

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 and has 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 & Willms, 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 misbehaviour. 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

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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 (6-8years) in a rural community of Gadap town, Karachi, Pakistan.

Methodology

A Questionnaire based survey was conducted from Jan to June 2013 in Gadap 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 \pm 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 \pm SD 6.75 \pm 0.74		
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	102
Middle	219	219
High	63	63
Family Status of spouse		
Married	307	307
Widow / 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	268	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.

S. No	Associated risk factors	Male No %	Female No %	P value
1	Age	100 (100) 125 (44)	0(0) 59 (56)	< .00001
2	Family Size 1-5 6-10	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
5	Family socioeconomic status Low Middle	102(100) 0 (0)	123(56.2) 96(43.8)	< .00001
6	Family Status of spouse Widow Separated/ divorced	107(100) 0 (0)	118(42.6) 159 (57.4)	< .00001
7	Family environment Healthy Disputes within the family	91(100) 0 (0)	134(45.7) 159(54.3)	< .00001
8	Intimate partner Violence Yes No	116(100) 0 (0)	109(40.7) 159(59.3%)	< .00001
9	Maternal Education Nil Five years education	169(100) 0 (0)	56(26) 159(74)	< .00001
10	Paternal education Nil Five years education	132(100) 0 (0)	93(36.9) 159(63.1)	< .00001

Parenthesis* Significant at < .00001

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

[13]. Children enrolled were from 6-8 years of age [12]. Non-friendly attitude with school peers and improper conducts 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 mothers are busy in kitchen and family management. Parents are usually not able to give quality time to their female children compared to the support and time for the male privileged children. As male children will be the bread winners for the family in future. Families with low socioeconomic status have all male children 102 with aggressive behaviour compared to female in 56.2% belonging to low and 43.8% from middle socioeconomic group as shown by Bar Tal Study [19].

The aggressive behaviour is more significant in single parents like widow/separated or divorced particularly among male children as discussed by Begin C qualitative analysis [20]. It has been found that

the single parents cannot fulfil the physical and psychological support for their children all the time. The association of family environment, intimate partner violence and violence with children has been documented. In our study if the violence is occurring within family, mostly the male children are affected and express aggression after physical battering and abuses of parents. This study also showed that female children were affected in 40.7% cases compared to other studies [21-23].

Maternal education has direct effects on the behaviours of children and minimum 5 years education of mothers was significantly associated with the healthy behaviour in 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 help 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.

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