

Original Research

Prevalence of depression among children with epilepsy

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ABSTRACT:

Background: Epilepsy is one of the common problems in children. The occurrence of two unprovoked seizures more than 24 hours apart could indicate the presence of an epileptic disorder. The present study was conducted to assess depression among children with epilepsy. **Materials & Methods:** 80 children diagnosed with epilepsy of both genders were enrolled. A thorough clinical examination was performed. Assessment of depression was done by DASS scale. **Results:** Out of 80 patients, boys were 50 and girls were 30. out of 80 patients, 24 (30%) had depression. **Conclusion:** Epileptic children had high prevalence of depression. Maximum cases were seen in boys than girls.

Key words: Children, Depression, Epileptic

Received: 12 January, 2021

Accepted: 16 February, 2021

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This article may be cited as: Sharma M, Bhartiya J, Kumar V. Prevalence of iron deficiency anemia in school going children. Int J Res Health Allied Sci 2021; 7(2):84-86.

INTRODUCTION

Epilepsy is one of the common problems in children. The occurrence of two unprovoked seizures more than 24 hours apart could indicate the presence of an epileptic disorder.¹ Most cases of epilepsy are managed efficiently by medication, and afflicted children have normal IQ and are expected to have a normal life. However, these children need to be carefully monitored for psychopathology and learning disability, as both of these are more common in epileptic children than in the general population.²

Elevated rates of depression, anxiety and suicidal attempts have been reported in adults with epilepsy and it is increasingly being realised that both depression and anxiety in youth with epilepsy are common but often unrecognized disorders.³ Therefore, the early identification and treatment of both conditions is crucial to minimize the risk for suicide and negative impact on quality of life.⁴ The reported frequency and severity of emotional and behavioural problems in children with epilepsy would suggest that a comprehensive epilepsy service should provide assessment and treatment of

psychiatric problems and there should be regular monitoring of psychological adjustment of children with epilepsy. However, such difficulties are often either unrecognized or assessment and intervention are not available.⁵

Diagnosis of depression has changed due to the refinements in the diagnostic criteria of depression in ICD-10 and DSM-IV. According to these criteria symptoms of depression should persist at least for 2 weeks, with core symptoms being present during most days.⁶ The present study was conducted to assess depression among children with epilepsy.

MATERIALS & METHODS

The present study comprised of 80 children diagnosed with epilepsy of both genders. All were enrolled and written consent was obtained from their parents.

Data such as name, age, gender etc. was recorded. A thorough clinical examination was performed. Assessment of depression was done by DASS scale. Results were analyzed statistically. P value less than 0.05 was considered significant.

Results

Table I Distribution of patients

Total- 80		
Gender	Boys	Girls
Number	50	30

Table I, graph I shows that out of 80 patients, boys were 50 and girls were 30.

Graph I: Distribution of patients

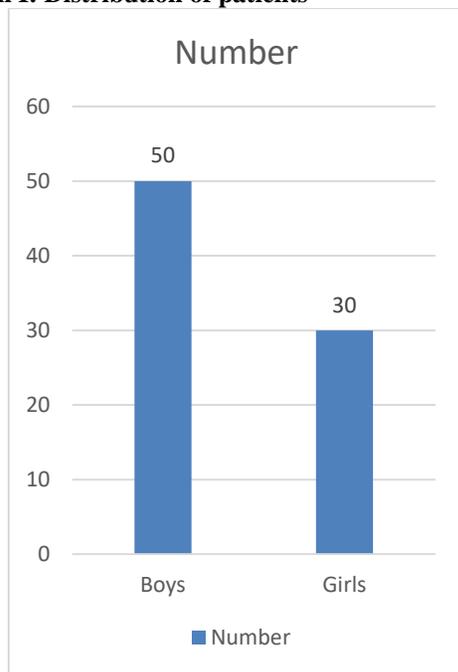


Table II Assessment of depression among children

Total	Prevalence	Percentage
80	24	30%

Table II shows that out of 80 patients, 24 (30%) had depression.

DISCUSSION

Depression is one of the most common psychiatric disorders in epileptic children. The prevalence of depression in the pediatric population according to the Isle of Wight study was 0.2% in 10 year olds and 2% in 14 year olds More recent studies have reported higher rates of 1-5 percent among children and adolescents.⁷ The prevalence of depression among children with epilepsy in different worldwide studies varies from 23% to 33%. Psychosocial risk factors of depression in epilepsy include the fear of seizure, perceived stigma, learned helplessness and pessimistic attribution, and decreased social support.⁸ Biological risk factors include family history of mood disorder, left sided focus and focus in temporal or frontal lobe. The clinical recognition of childhood depression has developed over

the past decade.⁹ Multiple studies have demonstrated that depression in children and adolescents may present with different symptoms than adult depression. Juvenile-onset depression has been found to have a recurrent course and can include severe psychosocial morbidity and significant risk of suicide.¹⁰ Some symptoms that differentiate childhood depression from the classic clinical picture of adult depression include irritable mood, anger, and decline in academic performance. Depressed children may also exhibit psychomotor agitation, anxiety symptoms, phobias, and regressing behaviors, including separation anxiety. Vegetative and somatic complaints can also be associated with depression in children.¹¹ The present study was conducted to assess depression among children with epilepsy.

In present study, out of 80 patients, boys were 50 and girls were 30. Seyfhashemi et al¹² recorded the prevalence of depression in epileptic children and adolescents by reviewing the existing literature, looking for any association between depression in these children and their demographic or seizure related factors to highlight the potential risk factors for depression in epileptic children. A search of MEDLINE, NLM Gateway, Ovid and EMBASE was carried out to study original English language articles published during the last 15 years, focusing on only epileptic children and adolescents, studying of depression as comorbidity of epilepsy, and describing demographic and epilepsy-related factors associated with depression. The 11 articles included in this study have reported data on 1095 epileptic children aged 4-19 years old and showed that the prevalence of depression has continued to be very common in epileptic children and adolescents, ranged from 5.2% to 39.6%. On the whole, the findings did not support the presence of an association between depression and demographic or seizure variables in children. Pediatricians and other physicians working with epileptic children should have a high index of suspicion for depression as a comorbid condition in children with epilepsy. Early diagnosis and more comprehensive packages of care for depression in epileptic children will enable them to have a better quality of life.

We found that out of 80 patients, 24 (30%) had depression. Baki et al¹³ found that children with epilepsy have high rates of depression and anxiety. The majority of studies concentrate on the children with epilepsy, but the emotional impact of epilepsy on family members is of clinical concern. In this cross-sectional study we aimed to examine the association between epilepsy in childhood and adolescence, and anxiety and depression in these patients and their mothers. Authors studied 35 children and adolescents with seizures (age range, 7-19 years), 35 gender-matched healthy controls (age range, 8-17) who did not

have any chronic medical illness, and mothers of these individuals (n=70) in a cross-sectional analysis. They administered the Kovac Child Depression Inventory (CDI) and State-Trait Anxiety Inventory for Children (STAIC) to the children. Authors administered the Beck Depression Inventory (BDI) and State-Trait Anxiety Inventory (STAI) to the mothers of these children. Patients with epilepsy had higher CDI scores (mean \pm SD, 12.48 \pm 6.35) than controls (9.31 \pm 5.11) ($P<0.05$), whereas the STAIC scores did not differ between cases (34.03 \pm 8.29) and controls (35.20 \pm 6.23) ($P<0.05$). Mothers of children with epilepsy did not have more depression or anxiety symptoms than mothers of children without epilepsy as measured by BDI and STAI scores ($P>0.05$). There was no correlation between mothers' scores and patients' or controls' scores. These results support findings from previous studies that children and adolescents with epilepsy have a higher frequency of depressive but not anxiety symptoms than the general population of healthy children and that this is independent of their mothers' symptoms.

Ettinger et al¹⁴ reported that rates of 'emotional disorder' for children with 'complicated epilepsy' were similar to rates for those with 'uncomplicated epilepsy' suggesting that difficulties with anxiety and depression are not restricted to children with epilepsy who have additional neurological or intellectual difficulties. 'Complicated epilepsy' included children with severe learning difficulties (vocabulary quotient <60), speech or language difficulties, other physical impairments, and congenital conditions.

CONCLUSION

Authors found that epileptic children had high prevalence of depression. Maximum cases were seen in boys than girls.

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