

LIFE EVENTS & PSYCHIATRIC MORBIDITY IN SCHOOL CHILDREN

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ABSTRACT: BACKGROUND: Psychiatric morbidity in school children can be multi-factorial. Stress in school and other life events contribute significantly to it. There are many western studies on the effects of life events on children and adolescents similar to studies on adults. Indian studies on life events have focused on their association with neurotic disorders in adults. There is paucity of literature about life events in school children and their association with psychiatric morbidity. Present study addresses this issue. **AIM:** To assess the association between life events and psychiatric morbidity in school children. **MATERIALS AND METHODS:** Two hundred and eighteen school children were selected through multistage random sampling. The study was conducted in three stages. In the first stage, all the students were administered six-item version of GHQ to screen for emotional problems. Life events were recorded using Life Events Inventory. Raven's Progressive Matrices was administered to evaluate IQ. In the second stage, parents assessed their child's behavior using CPMS. In the third stage, all students were subjected for detailed clinical work-up. **STATISTICAL ANALYSIS:** Continuous variables were analyzed using t test. **RESULT:** Out of 218 students 152 (69.7%) had Psychiatric illness. Majority of the students (53%) had Depression. Students with psychiatric problems had experienced more life events. Psychiatrically disturbed boys experienced more number of events than psychiatrically disturbed girls. Urban students having psychiatric problems had high life event score compared to urban students not having psychiatric problems. **CONCLUSION:** Psychiatrically ill students experienced more life events.

KEYWORDS: Life events, Psychiatric morbidity, School children.

INTRODUCTION: A high incidence and prevalence of psychiatric morbidity in children exposed to adverse circumstances has led to the concept of children at risk for psychiatric disorders. School children could be one such group.

There are many western studies on the effects of life events on children and adolescents as in adults. Life events in children have been reported to be associated with physical disorders like respiratory tract infection,⁽¹⁾ accidents⁽²⁾ and day to day changes in the health status of chronically ill children.⁽³⁾ Stressful life events have also been reported to be associated with psychiatric morbidity like enuresis,⁽⁴⁾ emotional disorders^(5,6,7) and depression.⁽⁸⁾ Life events are known to increase the likelihood of hospitalization in adolescents with psychiatric disorders.⁽⁹⁾ Depressed children having ideas of suicide have been found to have more stressors than non-depressed children.⁽¹⁰⁾

Some Indian studies have found life events to be associated with neurotic disorders in adults. Hysteria in adolescents was found to be preceded by significantly more number of negative life events and school problems in comparison to controls.⁽¹¹⁾ Psychiatrically ill female

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children were found to have significantly higher scores on stress.⁽¹²⁾ Most of Indian studies on children have been carried out in clinic population. Thus there is paucity of literature about life events in school children and its association with psychiatric morbidity. In this background the present study was planned to assess the association between life events and psychiatric morbidity in school children.

MATERIAL AND METHOD:

Sample: Students studying in 10th standard in an urban city formed the sample of the study. All the schools situated in an urban city, where in the medium of instruction is a local language (Kannada), were stratified based on type of school (government, government aided, private). Private schools were excluded as all of them were co-educational, some of them refused permission and private schools had students from different socioeconomic status. Thus one school each from government schools for girls & boys and government aided schools for girls & boys were randomly selected for the study. Further from sampled schools, equal number of students were selected from each of the sections randomly. There were 240 students available to be included out of which 22 dropped out of the study because of; unwillingness of parents and students, absence of students, unavailability of parents, inability of parents to communicate in local language. 218 students constituted the final sample.

Tools: Self designed proforma to elicit socio demographic data.

6-Item Version of Goldberg's General Health Questionnaire: General Health Questionnaire (GHQ) was designed by Goldberg (1972). It is a simple questionnaire which is easy to administer. It is found to have high validity. It is a widely used epidemiological screening device for identifying Psychiatric disorders. Original version of this questionnaire has 60 items. The abridged version of this questionnaire has been used in Indian setting by many researchers. Rao et al (1992) validated 6-item version of GHQ in the hands of non-psychiatrist on Indian population. The criterion validity of this 6-item GHQ has a sensitivity of 86% and specificity of 89% with a cut off score of 1.⁽¹³⁾ For the present study short 6-item version of GHQ was used as a screening tool to detect psychiatric morbidity in children.

Life Events Scale for Indian Children: This scale has been standardized on Indian children by Savitha Malhotra.⁽¹²⁾ Each item in the scale is assigned a stress score called weightage score. Stress scores range between 0 and 100 indicating stressfulness of the event.

Childhood Psychopathology Measurement Schedule (CPMS): CPMS is a standardized instrument to detect childhood psychopathology.⁽¹⁴⁾ Inter rater reliability of this scale ranged between 0.88 to 0.96. Criterion validity was significantly high with a sensitivity score of 82% and specificity of 87%. CPMS consists of 75 items, applicable to both sexes in age range of 4 to 14 yrs. It is a screening instrument to identify disturbed children in population surveys. Children who score 10 or more are considered to be disturbed psychiatrically. The information is collected from the mother or a parent surrogate.

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METHOD: Using the proforma for socio-demographic data, student's name, age, sex, address, religion, type of family, and parents' occupation & income were recorded. Health & habits were elicited from school records and parents. All the students were administered 6-item version of Goldberg's general health questionnaire (GHQ) to screen for psychiatric illness. Raven's Progressive Matrices was administered to evaluate IQ. Life events were recorded using Life Events Inventory. Parents were individually contacted and requested to assess their child's behavior in the last one year in the Childhood Psychopathology Measurement Schedule (CPMS). All cases were subjected to detailed clinical evaluation by a Psychiatrist. The psychiatric diagnoses were confirmed using DSM-III-R criteria. The cases who were positive on GHQ and or CPMS were considered as psychiatrically ill. The students with or without psychiatric problems were compared. Statistical analysis was done using SPSS version 17.

RESULTS:

Socio-demographic details: There were equal number of boys and girls in the sample. Majority of the students belonged to Hindu religion hailing from urban, nuclear, lower socio-economic status families (Table 1).

Psychiatric morbidity: Out of 218 students 152(69.7%) had Psychiatric illness. Majority of the students 61(40.1%) had Dysthymia. 20(14.4%) students had Major Depressive Disorder. Other common problems were Somatoform disorder and Generalized anxiety disorder.

Life events: First four frequent life events in the present sample were; Visit of relative, Change of school, Acquisition of TV by family or going for a picnic or excursion. The undesirable events that were next in frequency were; Change in parent's financial condition, Death of grand parent, Witnessing a serious mishap or death, Decrease in arguments between parents, Decrease in arguments with brothers and sisters, Change in father's job requiring increased absence from home, Quarrel between parents/parent and neighbor/relative.

Students having psychiatric illness experienced significantly more frequent and intense life events than students not having psychiatric illness (Figure-1). This was true for both one year and life time scores (Table-2) Both genders having psychiatric illness experienced significantly more frequent and intense life events than those not having psychiatric illness. However, psychiatrically disturbed boys experienced more number of events than psychiatrically disturbed girls (Figure-2). Urban students with psychiatric illness had significantly high life event scores compared to urban students without psychiatric illness. Students with psychiatric problems hailing from nuclear families had high life event score. No difference in life events scores was found between the two groups regarding religion and socio economic status.

DISCUSSION: Students having psychiatric morbidity experienced significantly more frequent and intense life events in the past one year and during their life time. This is in line with the findings of earlier studies in this area.^(5,4,9,6,10,11,7) Savita malhotra et al reported that life events in the past one year had significant relationship with psychiatric morbidity in a clinic group of psychiatrically sick children.⁽¹²⁾ In the present study, boys having psychiatric morbidity

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experienced more life events than girls. But Malhotra et al reported that psychiatrically ill girls had higher number of life events.⁽¹²⁾ Children from urban background and nuclear family with psychiatric morbidity had higher life event scores. These factors have not been addressed in earlier studies. Further studies are needed to establish association between life events and psychiatric morbidity in relation to socio-demographic factors which contribute to the life events.

CONCLUSIONS: In the present study, psychiatrically disturbed students experienced more life events. Severity and frequency of life events was more in boys, children hailing from urban dwelling and nuclear families. High rate of prevalence of psychiatric problem and deleterious life events could be one of the reason for high level of low achievement level of school students in general. This issue of psychiatric morbidity and life events may have to be addressed to improve achievement levels of the school students.

LIMITATIONS OF THE STUDY:

- Even though random sampling technique was used, the sample had skewed distribution with regard to location, religion and socio-economic status, as the sample was drawn from schools located in urban area where in the medium of instruction was local language. Such schools tend to attract students from lower socioeconomic status. Hence scope for generalization is limited.
- Although this study has an advantage of direct interview of all the students in addition to use of screening tools, detection of psychiatric problems based on detailed individual psychiatric assessment is impracticable in a classroom set up.
- Pattern of life events and its relationship to particular psychopathology has not been addressed in this study.

IMPLICATIONS: School children appear to be at high risk for psychiatric morbidity. Apart from school life, home environment can contribute to it in the form of life events. This can have effect on academic performance of the child. The psychiatric morbidity, life events and school stress may have reciprocal relation. Sensitizing the teachers to interact with parents of school children periodically about deleterious effects of life events will go a long way in detection and management of psychiatric morbidity in children and improve academic achievement in them.

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Socio-demographic factors		Sample N= 218
Gender	Boys	109
	Girls	109
Place	Rural	5
	Urban	213
Religion	Hindu	189
	Muslim	29
Type of family	Nuclear	186
	Joint	32

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Socio Economic Status	High	14
	Middle	111
	Low	93
Psychiatric Morbidity	Present	152
	Absent	66

Table 1

Life events score (Mean & SD)		Students with Psychiatric problems (N=152)	Students without Psychiatric problems (N=66)	Statistical significance "t" test
One year	Number of events	2.8 ± 1.4	2.3 ± 0.75	3.8, P<0.01
	Total score	122.3 ± 87.9	100.4 ± 73.5	1.9, P<0.05
Life time	Number of events	10.3 ± 2.1	6.58± 1.92	18.6, P<0.01
	Total score	547.1 ± 254.4	390.3 ± 163.3	5.4, P<0.05

Table 2: Life event scores obtained in one year and life time by students with and without psychiatric problems

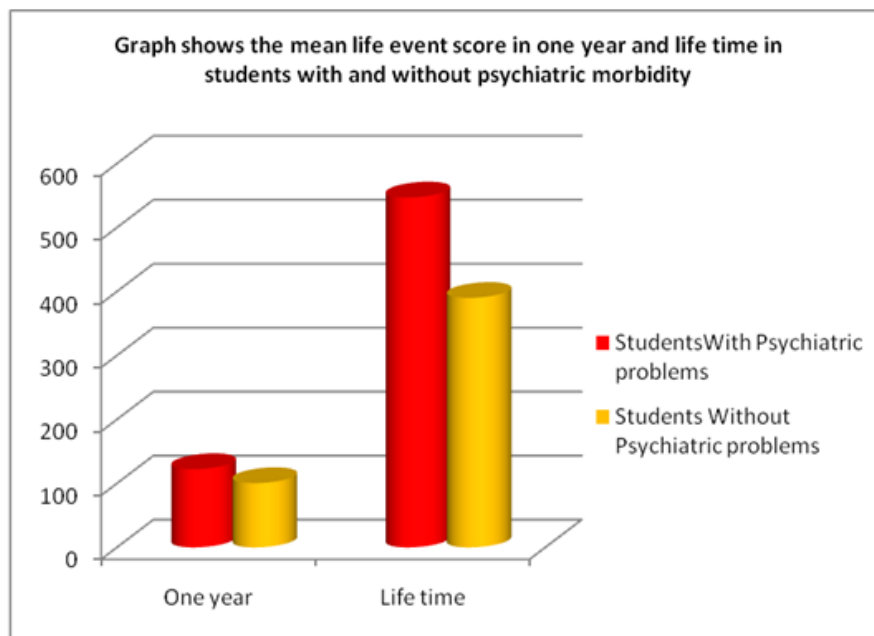


Figure 1

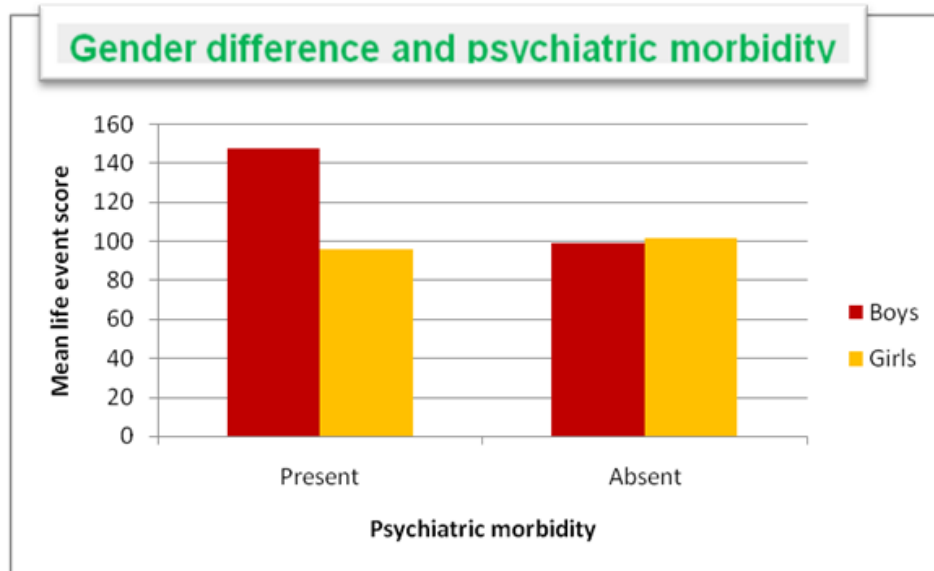


Figure 2

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