Association of Family Structure and its Environment with Aggressive Behaviour of Children (6-8years) in a Rural Community

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Abstract

Objectives: To determine the association of family structure and family environment with aggressive behavior of children (6-8years) in a rural community of Gadap town, Karachi, Pakistan

Subjects and Methods: This is a questionnaire based cross sectional survey to determine the association of family structure and environment with aggressive behavior of children (6-8years). Aggressive behaviour is defined as sudden, explosive outbursts of anger. Aggressive behaviours have been reported as a clinical problem in approximately 23%-40% of children in some communities. The information was collected by interviewing parents regarding their family structure, family environment and aggressive behavior of children in school and at home. This quantitative assessment was made on a validated Performa. The data was analyzed on SPSS windows version 16.

Results: Total numbers of respondents were 384. The impact of aggressive behavior in children were anger 32.8%, violence 36.5%, lack of tolerance for minor disputes 32.3%, respectively. The reliability statistics table had the actual value for Cronbach's alpha at 89.1%. The association of aggressive behavior in children has been rooted in the family size in 34.4%, family type 27.6%, family environment 23.7% and intimate partner violence in 30.2%.

Conclusion: One third of school children had aggressive behaviour directly related to family size and family environment in a rural area. The significant major risk factors were age, family size 34.4%, family type 27.6%, family environment 23.7% and intimate partner violence in 30.2%.

Keywords: Family structure; Family environment; Aggressive behavior; Children; Rural community

Introduction

Globally children involved in violence usually belong to families having conflicts in various aspects in their lives rooted in family structure and family environment. Aggressive behaviour is defined as sudden, explosive outbursts of anger. Aggressive behaviours have been reported as a clinical problem in approximately 23%-40% of children. There is no single, universally accepted, definition of aggression. Aggression has a long history and several forms. There is a direct relationship between a child's behaviour and their family environment [1]. Aggression has affected the behaviour and psychological responses in humans. These psychobiological effects include previous history of physical and mental trauma. Currently some children have been affected directly by aggression in the world, such as Pakistan. Studies have reported that mostly lives of children have been affected by their aggressive behaviour [2-4]. Loeber & Hay described aggression as "A category of behaviour that causes or threatens physical harm to others." Aggression encompasses a variety of behaviours, including verbal aggression, physical fighting, bullying, rape, robbery and homicide. Aggressive behaviours in half of the preschool children have been maintained till adolescence. Different forms of aggression are interrelated and clear distinctions are difficult to express. Aggression can be physical or relational. According to Baillargeon, Tremblay & Willsms, 2002, physical aggression runs in families. Poverty and unemployment has affects parent-child interactions. Low social groups impair the quality of parenting leading to child mistreatment. Single parenthood, divorce and split families have been associated with children's aggressive behaviours. "Relational aggression" encompasses manipulation of social relationships indirectly. The relational aggressions intend to harm social relationships and other's reputation.

Aggressive child behaviour is the inclination to behave in an unfriendly fashion in a society with family members, parents, peers, teachers and relatives [5]. The association of aggressive child behaviour is rooted within the child's personality or the family environment however, it is still debated. The children born in an environment with poverty, lack of education, lack of personal and psychological support is in advanced form. The lack of physical, psychiatric and mental support increases with the advancing age from toddler to adolescents [6]. Several studies have shown aggressive child behaviour is complex interaction and combination of risk factors including children with a history of physical abuse and/or sexual abuse, exposure to violence in the home and/or community, exposure to violence in media (TV, movies, etc.), family socioeconomic factors, presence of firearms in home and genetic factors [7]. A large, joint family and strong family environment are protective factor against children's aggressive behaviour in a rural community [8]. Sixty-two percent children had behaviour problem (self-injurious, aggressive behaviour). Therefore the prevalence of aggressive behaviour was 80.3 per 100,000 populations [9]. Recent studies have shown that the family context is critical for children's social
behaviours and their social competence [10]. Therefore, this study was conducted to determine the association of family structure and family environment with aggressive behaviour of children (6-8 years) in a rural community of Gada town, Karachi, Pakistan.

Methodology

A Questionnaire based survey was conducted from Jan to June 2013 in Gada town, Karachi, Pakistan. Children (six to eight years old) from six schools (Public and Private) were enrolled. Parents of the study children were included if agreed by their choice for inclusion in the study after informed consent. Parents were interviewed in relation to their family context and aggressive behaviour of their children. The data was recorded on a semi-structured validated questionnaire on the presence of aggressive behaviour in different age and both the genders. Simple random sampling technique was used. All the parents of students at both the public and private schools were interviewed on their choices and available time. Parents were included after consent for their responses. Based on Lars-Olov Lundqvist study the sample size was calculated through Open Epi, Version 3, open source calculator-SS Propor [6].

The aggressive behaviour was assessed by reporting of the parents regarding the direct association of family structure and family environment [11]. The academic activities affected directly by the aggressive behaviour were recorded by their performance in securing average required marks in their subject assessments. The major impact of aggressive behaviour was assessed by their performance in subject assessments, playgroup activities and attitude of anger with their peers. The children with aggressive behaviours were not performing actively in group activities and were isolated during school time. The questions included were to determine the family structure, family environment, frequency of sudden, explosive outbursts of anger in school and home weekly and monthly. The questions were based to assess the direct effect of aggressive behaviour to determine their educational and social activities at home and in schools both. The students if had an aggressive behaviour attack was assessed by anger, violence and attitude for no tolerance and friendship with peers in school and home environment. The overall impact of aggressive behaviour was assessed by the “direct effect” on the students. Male (58.6%); Female (41.4%) ratio was large in the sample therefore; aggressive behaviour was classified in both male and female children.

For qualitative variables like health impairment in children, frequency of aggressive behaviour, family size, family type, family environment and intimate partner violence have been presented as frequency and percentages. The stratification was done for gender to determine the association of aggressive behaviour with family size, family type, family environment and intimate partner violence. Children were recruited from the schools and parents were interviewed for the assessment of aggressive behaviours and information regarding their family context. Chi-square test was used to compare the qualitative variable at 5% level of significance. Cronbach’s alpha was used to determine the measure of internal consistency. The survey questionnaire had multiple LIKERT questions to determine the reliability of the scale. A 15 - question questionnaire named aggressive behaviour checklist (ABC) was used to understand the reliability. The information was collected by interviewing parents regarding their family structure, family environment and aggressive behaviour of children in school and at home. This quantitative assessment was made on a validated Performa. The data was analyzed on SPSS windows version 16.

Results

The response rate was 69.0%. Age is reported as Mean ± SD in Table 1. The female participants were 159 (41.4%). Table 1 shows the demographic characteristics and family context. The assessment had shown that 243 (63.3%) school children were healthy and 141 (36.7%) had either physical or psychiatric morbidity. Overall, significant aggressive behavior was seen in one third of school children in a rural community.

Table 2 describes the significant risk factors for the association of aggressive behaviour with family structure and family environment. About quarter of the families had social morbidity. There was an association of aggressive behavior in children rooted in family size 34.4%, family type 27.6%, family environment 23.7% and intimate partner violence in 30.2%. Table 2 also described the possible associated risk factors of aggressive behavior based on gender among school children. The common identified risk factors were maternal and parental education, family status, family relationships within and marital status of the parents. Female children affected were 40.7%.

Discussion

This study revealed that two third (63.3%) of the children were healthy and 141 (36.7%) children had aggressive behaviour among both the genders. The family size and family environment has significant impact on aggressive behaviours in 6-8 years, school children.

Empirical approaches are required to reduce the frequency and severity of aggressive behaviour initiation in the earliest years of childhood [12]. The violence, crime and substance abuse can be reduce by planning and provision of healthy family environment helping children in reducing their aggression from early childhood

| Characteristics                        | Number | Percentage |
|----------------------------------------|--------|------------|
| Age                                    |        |            |
| Mean ± SD                              |        |            |
| 6 years                                | 165    | 43         |
| 7 years                                | 150    | 39         |
| 8 years                                | 69     | 18         |
| Gender                                 |        |            |
| Male                                   | 225    | 58.6       |
| Female                                 | 159    | 41.4       |
| Family Size                            |        |            |
| 1-5                                    | 135    | 34.4       |
| 6-10                                   | 252    | 65.5       |
| Family Type                            |        |            |
| Nuclear                                | 106    | 27.6       |
| Joint                                  | 278    | 72.4       |
| Family socioeconomic status            |        |            |
| Low                                    | 102    | 29.3       |
| Middle                                 | 219    | 61.7       |
| High                                   | 63     | 19.0       |
| Family Status of spouse                |        |            |
| Married                                | 307    | 30.7       |
| Widowed / Separated/ divorced           | 77     | 77         |
| Family environment                     |        |            |
| Healthy                                | 293    | 23.7       |
| Disputes within the family             | 91     | 76.3       |
| Intimate partner Violence              |        |            |
| Yes                                    | 116    | 30.2       |
| No                                     | 288    | 69.8       |
| Maternal Education                     |        |            |
| Nil                                    | 169    | 44         |
| Five years education                   | 215    | 56         |
| Paternal education                     |        |            |
| Nil                                    | 132    | 34.4       |
| Five years education                   | 252    | 65.6       |

Table 1: Characteristics of the sample in the study n=384.
Table 2: Associated risk factors for aggressive behavior in school children in family context of the study population n=384.

| S. No | Associated risk factors | Male No | Male % | Female No | Female % | P value |
|-------|-------------------------|---------|--------|-----------|----------|---------|
| 1     | Age                     | 100(100) | 125(44) | 0(0)      | 59 (56)  | < .00001|
| 2     | Family Size 1-5          | 132(100) | 93(36.9)| 0(0)      | 159 (56) | < .00001|
| 3     | Family Type Nuclear Joint| 106(100) | 0(0)   | 119(42.8)| 159 (57.2)| < .00001|
| 4     | Family socio economic status Low | 102(100) | 0(0) | 123(66.2) | 96(43.8) | < .00001|
| 5     | Family Status of spouse Widow/ Separated/ divorced | 107(100) | 0(0) | 118(42.6) | 159 (57.4) | < .00001|
| 6     | Family environment Healthy/ Disputes within the family | 91(100) | 0(0) | 134(45.7) | 159 (54.3) | < .00001|
| 7     | Intimate partner Violence Yes/ No | 116(100) | 0(0) | 109(40.7) | 159 (59.3) | < .00001|
| 8     | Maternal Education Nil/ Five years education | 169(100) | 0(0) | 56(26) | 159 (74) | < .00001|
| 9     | Paternal education Nil/ Five years education | 132(100) | 0(0) | 93(36.9) | 159 (63.1) | < .00001|

Parenthesis* Significant at < .00001

[13]. Children enrolled were from 6-8 years of age [12]. Non-friendly attitude with school peers and improper conduct with anger during their school times were recorded as aggressive behaviours. The impact of aggression was more common in male students (56.6%) compared to females [14]. The association of aggressive behaviour of children was also dependent on the family size. This may be due to the poverty, lack of nutrition, proper clothing and food distribution according to the needs of the children. The space for rest and sleep was also improper for children and a contributing factor for their aggression. The children with aggressive behaviour (65.5%) belong to family size of six and more while children with friendly and nonaggressive behaviours were (34.4%) having less than six family members [15]. However all male children 132 had small family size less than five with aggressive behaviour in our study.

The analysis in this study showed that the aggression is also dependent on the family type. Mostly nuclear families have aggression in children. However, male children with joint family system were found healthy compared to 159 (57.2%) female with mild to moderate aggressive behaviour. This finding has been consistent in other studies [16-18]. The possible reason for this in a rural community could be due to less support for female children as social norms by the mothers / parents in joint family system. As the societal norm in rural community to less support for female children as social norms by the mothers / parents in joint family system. As maternal education has direct effects on the behaviours of children and minimum 5 years education of mothers was significantly associated with the healthy behaviour children. Mothers with 5 years education show physical and psychological care of their children compared to mothers with no education and schooling in rural areas. This was because of lack of awareness regarding the needs and care in early childhood by non-educated mothers. However, both paternal and maternal education has been associated with aggressive behaviours. Several studies have also shown that parental education helps understand children’s demand and attitude during their development in early years of lives [24,25].

This study has shown that in a rural community of a developing country one third of school going children had aggressive behaviour directly related to family structure and family environment. The analysis in this study focuses on further longitudinal and interventional studies on large samples.

Conclusion

One third of school children had aggressive behaviour directly related to family size and family environment in a rural area. The significant major risk factors were age, family size 34.4%, family type 27.6%, family environment 23.7% and intimate partner violence in 30.2%.

Study Limitations

The study had logistic limitations of collecting data from a rural community. The difficult areas were to comprehend the family environment, actual relationship of intimate partners and history of violence.

Conflict of Interest

All the authors have no conflict of interest and this study was not supported by any grant.

References

1. Achenbach TM, Phares V, Howell CT, Rauh VA, Nourcombe B (1990) Seven-year outcome of the Vermont Intervention Program for Low-Birthweight Infants. Child Dev 61: 1672-1681.
2. Tang J, Ma Y, Guo Y, Ahmed NI, Yu Y, et al. (2013) Association of aggression and non-suicidal self injury: a school-based sample of adolescents. PLoS One 8: 78149.
3. Kolch JB, Lewis T, Hussey JM, English D, Thompson R, et al. (2008) Importance of early neglect for childhood aggression. Pediatrics 121: 725-731.
4. Hussey JM, Marshall JM, English DJ, Knight ED, Lau AS, et al. (2005) Defining maltreatment according to substantiation: distinction without a difference?. Child Abuse Negl 29: 479-492.
5. Sette S, Spinrad T, Baumgartner E (2013) Links Among Italian Preschoolers’ Socio-Emotional Competence, Teacher-Child Relationship Quality and Peer Acceptance. Early Educ Dev 24: 851-864.
6. Hurtig T, Taanila A, Ebeling H, Miettunen J, Moilanen I (2005) Attention and
behavioural problems of Finnish adolescents may be related to the family environment. Eur Child Adolesc Psychiatry 14: 471-476.
7. Singer HS, Rosenberg LA (1989) Development of behavioral and emotional problems in Tourette syndrome. Pediatr Neurol 5: 41-44.
8. Santangelo SL, Pauls DL, Goldstein JM, Faraone SV, Tsuang MT, et al. (1994) Tourette’s syndrome: what are the influences of gender and comorbid obsessive-compulsive disorder?. J Am Acad Child Adolesc Psychiatry 33: 795-804.
9. Lundqvist LO (2013) Prevalence and risk markers of behavior problems among adults with intellectual disabilities: a total population study in Örebro County, Sweden. Res Dev Disabil 34: 1348-1356.
10. Dumais A, Lesage AD, Alda M, Rouleau G, Dumont M, et al. (2005) Risk factors for suicide completion in major depression: a case-control study of impulsive and aggressive behaviors in men. Am J Psychiatry 162: 2116-2124.
11. Tissak MS, Tissak J, Laurene KR (2012) Children’s judgments of social interactive behaviors with peers: the influence of age and gender. Soc Psychol Educ 15: 555-570.
12. Tapper K, Boulton MJ (2004) Sex differences in levels of physical, verbal, and indirect aggression amongst primary school children and their associations with beliefs about aggression. Aggressive Behavior 30: 123-145.
13. Tapper K, Boulton MJ (2005) Victim and peer group responses to different forms of aggression among primary school children. Aggressive Behavior 31: 238-253.
14. Killeya-Jones LA, Costanzo PR, Malone P, Quinlan NP, Johnson SM (2007) Norm-narrowing and self- and other-perceived aggression in early-adolescent same-sex and mixed-sex cliques. J Sch Psychol 45: 549-565.
15. Kerestes G, Milanovic A (2006) Relations between different types of children’s aggressive behavior and sociometric status among peers of the same and opposite gender. Scand J Psychol 47: 477-483.
16. Toldos MP (2004) Sex and age differences in self-estimated physical, verbal and indirect aggression in Spanish adolescents. Aggressive Behaviour 31: 13-23.
17. Bar-Tal D, Raviv A, Goldberg M (1982) Helping behavior among preschool children: An observational study. Child Development 53: 396-402.
18. Bergin C, Talley S, Hamer L (2003) Prosocial behaviours of young adolescents: a focus group study. J Adolesc 26: 13-32.
19. Chang L, Schwartz D, Dodge KA, McBride-Chang C (2003) Harsh parenting in relation to child emotion regulation and aggression. J Fam Psychol 17: 598-606.
20. Bieman KL (1966) The relationship between social aggression and peer rejection in middle childhood. In R Prinz (Ed.), Advances in behavioral assessment of children and families, Greenwich, JAI Press 2: 151-176.
21. Björkqvist K (1994) Sex differences in physical, verbal, and indirect aggression: A review of recent research. Sex Roles 30: 177-188.
22. Block JH (1983) Differential premises arising from differential socialization of the sexes: some conjectures. Child Dev 54: 1335-1354.
23. Bonica C, Arnold DH, Fisher PH, Zeljo A, Yershova K (2003) Relational aggression, relational victimization, and language development in preschoolers. Social Development 12: 551-562.
24. Michael KD, Albright A, Jameson JP, Sale R, Massey C, et al. (2013) Does cognitive behavioral therapy in the context of a rural school mental health programme have an impact on academic outcomes?. Advances in School Mental Health Promotion 6: 247-262.
25. Holmbeck GN, Thill AW, Bachanas P, Garber J, Miller KB, et al. (2008) Evidence-based assessment in pediatric psychology: measures of psychosocial adjustment and psychopathology. J Pediatr Psychol 33: 958-980.

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