



Original Article (FORENSIC PSYCHIATRY)

## A Bicentric Study of Psychiatric Illness among Pediatric Population Patients with a History of Sexual Abuse

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### ABSTRACT

**Background:** The present study assessed the psychiatric diseases in victims of childhood sexual abuse from intact and broken families.

**Methodology:** A cross-sectional study was conducted at the PMC hospital, Nawabshah and Pir Abdul Qadir Shah Jeelani Institute of Medical Sciences, GAMBAT between February 2020 to January 2022. 60 (30 in each group) children were included with the ages of 5-16 years. Non-probability convenience sampling technique was used. Children with reported sexual abuse who fulfilled the inclusion criteria were included in this study. All children included in the study were screened for psychological disturbances through the Urdu version of SDQ. The severity of symptoms was assessed based on ICD-10 criteria.

**Results:** There was a significant relationship between the identity of the perpetrator with the stability of the family. In victims belonging to the intact family system, the perpetrator was mostly an outsider while, in cases of broken families, oftentimes, the abuser was a relative or known to the victim. 44.44% of individuals belonging to broken families were abused within the confinements of the home. 17.8% of children from unstable families had mixed anxiety and depression disorder, while the rate was lower among children who had intact families. Surprisingly, only five children altogether had post-traumatic stress disorder. Hyperkinetic disorder and conduct disorder was significantly more prevalent in victims belonging to a broken family system.

**Conclusion:** Childhood sexual abuse and its resultant psychiatric morbidity are equally common in children from intact and broken families. However further research with a greater sample size from multiple centers is needed.

**Keywords:** Childhood sexual abuse, Psychiatric morbidity, Broken family.

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## INTRODUCTION

Psychiatric disturbances are not pertinent to adults only but they are also prevalent among children. These disturbances not only affect children but also have an impact later on in their adult life. Some individuals are quite aware of the presence of psychological problems but some are made aware by others around them.<sup>1</sup>

Childhood sexual abuse is quite common in the community, and most often the cases are not reported because of the stigma of shame and guilt attached to the sexual abuse of children.<sup>2</sup> No epidemiological data is available on the prevalence and incidence of childhood sexual abuse in Pakistan. So the actual impact of the problem on society could not be assessed.<sup>3</sup>

Childhood sexual abuse has a great impact on the psyche and future attitude of a person.<sup>4</sup> This study provides introspection into the problem and creates understanding and awareness about the magnitude of the problem. Furthermore, enabling one to deal efficiently with the problems and take possible preventive measures that will ultimately bring positive reform in society. People having a history of any mental illness or a higher level of stress are at a greater risk of experiencing sexual assault, with unemployment and lack of parenting skills also being the factors. Moreover, research has also revealed that the abusers can be parents, siblings, friends, neighbors, and even strangers.<sup>5,6</sup>

Additionally, it has been proven that continuous or repeated sexual abuse experienced by a child over an extended period can cause long term consequences by giving rise to mental health problems such as depression, anxiety, and

even some serious disorders like Post Traumatic Stress Disorder (PTSD) and Attention Deficit Hyperactivity Disorder (ADHD) in future.<sup>7-9</sup> This makes the approach of the victim maladaptive towards life as it lessens the adaptive behaviors and incapacitates the adult by causing a greater emotional or psychological trauma than the physical damage itself.

Adult adaptive behavior is determined by the way the children are being raised, and the support, love, care, and attention they receive from their parents or caretakers as these factors help in the successful development of their psychosocial development.<sup>10</sup>

The purpose of this study was also to highlight the importance of professional evaluation and treatment of sexually abused children. Such evaluation and treatment could help in reducing the risk that the child could develop serious problems as an adult. This study can also be used as a basis for further research into childhood sexual abuse by health care professionals.

The study aimed to compare the demographic variable ratios of sexual abuse in children from intact and broken families and to determine different types of psychiatric morbidity in these sexually abused children.

## METHODS AND MATERIALS

### Study Design and Setting

A cross-sectional study was conducted at the PMC hospital, Nawabshah and Pir Abdul Qadir Shah Jeelani Institute of Medical Sciences, GAMBAT between February 2020 to January 2022.

### Ethical Considerations

Ethical approval was obtained before the study from the institutional review board.

### Sample Size and Sampling Technique

A sample size of 90 children with childhood

sexual abuse was calculated using Select statistics. 45 each from intact and broken families. A nonprobability convenience sampling was used to enroll participants in the study.

### Inclusion Criteria

For children aged above 5 years and below 16 years, irrespective of gender, abuse history proved by comprehensive interviews was included in the study.

### Exclusion Criteria

Mentally retarded children were excluded because the validity of the account remains doubtful. Informed verbal and written consent was taken from the parents.

### Data Collection Procedure

Children with reported sexual abuse were screened on history. Those who fulfilled the inclusion criteria were included in the study. After building trust and rapport, a predefined proforma was used to collect the data on demographic parameters, detailed history, family history, personal history, and information about abuse.

### Data Collection Tools

All children included in the study were screened for psychological disturbances through the Urdu version of the strength and difficulties questionnaire (SDQ). SDQ is a simple self-administered questionnaire that can be filled by adults who are parents or teachers of four to sixteen years olds.<sup>11</sup> It consists of five subscales including parts about emotion, conduct, hyperactivity, and problems with peers along with prosocial behavioral assessment. The sum of scores ranged from 0 to forty. For borderline cases, the score was set as 14 – 16 and a score greater than 17 was set as the cut-off for abnormal scores. The severity of symptoms of psychological diseases including depression,

anxiety, stress, disorder, and attention deficit disorder was assessed utilizing diagnostic criteria of the International Classification of Disease – 10 (ICD 10).

### Data Analysis

The data was recorded and explored using Statistical packages for social science (SPSS version 10.0). Categorical variables such as age groups, sex, family stability (intact or broken), education status, and occupational level, were presented as frequency and proportions, meanwhile, the continuous variable (like age) was presented as mean and standard deviation. A chi-square test, with a 95% level of confidence, was used to investigate the level of association among variables where  $P \leq 0.05$  was considered significant.

## RESULTS

### Demographics of the Participants

The mean age of patients was  $10.10 \pm 3.28$  years with a minimum age of 5 years and maximum age of 16 years. The mean age of patients from broken families was  $9.77 \pm 3.4$  years while that from broken families was  $10.4 \pm 3.17$  years ( $p = 0.29$ ). See table 1 for detailed socio-demographic details.

**Table 1:** Sociodemographic Parameters of Study Participants

Parameters	Broken Family n = 45	Intact Family n = 45	p-value
<b>Age Groups</b>			
5 – 7 Years	14 (31.1%)	8 (17.8%)	0.119
8 – 10 Years	9 (20%)	18 (40%)	
11 – 13 Years	17 (37.8%)	12 (26.7%)	
14 - 16 Years	6 (13.3%)	8 (17.8%)	
<b>Gender</b>			
Male	29 (64.4%)	30 (66.7%)	0.66
Female	17 (37.8%)	15 (33.3%)	

<b>Type of Family</b>			
Nuclear	20 (44.44%)	21 (46.67%)	0.909
Extended	3 (6.67%)	3 (6.67%)	
Joint	23 (51.11%)	21 (46.67%)	
<b>Education of Victims</b>			
Uneducated	17 (37.78%)	15 (33.33%)	0.53
Primary	23 (51.11%)	24 (53.33%)	
Medium	5 (11.11%)	6 (13.33%)	
Secondary	2 (4.44%)	0 (0%)	
<b>Occupation of Victims</b>			
Working	8 (17.78%)	7 (15.55%)	0.777
Not working	37 (82.22%)	38 (84.44%)	
<b>Education of Victim's Father</b>			
Uneducated	12 (31.11%)	16 (40%)	0.513
Informal Education	5 (11.11%)	2 (4.44%)	
Primary	11 (24.44%)	5 (11.11%)	
Secondary	6 (13.33%)	6 (13.33%)	
Graduation	5 (11.11%)	8 (17.78%)	
Post Graduation	6 (13.33%)	8 (17.78%)	
<b>Father's Occupation</b>			
Unskilled	20 (46.67%)	22 (51.11%)	0.389
Semi Skilled	17 (37.78%)	12 (26.67%)	
Skilled	0 (0%)	2 (4.44%)	
Professional	8 (17.78%)	9 (20%)	
<b>Education of Victim's Father</b>			
Uneducated	20 (46.67%)	21 (51.11%)	0.245
Informal Education	9 (20%)	3 (6.67%)	
Primary	3 (6.67%)	8 (17.78%)	
Secondary	5 (11.11%)	3 (6.67%)	
Graduation	5 (11.11%)	8 (17.78%)	
Post Graduation	3 (6.67%)	2 (4.44%)	
<b>Mother's Occupation</b>			
Unskilled	33 (73.33%)	34 (75.55%)	0.029
Semi Skilled	5 (11.11%)	2 (4.44%)	
Skilled	2 (4.44%)	0 (0%)	
Professional	3 (6.67%)	0 (0%)	
Hose wife	2 (4.44%)	9 (20%)	
<b>House Conditions</b>			
Unsatisfactory	24 (53.33%)	15 (33.33%)	0.077
Satisfactory	6 (13.33%)	17 (37.78%)	
Conflict	5 (11.11%)	3 (6.67%)	
Tense	5 (11.11%)	7 (15.55%)	
Disturbs	5 (11.11%)	3 (6.67%)	

### Parameters of Sexual Abuse

A detailed history of sexual abuse was procured in a very sensitive and private manner as illustrated in Table 2. All victims of child sexual abuse reported being "touched". The majority of the children reported that the perpetrator touched their private parts. There was a significant

relationship between the identity of the perpetrator with the stability of the family. In victims belonging to the intact family system, the perpetrator was mostly an outsider while, in cases of broken families, oftentimes, the abuser was a relative or known to the victim ( $p < 0.02$ ). 44.44% of individuals belonging to broken families were abused within the confinements of the home.

**Table 2:** Responses of Victims of Sexual Abuse.

Questions Related to Victim	Broken Family	Intact Family	p-value
Was the victim:			
Touched	42 (93.33%)	43 (96.55%)	0.645
Not touched	3 (6.67%)	2 (4.44%)	
Where did she/he touch you			
All	12 (26.66%)	12 (26.67%)	0.151
Face	2 (4.44%)	3 (6.67%)	
Limbs	3 (6.67%)	10 (22.22%)	
Private / Sexual Part	28 (63.33%)	20 (44.44%)	
Did he/she force you to touch his/her private sexual parts			
Yes	5 (11.11%)	10 (22.22%)	0.157
No	40 (88.89%)	35 (77.78%)	
Did he/she show you any naked pictures or movies			
Yes	2 (4.44%)	6 (13.33%)	0.138
No	43 (97.78%)	39 (86.67%)	
Did he/she take the picture after taking your clothes off			
Yes	0 (0%)	3 (6.67%)	0.306
No	45 (100%)	42 (93.33%)	
Are the perpetrators known to you			
Family	15 (33.33%)	12 (26.67%)	0.026
Outside Family	18 (40%)	9 (20%)	
Stranger	12 (26.67%)	24 (53.33%)	
Location of Abuse			
Home	20 (44.44%)	9 (20%)	0.013
Outside home	25 (57.78%)	36 (80%)	
How many perpetrators were there			
One	38 (84.44%)	35 (77.78%)	0.317
More than one	7 (15.56%)	10 (22.22%)	
What was the time of abuse			
Morning	12 (26.67%)	9 (20%)	0.148
After Noon	21 (46.67%)	13 (28.88%)	
Evening	3 (6.67%)	9 (20%)	
Midnight	3 (6.67%)	3 (6.67%)	
Night	6 (13.33%)	11 (24.44%)	

### Association of Psychiatric Morbidity with Sexually Abused

Table 3 shows the association between psychiatric

morbidity among those sexually abused. It was found that 8 (17.8%) children from unstable families had mixed anxiety and depression disorder, while the rate was lower among children who had intact families (p = 0.561). Surprisingly, only five children altogether had post-traumatic stress disorder and anxiety disorder. Hyperkinetic disorder and conduct disorder was significantly more prevalent in victims belonging to a broken family system (p = 0.02).

No	42 (93.33%)	43 (95.56%)	
Moderate Depressive Disorder			
Yes	2 (4.44%)	0 (0%)	0.153
No	43 (95.56%)	45 (100%)	

**Table 3:** Psychiatric Morbidity among Sexually Abused Children Concerning Intact Versus Broken Families.

Psychiatric Morbidity	Broken Family n = 45	Intact Family n = 45	p-value
Mixed Anxiety and Depressive Disorder			
Yes	8 (17.8%)	6 (13.3%)	0.561
No	37 (82.2%)	39 (86.7%)	
Somatization Disorder			
Yes	3 (6.7%)	6 (13.3%)	0.292
No	42 (93.33%)	39 (86.67%)	
Acute Stress Reaction			
Yes	5 (11.1%)	3 (6.67%)	0.459
No	40 (88.9%)	42 (93.33%)	
Mixed Disorders of conduct and Emotion			
Yes	6 (13.33%)	2 (4.44%)	0.138
No	39 (86.67%)	43 (95.56%)	
Severe Depressive Disorder			
Yes	3 (6.67%)	2 (4.44%)	0.645
No	42 (93.33%)	43 (95.56%)	
Post Traumatic Stress Disorder			
Yes	2 (4.44%)	3 (6.67%)	0.645
No	43 (95.56%)	42 (93.33%)	
Adjustment Disorder			
Yes	2 (4.44%)	3 (6.67%)	0.0645
No	43 (95.56%)	42 (93.33%)	
Hyperkinetic Disorder And Conduct Disorder			
Yes	5 (11.1%)	0 (0%)	0.021
No	40 (88.9%)	45 (100%)	
Generalized Anxiety Disorder			
Yes	2 (4.44%)	3 (6.67%)	0.645
No	43 (95.56%)	42 (93.33%)	
Conduct Disorder			
Yes	2 (4.44%)	3 (6.67%)	0.645
No	43 (95.56%)	42 (93.33%)	
Separation Anxiety Disorder			
Yes	3 (6.67%)	2 (4.44%)	0.645

## DISCUSSION

About 45% of Pakistan’s population comprises children, which is very concerning because they are the chief victims of the prevailing disadvantages some of which are poverty, illiteracy, injustice, large family sizes, and human rights violations.<sup>12</sup> These disadvantages predispose children to different types of abuse and of these abuses, sexual abuse has long-lasting effects on the psychological development of the child.<sup>13</sup>

In this study, most of the sexually abused children were either uneducated or primary. These results are following other studies in the USA and Pakistan.<sup>14</sup> However one Australian study shows sexual abuse to be significantly associated with a greater likelihood of having attended tertiary education.<sup>15</sup> The higher number of educated people in this study may be because of the difference in methodology since it was a retrospective study and participants selected in this study were greater than 60 years of age and a postal questionnaire was administered to all patients, which may have been filled by only educated participants.

There was a significant relationship between the identity of the perpetrator with the stability of the family. In victims belonging to the intact family system, the perpetrator was mostly an outsider while, in cases of broken families, oftentimes, the abuser was a relative or known to the victim (p < 0.02). A study by Teke et al. reported a 40% prevalence of ADHD in children with divorced parents. Additionally, these children also had higher rates of depression.<sup>16</sup> This implies that the family's instability before the divorce, or the events that led up to it, caused significant emotional neglect and trauma to the children.

When all these factors come into play, considerable damage to a child's mental well-being may occur.

Furthermore, the present study found that the majority (63%) of children were living in unsatisfactory conditions with conflictual, tense, and disturbed home atmospheres, while only (25%) were living in a satisfactory and cordial environment of the home.

Similar results were revealed in other studies from Pakistan and the USA.<sup>17,18</sup> This shows that childhood sexual abuse is high in children from fragile and adverse home environments with a lack of care and support from the family. The high number of children with single incidents in this study may also be because sexual abuse is done under secrecy and the victims are either threatened by the perpetrators or fear being blamed for committing the act repeatedly and so they sometimes try to hide the real facts.

The results of this study show an equal preponderance of abuse in both types of families. The reason for the trend is because children in the developmental stage are very vulnerable and sensitive to such predicament, no matter to which type of family they belong. Sexual abuse is experienced as overwhelming trauma which has very devastating effects on the psychological development of a child. Certain crucial factors can increase or add up to the severity of psychological impairment i.e. genetic risk, childhood adversity unrelated to abuse, social class, nutrition, ethnicity, traumatic life events, and environmental exposures but they have relatively small effects on adverse outcomes, and the relationship between childhood sexual abuse and the psychiatric disorders may be stronger than any other adverse event.<sup>19</sup>

Early emotional consequences of sexual abuse include anxiety, fear, depression, anger, and inappropriate sexual behavior as well as reactions to any unwanted pregnancy. There may be episodes of aggressive acts.<sup>20</sup> In the present study hyperkinetic disorder and conduct disorder were

significantly more prevalent in victims belonging to a broken family system ( $p = 0.02$ ). Moreover, at least one-fourth of children from unstable families had mixed anxiety and depression disorder, while the rate was lower among children who had intact families. Characteristics of families are significantly associated with the psychosocial impact of children and conduct disorders.<sup>21</sup> Adverse childhood experiences of being raised in a dysfunctional family can result in psychological problems that may last from childhood to old age. These issues develop to mask the traumas of childhood. Psychological issues that stem from growing up in a broken family include post-traumatic stress disorder, anxiety, and depression.<sup>22</sup>

A study by Bakker et al. evaluated family instability's impact on mental issues among children and adolescents. The results revealed that children tend to internalize problems and manifest them later on, in the form of hyperactivity disorders or conduct disorders.<sup>23</sup> A child's experience of maltreatment, or exposure to an unhealthy environment at home, which is uncondusive to their mental growth, results in behavior issues that reflect a deficiency of regular care.<sup>24</sup>

Some children tend to undergo Post Traumatic Stress Disorder (PTSD) as they start having depressed mood, low self-esteem, sexual maladjustments in the form of hypersensitivity or sexual inhibition, and aberrant feelings (feeling pain, powerless, helplessness, betrayal, grief, dirty, shame, vulnerable, terrified, angry, anxious and miserable).<sup>5,6</sup>

Victims and people closely associated with them should be educated enough to report the incident immediately and to get the victims medically examined so that early preventive measures can be taken to diminish and sometimes completely avoid future psychological trauma. This study also suggests a careful inspection of children suffering from psychiatric disorders like PTSD, ADHD, depression, and

anxiety to check for any possible child abuse occurrence so that effective therapeutic plans can be established accordingly. Additionally, this study highlights the necessity of further research in this area along with proper training of the mental health care personnel so that prompt recognition of the underlying condition can be done.

There were certain limitations of this study. Since the sample size was small, we could not draw any legit interference from the study, which is a major limitation of our study. Future studies should be multicentre and a more comprehensive qualitative study would be more accurate for such a sensitive topic. Furthermore, instead of self-reported incidence of sexual abuse, such cases should be confirmed on medicolegal examination.

## CONCLUSION

The results of this study confirmed the findings of previous studies on many variables and psychopathology risks. The findings of this study suggest that psychiatric morbidity in sexually abused children from broken and intact families is equally common and children who are less educated and belong to larger family sizes are more prone to sexual abuse.

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## Additional Information

**Disclosures: Authors report on conflict of interest.**

**Ethical Review Board Approval:** The study was confirmed to the ethical review board requirements.

**Human Subject:** Consent was obtained by all patients/participants in this study.

**Conflict of Interest:**

In compliance with the ICMJE uniform disclosures form, all authors declare the following:

**Financial Relationships:** All authors have declared that they have no financial relationship at present or within the previous three years with any organizations that might have an interest in the submitted work.

**Other Relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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### **AUTHORS CONTRIBUTIONS**

<b>Sr.#</b>	<b>Author's Full Name</b>	<b>Intellectual Contribution to Paper in Terms of:</b>
1.	Pardeep Kumar	1. Study design and methodology.
2.	Rabail Altaf, Muhammad Qasim Memon	2. Paper writing and data calculations.
3.	Sultan Rajper	3. Data collection and calculations.
4.	Abrar-ul-Hasnain Memon	4. Analysis of data and interpretation of results etc.
5.	Kanwal Kumar	5. Literature review and referencing.