## **ORIGINAL ARTICLE**

# Physical and Verbal Aggressive Behaviour Pattern Among School Children in Urban Area of North Karnataka: A Cross Sectional Study

Fawwad Shaikh<sup>1</sup>, R. G. Viveki<sup>1\*</sup>, A. B. Halappanavar<sup>1</sup> <sup>1</sup>Department of Community Medicine, Belgaum Institute of Medical Sciences, Belgaum - 590001 (Karnataka) India.

### Abstract:

Background: There is growing concern with student conflict, aggression, and violence in the schools, and anger is an important contributing factor which can damage school climate. Aims and Objectives: To elucidate the differentials of aggressive behaviour among high school students and to recognize the influence of age and sex on aggressive behaviour. Material and Methods: The present cross sectional study was conducted in one of the high school in urban area, which included all 347 students (199 boys and 148 girls) of classes VII to X. The students were asked to answer, by recall method, a self-administered, pre tested, structured questionnaire indicating the types of aggressive behaviour by them in the previous month and to assess themselves with reference to the statements regarding physical / verbal aggression, after taking their consent. Results: Majority of the students (58.8%) were from nuclear families and 26.2% students experienced aggressive behaviour in the family. Role models for aggressive behaviour were parents (42.3%) and TV / Cinema actors (39.0%). Overall, 241 (69.5%) children were physically aggressive in the previous month. Physical active direct and indirect aggression was significantly more common among boys than among girls. 248 (71.5%) children were verbally aggressive in the previous month. Physical aggression increased substantially from VII standard (56.9%) to X standard (84.6%). Conclusion: Aggressive behaviour was common among both boys and girls, with increasing trend of physical aggression from VII standard to X standard. Classroom management, counseling and life skills education strategies are recommended for channelizing the aggressive behaviour among school children.

**Keywords:** Active and Passive Aggression, Children, Physical Aggression, Verbal Aggression

### Introduction:

Society has seen an increase in the incidents of aggression / violence among youth. It includes behaviours such as slapping, hitting, rape, recklessness, driving and shooting in school, truancy, road rage and other high risk behaviours [1]. Aggression is defined as "any behaviour intended to harm another person who is motivated to avoid the harm" [2]. The belief that aggression is more of a problem of the industrialized nations is falling short of space as the developing ones are catching up with them. Aggression not only spoils the school environment but also is a risk factor for future delinquency [3].

Children from homes where domestic violence is occurring are more likely to exhibit aggressive behaviour. This evidence underlines the truth of the statement that young children with the highest degree of temperamental and cognitive predisposition (to aggression and antisocial behaviour generally) are usually raised in families that are ill-prepared to provide childrearing that could prevent the development of antisocial behaviour. Children from homes where domestic violence is occurring are also more likely to exhibit aggressive behaviour [4]. Aggression affects emotional development and academic learning, spoils schools environment and if not controlled early, may precipitate extreme incidents of violence in the future [5]. There is growing concern with student conflict, aggression, and violence in the schools, and many psychologists believe that anger is an important contributing factor. Yet, despite some evidence of a correlation between anger and student aggression, "anger, particularly among children and adolescents, has received only limited research attention" [6]. This study intends to elucidate the differentials of aggressive behaviour among high school students of an urban area in Southern India.

# **Material and Methods:**

The present cross sectional study was conducted in one of the high schools in urban field practice area of Department of Community Medicine, Belgaum Institute of Medical Sciences, Belgaum, India in the month of February 2014. A week before collection of data, was discussed the problem of aggression with school authorities and the purpose of the study was explained to them. After getting permission from school authorities, a study was planned to collect the socio demographic profile and aggressive behaviour pattern of school children. A self-administered, pre tested, predesigned, structured questionnaire after adaptation of the Buss and Perry aggression questionnaire [7] and direct and indirect aggression scales [8] were used to collect the data from all willing students from Class VII to Class X after taking their consent. Those children who were absent on the day of study were re-contacted for their inclusion in the study. The students were primed about the questionnaire.

A history of any aggressive behaviour by the children in the previous month by recall method was considered in the study. Students were asked to fill up anonymously the predesigned, pretested, self administered questionnaire. They were instructed to refrain from discussion and copying of the answers enumerated by the other students to reduce bias.

**Types of Aggression Studied:** The present study included following types of aggression, categorized as per Baron, 1977 [2]:

- 1. Physical-active-direct: Stabbing, punching or hitting.
- 2. Physical-active-indirect: Setting a booby trap / hiring an assassin to hurt another person
- 3. Physical-passive-direct: Physically preventing another person from obtaining a desired goal or performing a desired act
- 4. Physical-passive-indirect: Refusing to perform necessary tasks
- 5. Verbal-active-direct: Insulting or derogating another person
- 6. Verbal-active-indirect: Spreading malicious rumours or gossip about another person
- 7. Verbal-passive-direct: Refusing to speak to another person, to answer questions
- 8. Verbal-passive-indirect: Failing to make specific verbal comments when required.

**Sample size estimation:** By considering overall 66.55% prevalence of aggression behaviour in the school children in a study by Debashis Dutt *et al* [9] in West Bengal, at the 5% level of significance, the sample size was estimated to be 342 [10]. However, the present study included 347 children. The collected data was compiled, tabulated and analyzed by percentages, proportions and Chi-square test to understand the trend of aggression behaviour.

## **Results:**

As shown in (Table 1), the present study included all 347 children (199 boys and 148 girls) of classes VII to X from a high school in an urban area of North Karnataka. Around three fourths of the mothers of the children were educated up to higher secondary level and two thirds of the fathers were businessmen. Majority of the children (58.8%) were from nuclear families. 26 (7.5%) children were having habits like smoking, guthka / tobacco chewing and eating scented betel nut etc. Majority of the children (91.6%) were staying with their parents and among 248 (71.5%) children, father was the decision maker in family affairs.

|                           | v u        |            |            |  |
|---------------------------|------------|------------|------------|--|
| Characteristic            | Male       | Female     | Total      |  |
|                           | N=199 (%)  | N=148 (%)  | N=347(%)   |  |
| Standard                  |            |            |            |  |
| - VII                     | 70 (35.2)  | 39 (26.4)  | 109 (31.4) |  |
| - VIII                    | 38 (19.1)  | 37 (25.0)  | 75 (21.6)  |  |
| - IX                      | 43 (21.6)  | 42 (28.4)  | 85 (24.5)  |  |
| - X                       | 48 (24.1)  | 30 (20.3)  | 78 (22.5)  |  |
| <b>Mothers' Education</b> |            |            |            |  |
| - Illiterate              | 16 (08.0)  | 01 (00.7)  | 17 (04.9)  |  |
| - Primary                 | 15 (07.5)  | 14 (09.5)  | 29 (08.4)  |  |
| - Higher secondary        | 136 (68.3) | 112 (75.7) | 248 (71.5) |  |
| - College & above         | 32 (16.1)  | 21 (14.2)  | 53 (15.3)  |  |
| Fathers' Occupation       |            |            |            |  |
| - Business                | 126 (63.3) | 105 (70.9) | 231 (66.6) |  |
| - Service                 | 64 (32.2)  | 37 (25.0)  | 101 (29.1) |  |
| - Others                  | 09 (04.5)  | 06 (04.1)  | 15 (04.3)  |  |
| Type of Family            | •          | •          | •          |  |
| - Nuclear                 | 113 (56.8) | 91 (61.5)  | 204 (58.8) |  |
| - Joint                   | 57 (28.6)  | 39 (26.4)  | 96 (27.7)  |  |
| - Three generation        | 29 (14.6)  | 18 (12.2)  | 47 (13.5)  |  |
| Habits                    |            |            |            |  |
| - Smoking                 | 10 (05.0)  | 00 (00.0)  | 10 (02.9)  |  |
| - Guthka/Supari           | 14 (07.0)  | 02 (01.4)  | 16 (04.6)  |  |
| - Nil                     | 175 (87.9) | 146 (98.6) | 321 (92.5) |  |
|                           |            |            |            |  |

 Table 1: Socio-Demographic Profile of Study Subjects

As shown in (Table 2), about one fourth of the children responded about aggressive behaviour in the family between parents (8.6%), between other family members (14.1%) and between family members and neighbors (3.5%). During aggressive behaviour in the family, children responded to it by watching (3.5%), getting away (5.2%), crying (2.9%), getting involved (7.2%) and 28 (8.1%) children did not know about what to do. Almost all the children (97.5%) with aggressive behaviour received counseling by the school teachers.

Among those children who received counseling, half of them (49.4%) showed positive attitude towards counseling efforts, while 104 (44.3%) of them thought that counseling was not of any use. Role models for aggressive behaviour were parents (42.3%) and TV / Cinema actors (39.0%). All the children with habits like smoking, guthka / tobacco chewing and eating scented betel nut etc, were physically and verbally aggressive in the last month.

| Characteristic             | Male<br>N=199 (%) | Female<br>N=148 (%) | Total<br>N=347 (%) | Chi square                  |  |  |
|----------------------------|-------------------|---------------------|--------------------|-----------------------------|--|--|
|                            | Family            | Living Status       | <u> </u>           |                             |  |  |
| Parents staying together   | 183 (92.0)        | 136 (91.9)          | 319 (91.9)         |                             |  |  |
| Not staying together       | 16 (08.0)         | 12 (08.1)           | 28 (08.1)          | $X^2 = 00.00, P > 0.05$     |  |  |
|                            | Decision M        | aker in the fam     | ily                |                             |  |  |
| Mother                     | 23 (11.6)         | 23 (15.5)           | 46 (13.3)          |                             |  |  |
| Father                     | 143 (71.9)        | 105 (70.9)          | 248 (71.5)         |                             |  |  |
| Both                       | 14 (07.0)         | 12 (08.1)           | 26 (07.5)          | $X^2 = 04.96, P > 0.05$     |  |  |
| Grand Parents              | 15 (07.5)         | 04 (02.7)           | 19 (05.5)          |                             |  |  |
| Others                     | 04 (02.0)         | 04 (02.7)           | 08 (02.3)          |                             |  |  |
|                            | Aggressive B      | ehaviour in Fai     | mily               |                             |  |  |
| Between parents            | 17 (08.5)         | 13 (08.8)           | 30 (08.6)          |                             |  |  |
| Between others             | 25 (12.6)         | 24 (16.2)           | 49 (14.1)          | W <sup>2</sup> 00 26 D 0.05 |  |  |
| Between family & neighbors | 09 (04.5)         | 03 (02.0)           | 12 (03.5)          | $X^2 = 02.36, P > 0.05$     |  |  |
| Nil                        | 148 (74.4)        | 108 (73.0)          | 256 (73.8)         |                             |  |  |
|                            | Reaction to A     | ggression in Fa     | mily               |                             |  |  |
| Watch                      | 08 (04.0)         | 04 (02.7)           | 12 (03.5)          |                             |  |  |
| Get away                   | 14 (07.0)         | 04 (02.7)           | 18 (05.2)          | $X^2 = 10.82, P > 0.05$     |  |  |
| Cry                        | 03 (01.5)         | 07 (04.7)           | 10 (02.9)          |                             |  |  |
| Get involved               | 16 (08.0)         | 09 (06.1)           | 25 (07.2)          |                             |  |  |
| Did not know what to do    | 10 (05.0)         | 16 (10.8)           | 26 (07.5)          |                             |  |  |
| Nil                        | 148 (74.4)        | 108 (73.0)          | 256 (73.8)         |                             |  |  |
| Rec                        | eived Counseling  | g for Aggressive    | Behaviour          |                             |  |  |
| Yes                        | 151 (75.9)        | 84 (56.8)           | 235 (67.7)         |                             |  |  |
| No                         | 01 (00.5)         | 05 (03.3)           | 06 (01.7)          | $X^2 = 15.97, P < 0.01*$    |  |  |
| Not applicable             | 47 (23.6)         | 59 (39.9)           | 106 (30.6)         |                             |  |  |
|                            | Attitude          | to Counseling       |                    |                             |  |  |
| Positive                   | 72 (36.2)         | 44 (29.7)           | 116 (33.4)         | $X^2 = 00.78, P > 0.05$     |  |  |
| Negative                   | 09 (04.5)         | 06 (04.1)           | 15 (04.3)          |                             |  |  |
| Not of any use             | 70 (35.2)         | 34 (23.0)           | 104 (30.0)         |                             |  |  |
|                            | Role Model for    | Aggressive Beh      | aviour             |                             |  |  |
| Parents                    | 79 (39.7)         | 23 (15.5)           | 102 (29.4)         |                             |  |  |
| TV/Cinema actors           | 41 (20.6)         | 53 (35.8)           | 94 (27.1)          | $X^2 = 33.14, P < 0.01*$    |  |  |
| Teachers                   | 21 (10.6)         | 03 (02.0)           | 24 (06.9)          |                             |  |  |
| Friends                    | 06 (03.0)         | 08 (05.4)           | 14 (04.0)          |                             |  |  |
| Others                     | 05 (02.5)         | 02 (01.4)           | 07 (02.0)          |                             |  |  |

# Table 2: General Domestic Information of Study Subjects

\* is significant

(Table 3) shows the physical aggressive behaviour pattern of study subjects. Overall 241 (69.5%) of the children were physically aggressive in the previous month (76.4% boys as compared to 60.1 % girls).

refusing to perform necessary tasks like refusing to move during a sit-in.

Overall, 248 (71.5%) children were verbally aggressive in the previous month which was more common in boys (73.9%) as compared to girls

| Physical Aggression   | Male<br>N=199 (%) | Female<br>N=148 (%) | Total<br>N=347 (%) | Chi square               |
|-----------------------|-------------------|---------------------|--------------------|--------------------------|
| Active Direct#        | 131 (65.8)        | 73 (49.3)           | 204 (58.8)         | $X^2 = 16.49, P < 0.01*$ |
| - Hit                 | 99 (49.7)         | 37 (25.0)           | 136 (39.2)         | $X^2 = 28.26, P < 0.01*$ |
| - Push                | 42 (21.1)         | 20 (13.5)           | 62 (17.9)          | $X^2 = 07.80, P < 0.01*$ |
| - Stab                | 16 (08.0)         | 06 (04.1)           | 22 (06.3)          | $X^2 = 04.54, P < 0.05*$ |
| - Slap                | 35 (17.6)         | 39 (26.4)           | 74 (21.3)          | $X^2 = 00.21, P > 0.05$  |
| - Twist               | 25 (12.6)         | 07 (04.7)           | 32 (09.2)          | $X^2 = 10.12, P < 0.01*$ |
| - Kick                | 48 (24.1)         | 07 (04.7)           | 55 (15.9)          | $X^2 = 30.56, P < 0.01*$ |
| Active Indirect       | 46 (23.1)         | 24 (16.2)           | 70 (20.2)          | $X^2 = 06.91, P < 0.01*$ |
| - Trip                | 09 (04.5)         | 11 (07.4)           | 20 (05.8)          | $X^2 = 00.20, P > 0.05$  |
| - Set up trap         | 26 (13.1)         | 09 (06.1)           | 35 (10.1)          | $X^2 = 08.25, P < 0.01*$ |
| - Hire assassin       | 11 (05.5)         | 04 (02.7)           | 15 (04.3)          | $X^2 = 08.26, P < 0.01*$ |
| Passive Direct        | •                 | •                   | •                  |                          |
| - (Preventing others) | 29 (14.6)         | 07 (04.7)           | 36 (10.4)          | $X^2 = 03.44, P > 0.05$  |
| Passive Indirect      |                   |                     |                    |                          |
| - (Refuse to move in) | 50 (25.1)         | 20 (13.5)           | 70 (20.2)          | $X^2 = 12.85, P < 0.01*$ |
| Any type              | 152 (76.4)        | 89 (60.1)           | 241 (69.5)         | $X^2 = 16.46, P < 0.01*$ |

| Table 2. Dhysical A gamessian | Dehaviour of Study Subjects |
|-------------------------------|-----------------------------|
| Table 5: Flysical Aggression  | Behaviour of Study Subjects |

# multiple entries,\* is significant

Physical active direct aggression like hitting (39.2%), slapping (21.3%), pushing (17.9%), kicking (15.9%), etc was significantly more common among boys (65.8%) than among girls (49.3%) ( $X^2 = 16.46$ , P < 0.01). Physical active indirect aggression like tripping (5.8%), setting up a trap (10.1%), and hiring an assassin (4.3%) was also observed more in boys as compared to girls ( $X^2 = 6.91$ , P< 0.01). Out of 241 physically aggressive children, 36 (14.9%) were physically preventing another child from obtaining a desired goal or performing a desired act and 29% were

(68.2%) ( $X^2$ =8.53, P<0.01) as shown in (Table 4). Verbal active direct aggression was observed in 152 (43.8%) children and teasing was the commonest one (88.2%) as compared to abusing (3.9%) and insulting (7.9%). Spreading false/-malicious rumours about another person (25.7%), refusing to speak to another person / to answer questions (78.3%), failing to speak up in another person's defense, when he / she in unfairly criticized (65.1%) was also noted more in boys as compared to girls.

| Table 4: Verbal Aggression Behaviour of Study Subjects |                  |                    |                   |                          |  |
|--|------------------|--------------------|-------------------|--------------------------|--|
| Verbal aggression                                      | Male<br>N=199(%) | Female<br>N=148(%) | Total<br>N=347(%) | Chi square               |  |
| Active Direct  | 97 (48.7)        | 55 (37.2)          | 152 (43.8)        | $X^2 = 11.60, P < 0.01*$ |  |
| - Abuse  | 05 (02.5)        | 01 (00.7)          | 06 (01.7)         | $X^2 = 02.66, P > 0.05$  |  |
| - Tease  | 83 (41.7)        | 51 (34.5)          | 134 (38.6)        | $X^2 = 07.64, P < 0.01*$ |  |
| - Insult   | 09 (04.5)        | 03 (02.0)          | 12 (03.4)         | $X^2 = 03.82, P > 0.05$  |  |
| Active Indirect  |                  |                    |                   |                          |  |
| - (Spreading false rumors)                             | 24 (12.1)        | 15 (10.1)          | 39 (11.2)         | $X^2 = 02.07, P > 0.05$  |  |
| Passive Direct   |                  |                    |                   |                          |  |
| - (Refused to answer call)                             | 69 (34.7)        | 50 (33.8)          | 119 (34.3)        | $X^2 = 03.03, P > 0.05$  |  |
| Passive Indirect                                       |                  |                    |                   |                          |  |
| - (Failure to speak in Defense)                        | 68 (34.2)        | 31 (20.9)          | 99 (28.5)         | $X^2 = 03.82, P > 0.05$  |  |
| Any type   | 147 (73.9)       | 101 (68.2)         | 248 (71.5)        | $X^2 = 08.53, P < 0.01*$ |  |

Table 4: Verbal Aggression Behaviour of Study Subjects

*# multiple entries,\* is significant* 

Table 5: Aggressive Behaviour According to the Class of Study

|                        | Male (%)  | Female (%) | Total (%) | Chi square              |
|------------------------|-----------|------------|-----------|-------------------------|
| Physical aggression    |           |            |           |                         |
| 7th $(M = 70, F = 39)$ | 48 (68.5) | 14 (35.8)  | 62 (56.9) |                         |
| 8th $(M = 38, F = 37)$ | 30 (78.9) | 19 (51.4)  | 49 (65.3) | $X^2 = 8.44, P < 0.05*$ |
| 9th $(M = 43, F = 42)$ | 34 (79.1) | 30 (71.4)  | 64 (75.3) |                         |
| 10th (M = 48, F = 30)  | 40 (83.3) | 26 (86.6)  | 66 (84.6) |                         |
| Verbal aggression      |           | •          | •         |                         |
| 7th $(M = 70, F = 39)$ | 58 (82.9) | 23 (59.0)  | 81 (74.3) |                         |
| 8th $(M = 38, F = 37)$ | 29 (76.3) | 26 (70.2)  | 55 (73.3) | $X^2 = 8.17, P < 0.05*$ |
| 9th $(M = 43, F = 42)$ | 28 (65.1) | 28 (66.7)  | 56 (65.9) |                         |
| 10th (M = 48, F = 30)  | 32 (66.7) | 24 (80.0)  | 56 (71.8) |                         |

\* is significant

(Table 5) shows that physical aggression increased substantially from VII standard (56.9%) to X standard (84.6%) and the same trend was observed in boys and girls. ( $X^2 = 8.44$ , P< 0.05). The verbal aggression was observed more in VII standard children (74.3%) and was least in the IX standard children (65.9%) ( $X^2 = 8.17$ , P< 0.05).

Special Classes on Aggression /Anger Control and Management:

As indicated by the students, no special classes had been taken on aggression / anger control and management by the school authorities in the current academic year.

### **Discussion:**

The present study has highlighted the presence of aggression among high school children. Overall 241 (69.5%) of the children have been physically

aggressive in the previous month (76.4% Boys as compared to 60.1% Girls). Physical and verbal direct and indirect aggression has been significantly more common among boys than among girls [11, 12]. Physical aggression increased substantially from VII standard to X standard and the same trend has been observed in boys and girls. Most studies in India and abroad have found males to be more aggressive than females [1, 9, 11-14]. Physical active direct aggressions like hitting, slapping, pushing, kicking, were the common in this order. However, a study by Gerdur RG et al [15], 58.9% of the adolescents who have been violent at least once in the past year, kicking has been the most common way expressing aggression. Our study findings are in agreement with the thinking of Bjorkqvist *et al* [16], that the trend of aggressive behaviour appears in the order of direct physical, direct verbal and indirect and passive aggression. In a study by Bjorkqvist K et al [17] and Iqbal N et al [17], adolescent girls have been reported to express more anger than boys. With earlier development of social intelligence and skills in girls, indirect aggression is likely to appear earlier among them and due to relative physical weakness; females are likely to be socialized into a preference for indirect rather than direct forms of aggression [9].

All the children with habits like smoking, chewing guthka/ scented betel nut and from families where parents have not been staying together have been aggressive in the last month [11]. About one fourth of the children have responded about aggressive behaviour in the family and role models for their aggressive behaviour were parents (42.3%), TV / Cinema actors (39.0%), teachers and friends. Though, 97.5% children with aggressive behaviour received counseling by the school teachers, only half of them (49.4%) have shown positive attitude towards counseling efforts, while 104

(44.3%) of them have thought that counseling was of no any use. So, instead of counseling the children after their attempts of aggression, various interventions like child focused interventions designed to directly enhance children's social, emotional, and cognitive competence by teaching appropriate social skills, effective problem solving, anger management and emotional language, and training teachers to implement effective classroom management, should be tried to reduce and prevent the development of aggression in young children [9].

The study reports that there has been a great amount of aggression among school children. There are many possible reasons for the aggression among school children like over influence of media, existing life style, social code, food habit, socialization pattern, family set up, school atmosphere, nature of school discipline and class room code of conduct, diminishing moral values etc. Students are not being trained socially. There is a need of number of activities, policy plans, and special programmes to shape the growing children to make them a social man, a man with social attitudes, social qualities, social skills, and social values, by which he acts, behaves, interacts, and communicates in a socially approved manner. For this, along with teachers, all the hands associated with the field of education must take special care. Our society, parents, teachers, family members, social workers, voluntary organizations, political as well as religious leaders, etc have a big responsible role to play in ensuring the reduction of aggressive behaviour among school children.

## **Conclusion:**

In the present study, aggressive behaviour was common among both boys and girls, with increasing trend of physical aggression from VII standard to X standard. Verbal aggression started early in boys and decreasing trend was observed till X

## JKIMSU, Vol. 3, No. 2, July-Dec 2014

standard. However, increasing verbal aggression trend was seen among girls from VII to X standard. Therefore, there is a need for research in the field of aggressive behaviour and reasons for aggression. However, more extensive research would be required for increased understanding of the aggressive behaviour of school children and for developing and utilizing the strategies for its

1. Manoj Kumar Sharma, Palaniappan Marimuthu. Prevalence and psychological factors of aggression among youth. *Indian Journal of Psychological Medicine* 2014; 36(1): 48-53.

- 2. Morgan T, King AR, Weisz JR, *et al.* Introduction to Psychology, 7<sup>th</sup> Edition, New Delhi: Tata McGraw Hill 2004.
- 3. http://www.ibe.unesco.org/publications/SalesPublications/salespdf/Oshako.pdf
- 4. Smritikana MG. A comparative study on aggression between boys and girls adolescents. *International Journal of behavioural Social and Movement Sciences* 2013; 2(3): 76-82.
- 5. White JL, Moffitt TE, Earls F, *et al.* How early can we tell? Predictors of childhood conduct disorder and adolescent delinquency. *Criminol* 1990; 28: 507-533.
- 6. Timothy B, Alex RP, Paul. Student anger and aggressive behaviour in school: an initial test of Agnew's Macro level strain theory. *Journal of Research in Crime and Delinquency* 2001; 38 (4): 362-386
- Buss AH, Perry M. The aggression questionnaire. J Pers Soc Psychol 1992; 63: 452-459.
- Bjorkqvist K, Lagerspetz KM and Osterman K. The direct and indirect aggression scales (DIAS). Finland: Abo Akademi University, Department of Social Sciences; 1992.
- 9. Debashis Dutt, GK Pandey, Dipak Pal, *et al.* Magnitude, Types and Sex Differentials of Aggressive Behaviour Among School Children in a Rural Area of West Bengal.

prevention and intervention. Classroom management, counseling and life skills education strategies are recommended for channelizing the aggressive behaviour among school children.

#### Acknowledgement:

The authors acknowledge the valuable cooperation of students, teachers and head master of the high school in the present study.

#### **References:**

Indian J Community Medicine 2013; 38(2):109-113.

- Lawanga SK, Lemeshow S. Sample size determination in health studies. A practical manual. Geneva: WHO; 1991.
- 11. Owensa LD, MacMullina CE. Gender differences in aggression in children and adolescents in South Australia schools. *Int J Adolescent Youth* 1995; 6:21-35.
- 12. M. Workman and John Beer. Depression, Suicide, Ideation and Aggression among high school students whose parents are divorced and use alcohol at home. *Psychological Reports* 1992; 70: 503-511.
- 13. Khatri P, Kupersmitdt JB. Aggression, peer victims and social relationships among Indian youth. *Int J Behav Dev* 2003; 27:87-95.
- 14. Kaj B, Karin O, Oomen TK, *et al.* Physical, verbal and indirect aggression among Hindu, Muslims and Sikh adolescents in India. In: M. Prevention and control of aggression and the impact on its victims Martinez (Ed), *Kluwer Academic Publisher* 2001:1-11.
- 15. Gerdur RG, Runar V, Gudrun K, *et al.* Violent behaviour among adolescents in Iceland: a national survey. *International J of Epidemiology* 2004; 33:1046-1051.
- 16. Bjorkqvist K, Lagerspetz KM, Kaukiainen A. Do girls manipulate and boys fight? Developmental trends regarding direct and indirect aggression. *Aggress Behav* 1992; 18:117-127.
- 17. Iqbal N, Ahmad H, Shukla SR, *et al*. A study on family system in relation to anger among male and female students. *Indian J Clinical Psychology* 1993; 20:73-77.

<sup>\*</sup>Author for Correspondence: Dr. R. G. Viveki, Associate Professor, Dept of Community Medicine, Belgaum Institute of Medical Sciences, Belgaum 590001, Karnataka, India. Cell: 09845143860 Email: rgviveki@gmail.com