



PREVALENCE OF ANXIETY AMONG CHILDREN EXPOSED TO INTER-PARENTAL DOMESTIC VIOLENCE: PROPORTIONAL RATIO BETWEEN COMMUNITY SAMPLE AND SHELTER HOME SAMPLE

HALEEMA KHATOON¹, ANEELA MAQSOOD², FARAH QADIR², FAREED A. MINHAS³

Clinical Psychologist/ Research Associate, Institute of Psychiatry & WHO Collaborating Center, Benazir Bhutto Hospital, Rawalpindi- Pakistan¹

Assistant Professor, Department of Behavioral Sciences, Fatima Jinnah Women University, Rawalpindi-Pakistan²

Professor and Head Institute of Psychiatry & WHO collaborating center, Benazir Bhutto Hospital, Rawalpindi-Pakistan³

Correspondence: Ms. Haleema Khatoon, **Email:** haleema.khatoon786@gmail.com

ABSTRACT

OBJECTIVE

To calculate the prevalence rate of anxiety among the children exposed to inter-parental domestic violence.

DESIGN

Cross sectional study

PLACE AND DURATION OF STUDY

The study sample was taken from an urban community of Rawalpindi and a shelter home (Dar-ul-Falah). The duration of study was from January 2011 to June 2011.

SUBJECTS AND METHODS

A total of 337 children was selected through non-probability convenient sampling technique; 111 children were selected from the shelter home and 226 children from the community. Anxiety and exposure to inter-parental domestic violence were assessed with State Trait Anxiety Inventory (STAI) and Children Exposure to Domestic Violence Scale (CEDVS).

RESULTS

Prevalence of anxiety was estimated to be 65% in the shelter home and 51% in the community sample. Mean differences showed that the prevalence of anxiety is higher in females ($M = 44.01$; $SD = 8.607$) as compared to males ($Mean = 40.88$; $SD = 8.487$) while the differences were statistically significant ($t = 3.311$; $p < .001$). Pearson product moment correlation showed that exposure to domestic violence has a significant positive correlation with anxiety ($r = .334^{**}$).

CONCLUSION

There is high prevalence of anxiety among children exposed to inter-parental domestic violence and this prevalence is much higher among children living in shelter home than general community. Females are more susceptible to develop anxiety as compared to males. Exposure to domestic violence is a significant positive correlate of anxiety among the children.

KEYWORDS

Domestic violence, Children, Anxiety, Inter-parental violence.

INTRODUCTION

Historical evidence of the last few decades reveals that domestic violence had grown in a diversified manner among different societies and socioeconomic groups. Ganley defined domestic violence as a tyranny which included physical abuse, sexual abuse, psychological abuse, and abuse to property and pets.¹

Children who get exposed to the inter-parental violence are on greater risk of getting (psychologically) victimized by the act of violence. Carlson (2000) explicates that around 10% to 20% of American children are annually exposed to adult domestic violence within their family settings.² Many studies report that children are exposed to domestic violence in their family setup.³

South Asia, with 23% of the world's population and widespread poverty, also faces a high rate of exposure to domestic violence among children. South Asian countries like India, Bangladesh, Bhutan, Nepal and Pakistan encompass a patriarchal family system, with cases of violence against women and children often remaining unreported due to inadequacy of resources and societal stigmata. These factors make it hard to determine accurately the number of children exposed to violence.⁴

Domestic violence adversely affects individuals, families, and the society. One of the major psychological outcomes of domestic violence is anxiety, which indulges adolescents in risk-taking and escape behaviors.⁵ Children exposed to domestic violence may not be direct victims of domestic violence, and may often be overlooked by helping professionals. Ignoring the consequences of exposure to violence on children can negatively impact their cognitive development as well as their emotional and physical health.⁶ Graham-Bermann (1994) reported that more than half of the school age children who were living in domestic violence shelters had severe anxiety.⁷

Anxiety is one of the most common psychological disorders in school age children and adolescents worldwide.⁸ Prevalence of anxiety among adolescents ranges from 4% to 25% with an average rate of 8%.^{9,10} These figures could be underestimated since anxiety among a large number of children and adolescents goes undiagnosed owing to the internalized nature of the symptoms.¹¹ Children who witnessed violence were also found to show more anxiety than children who did not witness violence at home.¹²⁻¹⁶

SUBJECTS AND METHODS

This cross-sectional study was conducted in urban community of

Rawalpindi and a shelter home in Rawalpindi from January 2011 to June 2011.

The sample consisted of 337 children selected through non-probability convenient sampling technique; 226 children were from community and 111 were from a shelter home. Participants were literate enough to understand and comprehend the questionnaires in Urdu language. An inclusion criterion of age group (11-16 years) and eligibility to comprehend Urdu was followed. Demographic information was collected from a predesigned proforma. Following scales (Urdu version) were used after informed consent from the participants.

1. Child Exposure to Domestic Violence Scale (CEDVS). The Child Exposure to Domestic Violence scale is a self-report tool consisted of 42 items used to measure the degree of exposure to domestic violence on multiple factors reported by children between the ages of 10 to 16. Parts I and II of the CEDV scale contain five subscales that measure:

(1) Violence (item no 1-10), Exposure to Violence at Home (Multiple Check boxes under item no 1-10) (2) Exposure to Violence in the Community (item no 22-29) (3) Involvement in Violence (item no 11-17) (4) Risk Factors (item no 18-21) and (5) Other Victimization (item no 30-33). Responses to each item (except Exposure to Violence at Home) are assigned the following values: Never = 0, Sometimes = 1, Often = 2 and Almost Always = 3. Higher scores indicate more and lower scores indicate less violence, exposure, involvement, risk factors or other victimization depending on the subscale content. Questions in the final section, Part III, ask for information on the child's demographic characteristics. The Urdu version of CEDVS was used in the study and according to Khatoon, et al., is a reliable tool with good internal consistency (.86) for use in the community.¹⁷

2. State Trait Anxiety Inventory- Trait Anxiety inventory (STAI-TAI) - State Trait Anxiety Inventory (STAI) was developed by Spielberger in 1970. It is a 40 items (four points scale based) Questionnaire which provides separate measures of state & trait anxiety with 20 questions each. The trait measure reflects the general tendency for experiencing anxiety, while state anxiety is a measure of the intensity of anxiety experienced at the time of assessment. Only the trait anxiety inventory (TAI) questions (21-40) was administered. Score range from 20-80, with higher scores indicating higher levels of anxiety. State Trait Anxiety Inventory Urdu version was translated and validated in Pakistan.

The data was analyzed in Statistical Package for Social Sciences (SPSS). Simple frequencies and descriptive statistics were calculated for the demographic data and for Anxiety and exposure to domestic violence. Test of significance (t-test) was used to find out the mean differences at the level of $p < 0.05$. Pearson product moment correlation was used to estimate the relationship between exposure to domestic violence and anxiety.

Table1. Indicate the demographical frequency and percentages of 337 children

Variables	Categories	Frequency (f)	Percentages (%)
Gender	Male	200	59
	Female	137	41
Age group	11-13	221	66
	14-16	116	35
Living setting	Shelter home	111	33
	Community	226	67

RESULTS

The mean age of the children was 12.84 years. All of the children were school going. Around 50% (171) were in 8th grade, 18% (61) were in 5th grade and the rest of the sample was in matriculation. When children were asked about their general health, 27% (92) reported some illness while 73% (245) reported no illness. In our sample 80% (269) had a patriarchal family system while 20% (68) had a matriarchal family system. About 86% (290) were living with both parents, 6% (20) were living with their father and 5% (16) were living with their mother. A small number, 3% (11) were living with their maternal grand-mothers. Table 1 shows the frequencies and percentages of typical demographical variables which indicate the general trend of the sample within the data. The gender stratified anxiety scores are shown in Fig 1.

Prevalence of anxiety was estimated to be 65% in the shelter home and 51% in the community sample after screening on those highly exposed to domestic violence. Table 2 shows the prevalence rate of anxiety within the two comparative groups of the sample. Further data analysis based on mean differences revealed that prevalence of anxiety was higher in female (Mean= 44.01; SD= 8.607) as compared to male (Mean= 40.88; SD= 8.487). Test of significance was appropriate with significant results ($t=3.311$; $P=.001$). Table 3 shows the correlation between exposure to domestic violence and anxiety among the children. Results indicate that exposure to domestic violence is a significant positive correlate of anxiety ($r=.334$; $p=.01^{**}$).

Table 2. Prevalence of Anxiety among the children highly exposed to inter-parental domestic violence (N=337)

Groups	Highly exposed to Domestic Violence	Prevalence rate of Anxiety	Total number of participants
Shelter home	48%	65%	111
Community Sample	55%	51%	226

DISCUSSION

Our study is a cross-sectional comparative study where the prevalence of anxiety between two groups was calculated. The results surprisingly showed that the exposure to domestic violence was higher in the community than the shelter home. However, the prevalence of anxiety was also

significantly higher among children living in the shelter home. It can be postulated that the level of exposure decreases when the mothers (along with her children) come to the shelter home, after break-up of marriage or death of the spouse. The experience of inter-parental domestic violence may internalize anxiety among these children and instead become a long standing psychological problem. It is also possible that the effect of exposure associated with anxiety, in particular, would be accounted for by other variables not tested in our analysis models. Further research is needed to determine the effect of exposure to inter-parental domestic violence and anxiety with a more robust research methodology.

Table3. Correlation between exposure to domestic violence and anxiety among the children

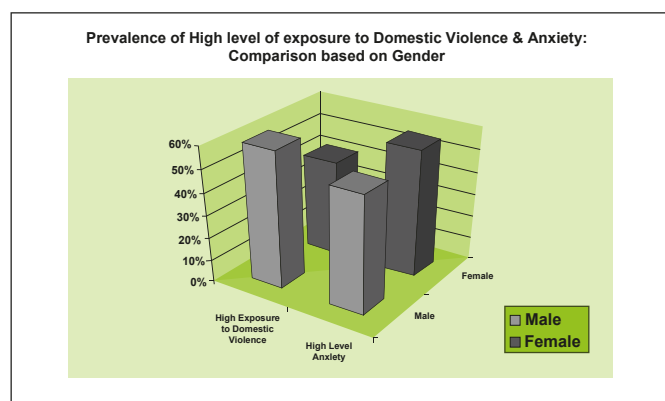
SCALES	CEDVS	I	II	III	IV	V	STAI-TAI
CEDVS	-	.758**	.779**	.802**	.626**	.676**	.334**
I	-	-	.324**	.605**	.443**	.508**	.246**
II	-	-	-	.414**	.400**	.361**	.218**
III	-	-	-	-	.386**	.557**	.302**
IV	-	-	-	-	-	.422**	.225**
V	-	-	-	-	-	-	.289**
STAI-TAI	-	-	-	-	-	-	-

Note: Children Exposure to Domestic Violence Scale (CEDVS); I: Violence at home, II: Community exposure, III: Involvement, IV: Risk factors, V: Other victimization; State Trait Anxiety Inventory-Trait Subscale (STAI-TAI).

This study aimed at calculating the prevalence rate of anxiety among those children who are exposed to or were being exposed to inter-parental domestic violence. Several studies have verified that experiencing inter-parental domestic violence can lead to a range of psychiatric problems in which anxiety was a common disorder (McLeer, Callaghan, Henry, & Wallen, 1994; McLeer et al., 1998). Result of the present study supports the arguments of McLeer et al. that anxiety is found as a major consequence of experiencing domestic violence.

** Correlation is significant at the 0.01 level (2-tailed).

Figure1. Graph showing comparison of scores on exposure to domestic violence and anxiety among children based on their gender.



Mean difference of scores based on gender revealed that females are on greater risk to develop anxiety while experiencing or exposing to inter-parental domestic violence. Sternberg et al. also reported that females exposed to domestic violence were at higher risk than males, in terms of externalizing and internalizing behavioral problems and anxiety.¹⁵ However, support is varied with respect to gender differences in effect of witnessing domestic violence. Kitzmann et al. (2003) conducted a meta-analysis using 118 studies of psychosocial outcomes related to domestic violence exposure, finding comparable effect sizes for females and males, with no evidence of gender-by-outcome interactions.²⁰ Wolfe et al. (2003) also conducted a meta-analysis using 41 studies on effects of exposure to domestic violence and came to similar conclusions.²¹ However, other studies have found that gender moderates the effects of exposure to inter-parental violence. Evans et al. (2008) reported that effect sizes of externalizing behavior problems were significantly higher for males exposed to domestic violence than for females.²²

Potential limitations of our study include the short time frame available to research team to calculate the prevalence rate of anxiety within the community. We were also limited by our inability to determine precisely how often and for how long the exposure occurred. Our procedure of combining the two data sources provides a conservative estimate of the number of children exposed to one or the other form of violence. The finding of our study on the prevalence of children who are exposed to violence is relatively consistent with the findings of other studies, particularly those based on high-risk samples.²³ Finally, while we conducted the analysis for important correlates of family violence, other covariates may exist which might have been missed. Further research may benefit from controlling for additional risk factors and demographic characteristics of children and their families, such as early childhood behavior problems, housing transitions, social support, and socio-economic status and parental psychopathology.

CONCLUSION

There is a high prevalence of anxiety among children exposed to inter-parental domestic violence, with prevalence being much higher among children living in shelter home than those in the general community. Females are more susceptible to develop anxiety as compared to males. Finally, exposure to domestic violence is a significant positive correlate of anxiety among the children.

REFERENCES

1. Ganley AL. Integrating feminist and social learning analyses of aggression: Creating multiple models for intervention with men who batter. 1989.
2. Carlson BE. Children Exposed to Intimate Partner Violence Research Findings and Implications for Intervention. Trauma, Violence, & Abuse. 2000;1(4):321-42.
3. Thompson MP, Saltzman LE, Johnson H. A comparison of risk factors for intimate partner violence-related injury across two national surveys on violence against

- women. *Violence against women*. 2003;9(4):438-57.
4. Hyder AA, Malik FA. Violence against children: a challenge for public health in Pakistan. *Journal of health, population, and nutrition*. 2007;25(2):168.
 5. McInnes J. Violence within Families: The Challenge of Preventing Adolescent Violence towards Parents. The Office for Families and Children: Adelaide, 1995
 6. Edleson JL. Problems Associated with Children's Witnessing of Domestic Violence. National Resource Center on Domestic Violence: USA. (1997). (Revised April 1999).
 7. Graham-Bermann S. (1994). Preventing domestic violence. University of Michigan research information index. UM-Research-WEB@umich.edu.
 8. Costello EJ, Mustillo S, Erkanli A, Keeler G, Angold A. Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of general psychiatry*. 2003;60(8):837-44.
 9. Bernstein GA, Borchardt CM. Anxiety disorders of childhood and adolescence: A critical review. *Journal of the American Academy of Child & Adolescent Psychiatry*. 1991;30(4):519-32.
 10. Boyd CP, Gullone E, Kostanski M, Ollendick TH, Shek DT. Prevalence of anxiety and depression in Australian adolescents: Comparisons with worldwide data. *The Journal of Genetic Psychology*. 2000;161(4):479-92.
 11. Tomb M, Hunter L. Prevention of anxiety in children and adolescents in a school setting: The role of school-based practitioners. *Children & Schools*. 2004;26(2):87-101.
 12. Fantuzzo JW, DePaola LM, Lambert L, Martino T, Anderson G, Sutton S. Effects of interparental violence on the psychological adjustment and competencies of young children. *Journal of consulting and clinical psychology*. 1991;59(2):258.
 13. Hughes HM. Psychological and behavioral correlates of family violence in child witnesses and victims. *American Journal of Orthopsychiatry*. 1988;58(1):77.
 14. Maker AH, Kemmelmeier M, Peterson C. Long-term psychological consequences in women of witnessing parental physical conflict and experiencing abuse in childhood. *Journal of Interpersonal Violence*. 1998;13(5):574-89.
 15. Sternberg KJ, Lamb ME, Greenbaum C, Cicchetti D, Dawud S, Cortes RM, et al. Effects of domestic violence on children's behavior problems and depression. *Developmental psychology*. 1993;29(1):44.
 16. Adamson JL, Thompson RA. Coping with interparental verbal conflict by children exposed to spouse abuse and children from nonviolent homes. *Journal of Family Violence*. 1998;13(3):213-32.
 17. Khatoon H. Relationship between children exposure to domestic violence, self esteem and anxiety among adolescents. Masters Thesis, Fatima Jinnah Women University, Rawalpindi, Pakistan. 2011
 18. McLeer SV, Callaghan M, Henry D, Wallen J. Psychiatric disorders in sexually abused children. *Journal of the American Academy of Child & Adolescent Psychiatry*. 1994;33(3):313-9.
 19. McLeer SV, Dixon J, Henry D, Ruggiero K, Escovitz K, Niedda T, et al. Psychopathology in Non—Clinically Referred Sexually Abused Children. *Journal of the American Academy of Child & Adolescent Psychiatry*. 1998;37(12):1326-33.
 20. Kitzmann KM, Gaylord NK, Holt AR, Kenny ED. Child witnesses to domestic violence: a meta-analytic review. *Journal of consulting and clinical psychology*. 2003;71(2):339.
 21. Wolfe DA, Crooks CV, Lee V, McIntyre-Smith A, Jaffe PG. The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical child and family psychology review*. 2003;6(3):171-87.
 22. Evans SE, Davies C, DiLillo D. Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior*. 2008;13(2):131-40.
 23. Herrenkohl TI, Sousa C, Tajima EA, Herrenkohl RC, Moylan CA. Intersection of child abuse and children's exposure to domestic violence. *Trauma, Violence, & Abuse*. 2008;9(2):84-99.