took place in a hospital and so it was biased on the sick and those aware of the services provided by the hospital.
III. Some of the survivors sampled were undergoing psychotherapy and this could have had an effect in reducing the PM.
IV. This was not a comparative controlled study and so the psychiatric morbidity found can not be said to be purely due to the sexual abuse.

CHAPTER EIGHT:

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The prevalence of psychiatric morbidity among the children and adolescents studied as measured by the DSM IV - TR was found to be 69%. The DSM IV-TR Diagnoses were: depressive disorder not otherwise specified, acute stress disorder, post traumatic stress disorder, dysthymic disorder, oppositional deviant disorder, attention deficit hyperactivity disorder, bipolar 1 disorder and conduct disorder. Although these findings were similar to those found in other studies, the study did not establish whether sexual abuse alone was the cause of the PM. The family pathology and especially the family way of sorting out disagreement could have contributed to the PM. Majority of the survivors sustained physical injuries as a result of the abuse with most of the abuse being penetrative. More girls than boys were abused. Abuse in the studied sample occurred in both stable and broken families and regardless of the guardian's/ parental economic status. Most of the survivors were abused by acquaintances such as neighbors, caregivers and parents. The authoritarian, indulgent- neglectful and the indulgent permissive parent child relationship were associated with higher rate of PM. A significant number of the survivors' parents were abusing substances even though abuse variables and social demographic variables did not predict either presence or absence of PM. Only 66% of the sexual abuse was discovered within the first 48 hours.

Recommendations

- Clinicians need to be well sensitized in recognizing the symptoms and signs of PM associated with past history of sexual abuse in children and adolescents.
- All parents/care givers, children and adolescents regardless of their social economic status need to be sensitized about childhood sexual abuse and the fact that majority of the perpetrators are acquaintances.
- All children and adolescents who have been sexually abused need to be evaluated for PM regardless of their social demographic profile and the abuse profile.
- Parents and caregivers need to be sensitized on the best parent child social relationship
- A study of sexual abuse among children aged below 7 years is recommended since the present study only studied this issue among the age group of 7-17 years
- A study to compare the PM rates among abused and none-abused children and adolescents is recommended.

CHAPTER NINE

REFERENCES

1. Hornby, A.S. Oxford Advanced Learner's Dictionary. 6th edition Oxford University Press 2000.
2. Feltoe, G. Child abuse and law –cases 1 and 2. *Legal forum* 1991; **3** : 14
3. Government of Kenya, The Children Act 2001, *Kenya Gazette Supplement* 95 (8) page 493. Government printer, Nairobi.
4. Government of Kenya. The Kenya Laws. CAP **63**. *Penal code Act* 1985; sections 144, 145, 164, 166 *Kenya* Government printers, Nairobi. 1985.
5. UN, UN convention on the rights of the child, General assembly Geneva -USA 20th Nov 1989.
6. OAU. African charter on the rights and welfare of the child. 26TH Session assembly of OAU, 1990, Addis Ababa Ethiopia.
7. Government of Kenya, The Children Act 2001, *Kenya Gazette Supplement* 95 (8) page 493. Government printer, Nairobi.
8. Lalor, K. Child sexual abuse in Tanzania and Kenya. *Child Abuse Negl.* 2004; 8: 833-44.
9. Nduati, R. W. and Muita, J. W. Sexual abuse of children as seen at Kenyatta National Hospital. *East Afr Med J.* 1992; **7**: 350-4
10. Lema, V. M. The determinants of sexuality among adolescent school girls in Kenya. *East Afr Med J.* 1990; 3: 191-200.
11. Nairobi women's hospitals register 2002, 2003 and 2004.
12. *The Kenya Police Annual Report of the Commissioner of police* Government printers, 2003:13

13. Tony, J. The sexual abuse of Kenyan women and girls. *Gender series*. 2003; **5:**13.

14. FrothingHan, T.E., Hobbs, C.J., Wynne, J.M., Yee L., Goya I, A., and Wadsworth D.J. Follow up study eight years after diagnosis of sexual abuse. *Archives of disease in childhood* .2000; **83:** 132 –134.

15. Calam, R., Horne, L.,Glasgow, D and Cox A. psychological disturbance and child sexual abuse. *Child Abuse and neglect*. 1998; **22:** 901 –913.

16. Kendall,T. K., Meyer, L.D., Finkelhor, D. Impact of sexual abuse on children. A review and synthesis of recent empirical studies. *Psychological Bulletin*.1993; **113**.

17. Onyancha –Nyambuto, P.K. Psychiatric morbidity among adult sexually abused females attending Nairobi women's hospital, Kenya. MMed Dissertation Nairobi University, Department of psychiatry, 2004

18. Bietchman, J. H., Zucker, K.J., Hood ,J.E., Dacosky, G.A and Akman, D. A review of the short- term effects of child sexual abuse. *Child abuse and neglect* .1991; **15**: 537 – 556.

19. Healther, Y., Swanston, A. M., Plunkett, B. I., O'Toole S. S., Patrick N. P., Oates,R. K. Nine years after child sexual abuse *child abuse and neglect.* 2002; **27:** 967 – 984

20. Price, L ., Maddocks, A .,Davies,S ., Griffins ,L. Somatic and psychological problems in a cohort of sexually abused boys. *Archive of Disease in Childhood*. 2002; **86**: 164-167.

21. Cotgrove, A.J and Kolvin, I .The long term effects of child sexual abuse. *Hospital update*, 1996; September: 401- 406.

22. Zanarian, M., Gunderson, J.G and Marino, M.F. Childhood experiences of borderline patients. *Comprehensive psychiatry.* 1989; **30**: 18 –25.

23. Brown, G. and Anderson, B, Psychiatric morbidity in adult in- patients with childhood histories of sexual and physical abuse. *American Journal of psychiatry.* 1991; **148**: 55 – 61.

24. Mclear, S.V., Deblinger, H. D.Sexually abused children at high risk for PTSD. *Journal of the American academy of child and adolescent psychiatry* 1992; **33**: 313 –319.

25. Jodi, A.Q., Gail, S.G. and David, P.H.J. Predictors of attributions of self blame and internalizing behaviour problems in sexually abused children. *Journal of child psychology and psychiatry.* 2003; **44**: **5**: 723 –736.

26. Bal, S., Paulette, V.O., Ilse D.B., Geert, C. Avoidant coping as a mediator between self reported sexual abuse and stress released symptoms in adolescents .*Child Abuse and Neglect.* 2003; **27:** 883 – 897.

27. Merry, S.N., Andrews, L.K. Psychiatric status of sexually abused children 12 months after disclosure of abuse. *J Am Acad Child Adolesc Psychiatry* 1994 Sep; **33** (7): 939-44.

28. Karla, M. Child sexual abuse in Matebele land. Matebele Land AIDS council Research report, Bulawayo, March 1993.

29. The World Distribution of Income http:www.econ.usf.es.March 31st 2004

30. Sadock, B. J., Sadock, V. A., Parenting styles Chapter 2, page 35 Synopsis of psychiatry, 9th edition Lippincott Williams & Wilkins, 2003.

31. Third National Incidence Study of Child Abuse and Neglect: www.healthier you.com/cabuse.html.March 1st 2005

32. Central Bureau of Statistics, Ministry of Health, National Council for Population and Development; *Kenya Demographic Health Survey* (2003). Characteristics of respondents page 39

33. Sadock, B. J., Sadock, V. A., Spacing of children Chapter 2,page 33 Synopsis of psychiatry, 9th edition Lippincott Williams & Wilkins, 2003,

CHAPTER TEN: ANNEXES

ANNEX 1

CONSENT FORM

I ..... (Name of parent or guardian) parent/guardian of ..... (Name of the child/adolescence) do hereby give consent for my child / adolescent to participate in a research study entitled: PREVALENCE OF PSYCHIATRIC MORBIDITY AMONG SEXUALLY ABUSED CHILDREN AND ADOLESCENTS (AGED 7-17 YEARS) IN THE NAIROBI WOMEN'S HOSPITAL – under the direction of DR, CATHERINE M. SYENGO – MUTISYA (Name of the investigator). I also accept to give any other relevant information about my child/adolescent. I understand that my child/ adolescent stands to benefit through: Narrative therapy to prevent / treat post-traumatic stress disorder (PTSD), selection for referral for psychotherapy and psychopharmacological interventions where indicated and long-term follows up to improve his or her psychological functioning.

I understand that my child / adolescent at the beginning of the narration of the trauma will undergo emotional crises but towards the end of the session the child / adolescent will have been helped to heal and even move to a better emotional state than before the start of therapy

I have also been assured that there are no invasive procedures and that all the information I give is confidential and none of the participants' names will be used in the study or any resulting publication

I have been given the opportunity to ask questions concerning this study and these questions have been answered to my satisfaction. I understand that I may at any time during the course of this study revoke my consent and withdraw from the study without any penalty or loss of benefits to which I and my child / adolescent are otherwise entitled.

Parents /guardians: signature or thumb print ..... Date .....

Home address .....

Tel (house) .....office..... Mobile.....

Study number.....

SUPERVISORS

Dr.Major (Rtd) Dammas M.Kathuku
MBChB (Makerere) MMed Psych (Nrb), FS (USAF-SAM)
Senior lecturer,Deprtment of Psychiatry
University of Nairobi.

Prof.David Musyimi Ndetei
MBChB (Nrb), D.P.M (London),M.R.C.Psych, F.R.C.Psych.(U.K),MD (Nrb)
Certificate in Psychotherapy (London)
Professor of Psychiatry, University of Nairobi.

ANNEX 2A

SOCIO-DEMOGRAPHIC QUESTIONNAIRE

Register number .....

1) Age .....

2) Sex .....

3) Current residence.....

4) Place of birth. .....

5) If 3 & 4 are different then probe the reasons for change of residence

.....

6) Do you know your parents? Coded as:

- 1 Both
- 2 only mother
- 3 Only father
- 4 none

7) Are both your parents alive? Coded as:

- 1 yes
- 2 no
- 3 don't know

8) If both of your parents are alive, are they? Coded as:

- 1 Married
- 2 Separated
- 3 Cohabiting
- 4 Divorced
- 5 Others, specify.....

9) Does your father have more than one wife? Coded as:

- 1 yes
- 2 no
- 3 don't know
- 4 have no father

10) Do you have stepparents.....? Coded as:

- 1 yes
- 2 no

11) Occupation of parents / other caregiver coded as:

- 1 professional
- 2 skilled
- 3 unskilled

12) How much income do your parents/ guardian earn per month? Coded as:

- 1 less than a dollar a day
- 2 more than a dollar a day

13) Number of siblings coded as:

- 1 less than 3 siblings
- 2 3 or more siblings

15) Who brought you up? Coded as:

- 1 Both parents
- 2 Mother a lone

- 3 Father alone
- 4 Others

16) Are you attending school now? Coded as:

- 1 Yes
- 2 No

17) History of mental illness in the family coded as:

- 1 Yes
- 2 No

19) Does either of your parents or guardian take any substances of abuse? Coded as:

- 1 yes
- 2 no

20) Whenever there is any disagreement in the family, how is it sorted out...? Coded as:

- 1 well
- 2 not well

21) Have any of your parents/ guardian gone through an experience similar to what you have gone through? Coded as:

- 1 yes
- 2 no

ANNEX 2B

SEXUAL ASSAULT PROFILE (SAP) BY Conte & Berliner, 1984).

1) Age, when the abuse

Began ☐
Ended ☐
Reported to the authority ☐

2) Child's/adolescent's relationship to the perpetrator coded as:

1 Stranger ☐
1. Acquaintance (known but not in position of trust (e.g. neighbor) ☐
2. Non-parental caregiver in position of trust e.g. relative, baby sister ☐
3. Parental caregiver Biological ☐
4. Parental caregiver non-biological ☐

3) Type of abuse (acts performed by perpetrator) coded as:

1 Exhibitionism ☐
2 Genital contacts ☐
3 Non-genital contacts ☐
4 Vaginal / anal penetration ☐

4) Acts performed by the child/adolescent: coded as:

1 Nothing ☐
2 Touching ☐
3 Oral copulation ☐

5) Duration and frequency of abusive incidents coded as:

1 Extremely short (1 day) ☐
2 Relatively short (e.g. a few months) ☐
3 Relatively long (several month to a few years) ☐
4 Extremely long (many years) ☐

6) Extend of physical injury the child sustained because of the above coded as:

1 No injury ☐
2 Mild injuries (e.g. slight bruise / scratching) ☐
3 Moderate injuries (e.g. lasting, large bruises) ☐
4 Severe injuries (e.g. broken bone) ☐

7) Did the perpetrator use verbal or physical force to obtain the child's compliance? Coded as:

1 None ☐
2 Mild (e.g. push or shove) ☐
3 Moderate (e.g. holding arm down during the incident) ☐
4 Severe (e.g. tying the victim down, holding a gun to the victims head) ☐

9) Coping Strategies used coded as:

1 Making efforts to resist ☐
2 Passively submitting ☐
3 Pretending it is not happening ☐
4 Others ☐

10) Whether abuse was perceived as:

1 Disgusting ☐
2 Painful ☐
3 Scary ☐
4 0thers

11) Attribution coded as:

Attributed 1 No responsibility to self ☐
2 Attribute partial responsibility to self ☐
3 Accepts full responsibility ☐

12) Delay between the last abusive incident and discovery of the abuse coded as:

1 Within 48 hours ☐
2 Two days to 2 weeks ☐
3 Two weeks to 1 month ☐
4 One – 6 months ☐
5 More than 6 months ☐

13) Whether subject's care giver reacted supportively coded as:

Yes ☐
No ☐