

Study of Somatic Complaints among Children with Poor Academic Performance

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ABSTRACT

Objectives: 1. To study the nature and prevalence of somatic complaints among children with poor academic performance., 2. To study the associated Psychiatric problems among children with poor academic performance were presenting with somatic complaints. **Material and Methods:** Total of 1480 children studying in 3 CBSE schools, aged between 6 and 12 years were screened. 312 children were found to be performing poor in academics. After simple randomization and further screening procedure 115 children were included in the study. Each child was assessed by interviewing with MINI-KID Questionnaire and CBCL. Statistical analysis was done using Epi Info 7 software. **Results:** The prevalence of poor academic performers was found to be 21.08%. The prevalence of somatic complaints among children with poor academic performance was found to be 29.57%. Majority of poor academic performers have single somatic complaints accounts to be 21.74% and multiple somatic complaints accounts to be 7.83%. Prevalence of types somatic complaints like head ache, abdominal pain / discomfort and other complaints among poor academic performers were 20.87%, 11.30% and 9.57% respectively. **Conclusion:** Somatic complaints in school going children leads to poor performance in academics and school drop outs. Prevalence of somatic complaints were more in boys. Headache is the most common type of somatic complaint presented by the children.

Keywords: Somatic Complaints, Poor Academic Performance.

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Education has a major influence on the life of any child. But for children with disabilities, the quality of schooling they receive is likely to have an even greater and longer lasting impact. Though education during childhood is a decisive component of human development, not every child thrives in it.

Globally it was noted that around 20% of school going children perform poor in their academics. Several Indian school surveys in the past decade have recorded prevalence rates of poor academic performance that range between 20 and 50%. In general it is estimated that one in every five school going children aged between 6-14 years in India is scholastically backward, making it as one of the important reasons for school dropouts. Somatic complaints by children is also a factor for poor academic performance in them and associated psychiatric problems along with somatic complaints. There is paucity of epidemiological studies in India to determine the exact prevalence of somatic complaints among children with scholastic backwardness.

Somatic complaints in school going children are more common and more often. Headache and abdominal pain or discomfort are common somatic complaints.⁷ Studies showed that children with somatic complaints have underlying psychiatry problems like anxiety and depression.

Somatic complaints can result in school absenteeism, problematic social interaction and poor academic achievement. For children and adolescents with frequent headache, co-morbid psychiatry problems are a well-recognized, but poorly understood clinical phenomenon.

A study conducted by Ann P, recruited 47 healthy children (age group between 6 to 17 years) presenting with migraine and 30 children as matched control group. They were assessed with Child's Symptom Inventory 4th edition and confirmatory psychological interview. Majority of the psychiatry co-morbidity with migraine headache were ODD 9 followed by anxiety 7, ADHD 6, conduct disorder 2, Dysthymia 1, and depression 1 respectively.

Another study conducted by John V et al, Showed that 79% of RAP (Recurrent Abdominal Pain) children were having anxiety disorder and 43% of RAP children were having depressive disorder. It also reports that RAP children were having higher levels of anxiety, depressive symptoms, temperamental harm avoidance, and functional impairment than control children.

There is limited literature available on this topic, hence there is need to study the prevalence and nature of somatic complaints among these children. The present study is intended to identify and analyze the somatic complaints and associated psychiatric problems among children with poor academic performance. Early identification and timely intervention can result in better outcomes amongst these children.

METHODOLOGY

Children studying in CBSE school, age group of 6 to 12 years scoring C grade and below were identified with the help of children school progress cards. As per simple randomization procedure done on students with C grade and below, every alternate child starting from first student in the list was recruited into the study. Detailed history was obtained from parents and teachers. Each recruited child was subjected for visual and hearing tests to rule out visual and hearing impairments. Then these children were subjected to physical examination to rule out major medical problems. These children were also subjected to I.Q testing to rule out intellectual disability by using Reven's Coloured Progressive Matrices. Following screening, each child subjected to MINI-KID Questionnaire and Childhood Behavioral Check List (CBCL) , by using CBCL somatic complaints were assessed. NIMHANS Index for Specific Learning Disorders. Temperament of children was assessed by Temperament Assessment Scale. The final diagnosis was made using ICD 10 DCR criteria Statistically analysis done using WHO Epi Info 7 software.

Inclusion criteria:

Students aged between 6 and 12 years from CBSE schools, both genders. Students scoring Grade 'C' and below in final examination

Exclusion criteria:

Students with visual, hearing impairment and other physical disabilities. Students suffering from acute and preexisting chronic medical disorders. Students whose Intelligence Quotient (IQ) is below 70.

RESULTS

Following the completion of the study 115 children met the criteria. Out of them 34 children were presenting with somatic complaints (i.e The prevalence of somatic complaints among children with poor academic performance was 29.57%.)

Prevalence of single somatic complaint and multiple somatic complaints among children with poor academic performance was found to be 21.74% and 7.83% respectively. (Table no 1)

Prevalence of types somatic complaints like head ache, abdominal pain / discomfort and other complaints (eye pain, burning sensation of head, toothache, weakness and limb pain) among poor academic performers were 20.87%, 11.30% and 9.57% respectively. (Table no 2)

30 (88.24%) of children with poor academic performance, presenting with somatic complaints had underlying psychiatry problems. Significant P value noted (0.00). (Table no 3)

Majority of children presenting with somatic complaints 16 (47.06%) had emotional disorders. Followed by 5 (14.71%) conduct disorders, 5 (14.71%) borderline intellectual disabilities, 3 (8.82%) mood disorder (only depression), 3 (8.82%) sleep disorder, 2 (5.88%) specific learning

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disorder, 2 (5.88%) substance abuse disorder and 1 (2.94%) hyperkinetic disorder respectively. (Table no 4)

DISCUSSION

This study began by including 1480 students attending 3 CBSE schools of Belagavi City with age group ranging between 6-12 years. With the help of progress sheets of school children, it was found that 312 (21.08%) children were poor performers in academics i.e. children scoring grade C and below.

Following simple randomization and total number of children completed the study were 115. Among 115 children 34 (29.57%) were presenting with somatic complaints.

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A study conducted in school children by Ann P showed that Majority of the psychiatry comorbidity with migraine headache were ODD 20% followed by anxiety 15.55%, ADHD 13.33%, conduct disorder 4.44%, Dysthymia 2.12% , and depression 2.12% respectively.

Another study conducted by John V et al, showed that 79% of RAP children were having anxiety disorder and 43% of RAP children were having depressive disorder.

Most of the time children with psychiatry illness present with somatic complaints rather verbalize their problems. In turn leading to repeated consultation with pediatrician, where no obvious organic cause has been found. Increased secondary gains and temper tantrums were also noted. Absentees to school, poor performance in academics and may also leads to school dropouts. Our study results are on par with other study results as above mentioned.

CONCLUSIONS

The prevalence of somatic complaints in children with poor academic performance was 29.57%. 88.24% was the prevalence of psychiatry problems among children with poor academic performance, presenting with somatic complaints. Majority of children were suffering from emotional disorder as underlying disorder to somatic complaints i.e 47.06%. Somatic presentation in children to be evaluated for underlying psychiatry illness and early intervention of psychiatrist can minimize the further consequences.

Most of our study results p value were significant and also corresponds with previous study results.

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Conflict of Interests

The author declared no conflict of interests.

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Table no 1: Prevalence of somatic complaints among children with poor academic performance. (N=115)

Variables		Total no of children	
Somatic complaints		N (%)	
Present	Single complaints	25 (21.74%)	34 (29.57%)
	Multiple complaints	09 (7.83%)	
Absent		81 (70.43%)	
Total		115 (100%)	

Table no 2: Distribution of children with poor academic performance according to the different types of somatic complaints

Variables	Total No Of Children
Somatic complaints	N (%)
1. Head ache	24 (20.87%)
2. Abdominal complaints	13 (11.30%)
3. Other Complaints	11 (09.57%)

Table no 3. Psychiatry problems among children with poor academic performance presenting with somatic complaints. (N=115)

Variables	Somatic complaints N (%)		Total number of children N (%)	χ^2	P
Psychiatry problems	Present (%)	Absent (%)			
Present	30 (88.24%)	33 (40.74%)	63 (54.78%)	19.93	0.00*
Absent	04 (11.76%)	48 (59.26%)	52 (45.22%)		
Total	34(100%)	81 (100%)	115 (100%)		

Table no 4: Prevalence of psychiatry problem among children with poor academic performance presenting with somatic complaints.

Psychiatry problem	Total number of children presenting with somatic complaints (%)	p
1. Emotional disorders	16 (47.06%)	0.000*
2. Specific learning disorders	2 (5.88%)	0.339
3. Mood disorders	3 (8.82%)	0.024*
4. Substance abuse	2 (5.88%)	0.085
5. Sleep disorder	3 (8.82%)	0.152
6. Conduct disorder	5 (14.71%)	0.023*
7. Hyperkinetic disorders	1 (2.94%)	0.671
8. Borderline intellectual disabilities	5 (14.71%)	0.765

P < 0.05 Statically significant

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