C. M. Syengo – Mutisya, MBChB (Nrb), MMed (Psych) (Nrb), Psychiatrist, Mathari Hospital, P.O Box 40663, Nairobi, Kenya, Major (Rtd), D. M. Kathuku, MBChB (Mak.), MMed (Psych.) (Nrb), FS (USAF-SAM), Senior Lecturer, Department of Psychiatry, School of Medicine, College of Health Sciences, University of Nairobi. P.O. Box 19676-00200, Nairobi, Kenya, D. M. Ndetei, MBChB (Nrb), D.P.M (London), FRC Psych.(U.K), MD(Nrb) Certificate in Psychotherapy (London), Professor of Psychiatry, Department of Psychiatry, School of Medicine, College of Health Sciences, University of Nairobi, P. O. Box 19676-00200, Nairobi, Kenya

Request for reprints: Dr. C. M. Syengo – Mutisya, Mathari Hospital, P.O Box 40663, Nairobi, Kenya

PSYCHIATRIC MORBIDITY AMONG SEXUALLY ABUSED CHILDREN AND ADOLESCENTS

C. M. SYENGO – MUTISYA, D. M. KATHUKU and D. M. NDETEI

ABSTRACT

Objectives: To describe the social demographic profile and identify psychiatric morbidity in sexually abused children and adolescents.

Design: A Cross-sectional descriptive survey.

Setting: Nairobi Women's Hospital (NWH) Gender Violence Recovery Centre (GVRC), Hurlingham, Nairobi- Kenya.

Subjects: A sample of 61 sexually abused children and adolescents aged 7-17 years.

Results: Eighty two percent of the survivors were sexually abused by acquaintances such as neighbours, caregivers and parents. Ninety percent of the sampled group were females. Abuse occurred in both single and both parent families and regardless of the guardian/ parental economic status. Sixty six percent of the survivors' parents were abusing psychoactive substances. Sexual abuse variables and most of the social demographic variables did not predict either presence or absence of psychiatric morbidity. Only 66% of the abuse came to the notice of the child's caregiver within the first 48 hours. 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 ($p = 0.045$). The prevalence of psychiatric morbidity among the subjects studied as measured by the Diagnostic Statistical Manual Text Revision (DSM IV-TR) was found to be 69%. Eight different types of DSM IV- TR diagnoses were made. Twenty nine percent of the AXIS-I DSMIV-TR diagnoses were co-morbidities (Multiple DSM IV- TR diagnoses).

Conclusions: The psychiatric morbidity prevalence is comparable to that found in other studies. Sexual abuse occurred regardless of the social demographic variables. Family's way of sorting out disagreement predicted presence or absence of psychiatric morbidity among the study subjects. Majority (82%) of the sexual abusers were acquaintances to the study subjects.

Recommendations: It is recommended that all children and adolescents who have been sexually abused be evaluated for psychiatric morbidity regardless of their social demographic and abuse profiles and that all parents and care givers, be sensitised on childhood sexual abuse and the fact that majority of the perpetrators are acquaintances to the subjects. Families need to be sensitised on their role on prevention and reduction of psychiatric morbidity among children and adolescents in general.

INTRODUCTION

Internationally all forms of child abuse are covered in the United Nation's Convention on the rights of the child (1) 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 (Article 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 (Article 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 (Article 32); the state shall protect children from sexual exploitation, prostitution and involvement in pornography (Article 34).

Over the period covering 2003 to 2005, the number of sexually abused children and adolescents reporting to the Nairobi Women's Hospital and elsewhere (2-5) in the Republic of Kenya has been increasing. Despite this, no studies have been done to assess the psychiatric morbidity among such survivors at the hospital or at the community level. It was therefore found necessary to conduct this study.

MATERIALS AND METHODS

This was a cross-sectional descriptive survey. The sample size was based on the number of the survivors reporting to the hospital at the time of the study. Approval of the study was given by the department of psychiatry, University of Nairobi and clearance given by the Ethics Research Committee (ERC) of Kenyatta National Hospital. The Board of directors of Nairobi Women's Hospital gave approval for the study to be conducted in their hospital.

All respondents were explained the purpose of the research and the consent of their parents /

guardians obtained. Confidentiality was assured. The inclusion criteria was any sexually abused child or adolescent aged 7-17 years reporting to NWH who was willing to participate in the study and whose parent's/guardian's gave consent. All survivors confirmed to be in need of long-term psychiatric services were referred to the hospitals' psychiatric services for follow-up.

A consecutive sample of 61 survivors meeting the above inclusion criteria was interviewed using a structured social demographic questionnaire developed by the authors and a sexual assault profile questionnaire adapted from Jodi *et al* (6). The sample was also subjected to a DSM IV-TR guided psychiatric evaluation for the purpose of making a DSM-IV TR diagnosis. Data was analysed using the Statistical Package for Social Sciences (SPSS) version 12. The level of statistical significance was held at $p < 0.05$.

RESULTS

Out of the 61 subjects studied, the male to female ratio was 1:9; the mean age was 11.1 years; (sd =3.3) the median age 11 years and the mode 7 years.

The other social demographic features were as shown in Table 1.

Table 1

Social demographic variables versus PM or NPM

Variable	Frequency	(%)	PM	NPM	X^2	df	p-value
Age group (years)							
7-12	46	75	34	12	2.234	1	0.99
13-17	15	25	8	7			
Sex							
Male	*6*	*10*	*4*	*2*	*0.015*	*1*	*1.00*
Female	55	90	38	17			
Place of abuse							
Nairobi	31	51	20	11	0.553	1	0.582
Outside Nairobi	30	49	22	8			
Number of siblings							
≤ 3	41	67.8	29	12	0.206	1	0.770
> 3	20	32.8	31	7			
School attendance							
Yes	48	80	33	15	0.553	1	0.582
No	12	20	8	4			
Who brought the child up?							
Both parents	32	52.5%	21	11	0.327	1	0.593
Others	29	47.5	21	8			

Whether child knew both parents							
Both	46	75	31	15	0.18	1	0.757
One parent	15	25	11	4			
Whether parents were alive							
Yes	38	68	26	12	0.17	1	1.0
No	18	32	12	6			
Whether child had a step parent							
Yes	8	14.5	7	1	1.48	1	0.41
No	47	85.5	3	1			
Parental marital status							
Married	31	51	20	11	0.553	1	0.58
Not married	30	49	22	8			
Occupation of caregiver							
Unskilled	38	65.5	26	12	0.015	1	1.5
Skilled	20	34.5	14	6			
Daily parent / guardians income							
≤ 1 \$	16	26.7	11	5	0.16	1	1.0
≥ 1 \$	44	73.3	31	13			
Family's history of mental illness							
Yes	17	29	11	6	0.70	1	0.511
No	42	71	29	13			
Parent/ guardians use of substances of abuse							
Yes	39	66	29	13	0.135	1	0.771
No	20	34	14	5			
Family's way of sorting out disagreements							
Well	23	38	12	11	4.789	1	*0.045
Not well	38	62	30	8			
Whether a parent had experienced similar trauma							
No	37	61	26	11	0.088	1	0.784
Don't know	24	39	16	8			

df = Degrees of freedom.

*   Indicates that the p-value is statistically significant

On the socio demographic profile, the only factor that showed a significant difference in predicting presence or absence of psychiatric morbidity was how the family sorted out their disagreements (p-value of 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.

PM = Psychiatric morbidity

NPM = No psychiatric morbidity

Table 2
DSM 1V-TR diagnoses

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 (PTSD)	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 prevalence of psychiatric morbidity among the subjects studied as measured by the DSM IV-TR was found to be 69%. Nine DSMIV-TR diagnoses were made (Table 2).

Twenty nine percent of the AXIS-I DSMIV-TR diagnoses were co-morbidities (Multiple DSM IV-TR diagnosis) (Table 3).

Table 3

Co-morbidities (Multiple DSM 1V-TR diagnoses)

Code	Diagnosis	Frequency
308.3	Acute stress disorder with	
311	Depressive disorder not otherwise specified	8
309.81	Post traumatic stress disorder with	
311	Depressive disorder not otherwise specified	3
309.81	Post traumatic stress disorder with	
300.4	Dysthymia	2
311	Suicidal ideation with	
309.81	Depressive disorder not otherwise specified and	
	Post traumatic stress disorder	2
309.81	Post traumatic stress disorder with	
313.81	Oppositional defiant disorder	1
308.3	Suicidal ideation with	
311	Acute stress disorder and	
	Depressive disorder not otherwise specified	1
	Total	17

Table 4
Sexual abuse profile versus PM or NPM

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

- None of the sexual abuse profile showed a statistically significance difference in predicting presence or absence of PM.

DISCUSSION

The DSM IV-TR psychiatric morbidity prevalence of 69% is comparable to that found by Merry *et al.* of 63.5% (7) in Auckland school of medicine (A study carried out to assess psychiatric status of sexually abused children aged 4—16 years 12 months after the disclosure of recent sexual abuse in 1994). In this study, depression disorders (Minor depressive disorder and dysthymia) were the most prevalent disorders (46%) followed by anxiety disorders (ASD and PTSD) (45%). Merry *et al* (7) using DSM III found anxiety disorder to be leading (30.3%) and depressive disorders to be 12%. Onyancha – Nyambuto (4) though studying adults found a DSM IV-TR prevalence of 74% among sexually assaulted adults at the same hospital.

On the social demographic profile, majority (75%) of the sample were in the 7 – 12 years age group while 25% were in the 13 – 17 year age group. The finding in the present study could be because some of the abused adolescents may not be reporting all cases of sexual abuse. Majority (90%) of those abused were girls.

About half (53%) of the children and adolescents were abused by an acquaintance (known but not in a position of trust for example neighbour). Ten percent were abused by a parental caregiver (biological) while 5% were abused by a parental caregiver non-biological. Only 18% were abused by strangers. Beitchman *et al.* (8) in his review of 42 studies found that a biological or stepfather as a perpetrator was associated with increased psychiatric morbidity.

Seventy one percent of the interviewed children and adolescent families had no history of mental illness while only 29% had history of mental illness. However it was noted that 66% of the parents of the abused children and adolescents used substances of abuse. This differs with Beitchman *et al* review (8) that 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 psychiatric morbidity (Table 1). Healther *et al.* (9) identified mother's depression as a risk factor for increased psychiatric morbidity whereas Merry *et al.* (7) concluded that mother's mental status and general health could predict presence or absence of psychiatric morbidity in sexually abused children and adolescents. This difference 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 illness is stigmatised and so parents might not have made honest disclosures.

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 psychiatric morbidity. This differs with Healther *et al.* (9) study that identified mother's sexual abuse history as a risk factor for psychiatric morbidity. The authors' 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 under-reporting of mothers history of sexual abuse.

Of importance to note is the fact that on the socio demographic profile, 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(10). Research has shown that the latter has been associated with low self-reliance, poor impulse control, aggression and social withdrawal.

Majority (90%) of the abused children and adolescents were subjected to vaginal or anal penetration. However this variable was not associated with either increased or decreased psychiatric morbidity. This differs with study by Beitchman *et al* (8), which associated invasive acts (involving vaginal or anal penetration) with increased psychiatric morbidity.

Majority (93%) sustained injuries ranging from mild to severe injuries. Seven percent of the survivors sustained no injury after the abuse. However the extent of physical injuries sustained did not predict presence or absence of psychiatric morbidity in this study. This concurs with findings by Merry *et al.* (7).

It was noted that 66% of the abuse was discovered within 48 hours after the last abuse while 36% was discovered later. This variable did not determine presence or absence of psychiatric morbidity. This differs with other studies (8), which associated longer duration of abuse before discovery with increased psychiatric morbidity. However efforts should be made to increase the percentage of discovery within the first 48 hours as this has an implication on the post exposure prophylaxis against HIV/AIDS.

Sixty two percent of the mothers or care givers reacted supportively after discovering the abuse while only 37% reacted negatively (unsupportive). This variable did not predict presence or absence of psychiatric morbidity. 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. Only 8% did not use force. However this was not associated with either increased or decreased psychiatric morbidity. This differs with Beitchman *et al.* (8) review that showered that use of force tended to predict increased psychiatric morbidity.

None of the sexual abuse profile variables used in the present study predicted presence or absence of psychiatric morbidity. This concurs with Merry *et al.* (7) study. However, Beitchman *et al.* review (8) found abuse variables like longer duration of abuse, use of force, and penetration to have negative effects.

In conclusion, the psychiatric morbidity prevalence was comparable to that found by Merry *et al.* (7). Sexual abuse occurred regardless of the social demographic variables. Family's way of sorting out disagreement predicted presence or absence of psychiatric morbidity among the study subjects. Majority (82%) of the sexual abusers were acquaintances to those sexually abused.

We recommended that all children and adolescents who have been sexually abused be evaluated for psychiatric morbidity regardless of their social demographic and abuse profiles and that all parents and care givers, be sensitised on childhood sexual abuse and the fact that majority of the perpetrators are acquaintances. Families need to be sensitised on their role on prevention and reduction of psychiatric morbidity among children and adolescents in general.

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CONFLICT OF INTEREST

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