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Relationship between Life Events and the Onset of Psychiatric Disorders in Childhood and Adolescence

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Abstract

The prevalence of psychiatric problems among children and adolescents is rising in Bangladesh. Children with acute and chronic pediatric diseases have a higher likelihood of developing psychiatric problems, as their physical health challenges can lead to emotional and psychological stress, affecting their overall well-being. Our study aims to explore the relationship between life events and the onset of psychiatric disorders in children and adolescents. This observational study was conducted in the Department of Psychiatry of Community Based Medical College, Bangladesh (CBMC,B) Hospital, Mymensingh, Bangladesh, between January 2022 and February 2023. A total of 110 patients of both sexes were included in the study. The mean age of patients was 10±3.32 years. Among them, 60% were found to have emotional disorders and the life events and psychiatric disorders show that a majority life events of parent financial crisis with higher rates of (22.73%) emotional disorders. Our study indicates the relation between life events and psychiatric conditions among the paediatric population.

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Introduction

Psychiatric disorders affecting children and adolescents are undeniably widespread and carry a substantial burden. These disorders, typically encompassing emotional, behavioral or developmental issues, tend to emerge during the initial two decades of life.[1] According to current worldwide epidemiological data, up to 20% of children and adolescents experience a debilitating mental disease and 50% of all adult mental disorders have their onset in adolescence.[2] Research conducted in developing countries provides a prevalence range of 1% to 49%.[3] The incidence of child and adolescent psychological disorders was 7% in a study of patients at a walk-in psychiatric clinic in Baghdad.[4] Bangladesh is a developing nation with a population of around 169.4 million people, 26% of whom are between the ages of 5 and 14.[5]

According to data from the Institute of Mental Health and Research gathered in 1990, the outpatient department (OPD) had 9% of children with mental disorders.[6] In Bangladesh, the first child and adolescent mental health screening research found that the self-reported Strengths and Difficulties Questionnaire had a 17.9% predictive prevalence of mental health disorders. 10.5% of them had emotional disorders, 5.6% had conduct disorders (CD), and 3.1% had

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hyperkinesis.[7] According to the first methodologically sound epidemiological study, 11-21% of children and adolescents in rural, urban, and slum areas of Bangladesh aged 5 to 10 were found to have emotional and behavioral issues severe enough to cause them significant distress or social impairment.[8] Another extensive community survey indicated that the rate of psychiatric morbidity among individuals aged 5 to 17 years was 18%.[9] Mental health services for children and adolescents are scarce worldwide. According to recent data from the World Health Organization's (WHO) Mental Health Atlas, there is an unmet need for child and adolescent mental health services in every corner of the globe.[10] The situation is far worse in developing countries like Bangladesh, where there is a huge disparity between the demand for mental health services for children and their actual availability. Child psychiatric disorders frequently manifest alongside physical symptoms and tend to be more prevalent among individuals who regularly seek medical attention.[11] Additionally, it was shown that children with acute and chronic pediatric diseases are more likely to develop psychological problems.[12] Consequently, mental health issues in children are frequently cited reasons for seeking consultation in general pediatric clinics. The findings of a recent study revealed that 20% of children visiting pediatric outpatient departments (OPDs) had experienced a psychiatric disorder.[13] Furthermore, in developing countries, it is common for families not to fully recognize or for children to struggle to articulate their psychological distress, leading them to manifest their symptoms through physical complaints. Children and adolescents, as well as their caregivers, often hesitate to seek assistance from mental health experts, opting instead for pediatric medical settings to seek treatment and support.[14] our study aims to investigate and analyze the relationship between life events and the onset of psychiatric disorders in childhood and adolescence at a tertiary care hospital in Bangladesh.

Methods

This was an observational study and was conducted in the Department of Psychiatry of Community Based Medical College, Bangladesh (CBMC,B) Hospital, Mymensingh, Bangladesh, from January 2022 to February 2023. A total of 110 patients including both sexes were included in the study. Data were collected from 80 boys and 30 girl patients between 5 and 15 years atending our hospital. Children and adolescents who had impaired consciousness, severe physical illness, and were unaccompanied by parents or guardians were excluded from the study. A standardized semi-structured data collection sheet was used to collect necessary information and face to face interview. Necessary information was collected by reviewing related medical reports. A semi-structured questionnaire was developed in English and translated in Bangla (native language). The questionnaire was developed using the selected variables according to the specific objectives. The questionnaire contained questions related to socio-demographic characteristics, psychiatric disorders and relationship of life events. A checklist was also developed to record desired variables from admission record, history sheet and related medical records. Data were checked immediately after completing interview and review of necessary investigation reports. All relevant data were collected from each respondent by use of an interview schedule,

measured parameters, and investigations in a predesigned format. Patients who were fulfilled the inclusion criteria and willing to enroll in the study were included in the study after receiving the informed written consent.

All data were recorded systematically in preformed data collection form and quantitative data was expressed as mean±SD and qualitative data was expressed as frequency distribution and percentage. Student's t-test and Chi-square test were applied to see the differences. Statistical analysis was carried out by using Statistical analysis was done by using SPSS (Statistical Package for Social Science) Version 23.0 for Windows. A p-value <0.05 was considered as statistically significant. The study was approved by the Ethical Review Committee of Community Based Medical College, Bangladesh (CBMC,B), Mymensingh, Bangladesh.

Results

The majority (63.64%) of our patients were in the 5-10 years age group, followed by 11-15 years age group (36.36%). The mean age was 10±3.32 years. Boys were accounting for 72.73%, while girls made up 27.27%. The socioeconomic status was predominantly middle-class, with 60% of the respondents falling into this category, followed by 36.36% from lower socioeconomic backgrounds, and only 3.64% from upper-class families. In terms of religion, most participants were Muslim (94.55%), with a small Hindu minority (5.45%) (Table-I). The majority of the respondents had emotional disorders (60%), 27% had disorders like ADHD, ODD, overanxious disorder, separation anxiety disorder and social phobia and the rest 13% had conduct disorder (Fig. 1). In children, parental separation was associated with a 10.91% prevalence of emotional disorders and a 4.55% prevalence of conduct disorders, though the overall frequency was low in any disorders (3.64%). Besides, parents' financial crisis had the highest correlation with emotional disorders (22.73%) and conduct disorders (7.27%), and any disorders (9.09%). Serious illness (trouble breathing, phobias or feeling dizzy, shaky, or sweaty) in a child showed a 14% rate of emotional disorders and 2.73% rate of conduct disorders and 6% rate to any disorders, while sibling death led to emotional disorders in 10.91% of cases and conduct disorders in 5.45% and any disorders 2.73%. However, none of those associations reached statistical significance (p>0.05) (Table-II).

Table-I: Socio-demographic characteristics of the study population (N=110)

Variables		Frequency	Percentage
Age group (in years)	5-10	70	63.64
	11-15	40	36.36
Mean age	10±3.32 years		
Sex	Boys	80	72.73
	Girls	30	27.27
Socio economic status	Upper	4	3.64
	Middle	66	60
	Lower	40	36.36
Religion	Islam	104	94.55
	Hinduism	6	5.45

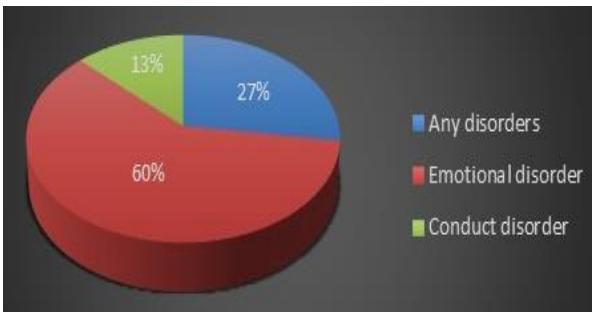

Fig. 1: Psychiatric disorders among the study population (N=110)

Table-II: Relationship of life events and psychiatric disorders

Life events	Any disorders		Emotional disorder		Conduct disorder		p-value
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
Parental separation	4	3.64	12	10.91	5	4.55	0.094
Financial crisis of parents	10	9.09	25	22.73	8	7.27	0.177
Serious illness	7	6	15	14	3	2.73	0.173
Death of siblings	3	2.73	12	10.91	6	5.45	0.151

Discussion

The relationship between life events and the onset of psychiatric disorders in childhood and adolescence suggests that certain life events may serve as causal factors rather than mere consequences of psychopathology. Stressful or traumatic experiences, such as family conflict, loss, or abuse, can contribute to the development of mental health issues, acting as triggers for the onset of psychiatric disorders in young individuals. These events can disrupt emotional and psychological development, leading to an increased vulnerability to mental health conditions.[15-18] For instance, the death of a sibling may be a trigger for depressive disorders. Adolescents with Conduct Disorder (CD) are more inclined to associate with physically aggressive peers, which could lead to their exposure to criminal activities or injuries among their friends. Additionally, it's challenging to completely eliminate the possibility of an unmeasured factor that might be responsible for both life events and psychopathology in young individuals. For instance, a particular social environment may increase the likelihood of parental divorce and, simultaneously, raise the risk of CD in the youth.[15-18] Therefore, further research is essential to determine the direction of the relationship between particular life events and psychopathology in children and adolescents. Lastly, some life events appeared to be correlated with each other, such as parental divorce and parental financial crisis. Even though their impacts may not be identical, separate analyses were conducted for each of these events. However, analyzing related events separately might have limitations. Our study showed that out of 110 respondents, the mean age was 10±3.32 years, while 72.73% were boys and 27.27% were girls. The socioeconomic status level of the majority (60%) was middle class. Religious distribution revealed that 94.55% were Muslims and 5.45% were Hindu religion. In this study shows that a majority of respondents were 60% had emotional disorders, 27% any disorder and 13% conduct disorder. On the other hand, the relationship of life events and psychiatric disorders shows that a majority life events of

parent financial crisis with higher rates of (22.73%) emotional disorders, (9.09%) any disorder, (7.27%) conduct disorder. We found the life events of child serious illness with higher rate of (14%) emotional disorders and (6%) any disorder respectively. In our study, the overall proportion of emotional disorder was the highest among all psychiatric disorders. Glazebrook Cet al. reported that emotional symptoms being particularly evident in both boys (OR=2.85, 95% CI 1.97-4.11) and girls (OR=3.04, 95% CI 1.92-4.70).[13] In another study done by Garralda & Bailey, the emotional disorders were observed as the commonest psychiatric diagnoses (in two thirds of the children), while less frequently observed disorders were conduct disorders (14%), mixed conduct/emotional disorders (17%), and hyperkinetic syndrome (8%).[14] A lower values were found in other studies – 2.9% and 14% of conduct disorders respectively.[8,14] One potential explanation for these lower prevalence rates, as discussed by Mullick and Goodman, could be the specific study location, particularly if it was a slum area. In such environments, children and adolescents may face increased vulnerability to various social stressors, including a lack of parental support, low socioeconomic status, and greater exposure to criminal influences.[8] Additionally, it is important to consider the possibility that in our study, family members may not have recognized the symptoms of these disorders, especially emotional disorders or conduct Disorder, as illnesses warranting medical attention. For instance, behavioural disorders may have been less noticeable to parents and caregivers, leading to these conditions not being perceived as disorders requiring medical support. Researchers also have increasingly come to believe that severe psychological trauma may have long lasting effects on brain structure or chemistry that may in turn lead to aggressive behaviour.[15,16] There is also a substantial body of evidence indicating correlations between various forms of familial dysfunction and childhood conduct problems. These findings collectively underscore the complex and multifaceted nature of psychiatric disorders in children and adolescents.[17,18] Since our study was conducted at a single center, it limits us drawing conclusions about causality. Additionally, due to the relatively brief study duration, we were only able to investigate a limited number of life events in a limited number of patients. There are several other factors that could have been incorporated into the study, such as parents' problem with police case, parents' cruel behaviour towards the children, physical abuse, social stigma etc.

Conclusion

Child and adolescent psychiatric disorders are a global concern, with prevalence rates varying widely. In Bangladesh, where 26% of the population is aged 5 to 14, mental health issues among children are prevalent, with up to 17.9% predictive prevalence. Access to mental health services is limited, particularly in developing countries like Bangladesh, leading children to seek help in general pediatric clinics where mental health issues are often expressed through physical symptoms. Increased awareness and access to child and adolescent mental health services within pediatric settings are essential.

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