Prevalence of Depression in Younger Population at a Tertiary Care Hospital

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ABSTRACT

Objective: To determine the frequency and severity of depression in adolescents presenting in outpatient department of a tertiary care hospital.

Study Design: Descriptive / cross sectional study

Place and Duration of Study: This study was conducted at the Psychiatry OPD of Div. HQ Hospital Mirpur AJK from Sep. 2017 to Feb 2018.

Materials and Methods: Data was collected by cluster sampling using the systematic random sampling technique. KADS for Depressive Illness was applied and data was then analyzed using SPSS 18.

Results: In total (n=400) prevalence of depression is 12%, with 177 (44.3%) male and 223 (55.8%) female participants while 5.8%,5.0%,and 1.3% have mild, moderate and severe degree of depression respectively.

Conclusion: The findings indicated that the clinician should determine a treatment plan that not only for assessment but also address the risk factors. Studies should be cost effective for treatment of depression as well as improving quality of life of sufferers.

Key Words: Children, childhood, frequency, severity, adolescent, Risk factors, Prevalence, depression, KADS.

INTRODUCTION

Depression, a disorder with maximum level of disability rate, disturbs quality of life and total functionality. Rate of depression is 14% to 20% in various studies and consequences could be substance misuse, anxiety, school refusal, truancy, conduct problems, with criminal tendency among the children and adolescents. The mortality risk for suicide in depressed patients is more than 20 times greater than in the general population as well as increase risk of ischemic heart disease and stroke. This article is gives a detailed idea that this disabling disorder of depression may affect quality of life and increases burden on family and social life. Even when successfully treated with remission is achieved, depressive disorders still impose a considerable burden on the patient[1]. Early onset depression is an imminent condition, which may become chronic in long term progression, so early detection and intervention is most important step. It is a leading cause of absents for schools, decreased functionality, and broad functional impairment across

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social, academic and family domains in adults, children, and adolescents[2].

Current studies are doing investigations of the prevalence, course, risk factors, protective factors, prevention and treatment plans for depressive symptoms in adolescence[3]. The past studies researched about epidemiology, biological factors, etiology, genetic factors, environmental factors, risk factors, precipitating factors, outcome of management, treatment of depression and suicidal behavior in the young. Stresses and acute life events such as friendship difficulties and bullying are also likely to be relevant in this age group[4].

Children of depressed parents have increased risk for the full range of adjustment problems, anxiety, depression, and causes could be family adversity, divorce, separation, early childhood losses, neglect, and insecure attachment, physical and sexual abuse. Parenting may have a role in the etiology of adolescent depression[5]. There are three main forms of treatment for depression: Counseling or psychotherapy; electroconvulsive therapy, and Antidepressant medications. The current research focuses on understanding the relationship between depression and factors such as the circadian rhythms, the hormonal system, genetics, neuronal receptors and circuits, PET/SPECT scan, MRI while medicines such as selective serotonin, nor-epinephrine and dopamine reuptake inhibitors are mainstay of treatment[6].

A number of socio-demographic factors may play a role in depression pathogenesis including difficulties in role transitions e.g. low education, high teen child-bearing, marital disruption, employment difficulties, low earning, persistence, and severity of secondary

disorders, and increased risk of mortality due to physical disorders and suicide[7]. In GBD 2000, depressive disorders were the 3rd leading cause of burden responsible for 13.4% of YLDs in women and 8.3% in men and also predicted as worse outcome for the other co-morbidities[8, 9]. There was a high rate of co-morbidity in children and adolescents with major depressive disorders such as conduct disorder/ oppositional defiant disorder, anxiety disorder, attention deficit hyperactive disorder and substance misuse e.g. (Cannabis, opiods, alcohol, cocaine and benzodiazepines)[10, 11].

The current study will reflect in the future planning about the mental health status of child and adolescents and can play an important part in determining and planning the kind of mental health services, identification of etiological and risk factors, prevalence of depression, interventions and rehabilitation services required both medical and psychological health.

MATERIALS AND METHODS

This Study was conducted in OPD of psychiatry department Div. HQ Hospital Mirpur AJK. The design of the study was descriptive cross sectional study.

Study was completed in 6 months from Sep. 2017 to Feb 2018. Sample size was calculated by using WHO sample size calculator, taking Confidence level 95 %, and Population proportion 3.7%, Precision 1.85%, Sample size was calculated to be 400. Sampling technique used was Consecutive non probability.

Inclusion criteria:

1. Patients aged between 10-19 years of either genders having any or combination of followings; irritability, poor school performance, behavioral disturbances and disturbed sleep & appetite for one week duration.

2. Consent regarding the participation in study was taken from guardians.

Exclusion criteria: Patients with other psychiatric disorders like ADHD, Mental retardation and Patients unable to communicate.

Procedure of data collection: After getting approval from hospital ethics committee, informed consent was obtained from those subjects who fulfilled the inclusion criteria. A predesigned Performa was given to the study participants and all the relevant details such as age, gender, educational status were obtained. The Kutcher Adolescent Depression Scale (KADS) was used to screen depression in adolescents. The patients suffering from depressive illness were then assessed for the severity of depression using the ICD10 criterion for depression. Data was analyzed with Statistical Program for Social Sciences (SPSS) version 18.

For the quantitative variables i.e. Age, KADS score, ICD10 criterion, Mean ± S.D was calculated. For the qualitative variables i.e. gender, depression and its severity, frequencies and percentages presented. Chi-square was applied, keeping p value <0.05 as significant.

RESULTS

Participants were children 10-19 years of age. Period was 6 month. The total numbers (n) of participants were 400.

Gender Distribution: Among the participants, 178 (44.5%) were males where as 222 (55.5%) were females (Table 1).

KADS scores: The mean KADS score was 4.35 ± S.D 2.530 with a score range of 10-19 years, (Table 2).

Frequency of Depression: Among the (n=400) participants, depression was present in 48(12%) while absent in 352 (88%). (Table 3)

Different Grades of Depression: Among the participants 352(88.0%) had no depression, 23(5.8%) had mild depression, 20(5.0%) had moderate depression and 5(1.3%) had severe depression. (Table 4).

Table No.1: Showing the gender distribution of the participants.

Gender	Frequency	Percentage
Male	178	44.5%
Female	222	55.5%

Table No.2: Mean KADS score

KADS Score			
Minimum	Maximum	Mean	Std.Deviation
2	15	4.25	2.057

Table No.3: Showing the frequency of depression amongst the adolescents

Depression	Frequency	Percentage
Present	48	12%
Absent	352	88%

Table No.4: Showing frequency of different grades of severity of depression

severity of depression	Frequency	Percentage
Mild	23	5.8%
Moderate	20	5%
Severe	5	1.3%

Table No.5: Chi-square test to test the association of age with severity of depression (p-value less than 0.05 considered statistically significant)

Age groups of patients	Severity of depression				Total	P-value
	Mild	Moderate	Severe	No depression		
10-12 years	1	3	0	80	84	
13-15 years	2	2	1	165	170	
16-18 years	16	10	2	86	114	
>18 years	4	5	2	21	32	
Total	23	20	5	352	400	0.000

Chi-square Analysis to associate age with Depression Severity: Chi-square test reveals p-value of 0.001 i.e. <0.05 hence a statistically significant association exists between age and severity of depression. (Table 5)

Chi-square Analysis to associate Gender with depression severity: Chi-square test reveals p-value of 0.000 i.e. <0.05 hence a statistically significant association exists between gender and severity of depression. (Table 6)

Table No.6: Chi-square test to test the association of gender with severity of depression (p-value less than 0.05 considered statistically significant)

Gender of patients	Severity of depression				Total	P-value
	Mild	Mode-rate	Severe	No depre-ssion		
Male	10	8	3	157	178	
Females	13	12	4	165	222	0.000
Total	23	20	5	352	400	

DISCUSSION

Depression is a debilitating kind of mental illness which carries a significant burden in terms of social, educational, interpersonal, economic and impaired future developmental outcomes and creates problems for many youngsters throughout childhood, adolescence and beyond. There is lack of confirmatory studies concerning the main contributing factors and further studies regarding the most suitable treatment for each age group are still needed. Understanding and recognizing the early signs of depression, as well as the treatment and prevention, helps to reduce the global burden. Families and caregivers are in a unique position to provide interventions, Promotion of a positive family environment, healthy lifestyles can reduce the likelihood of depression in their children. Mental health is as equally important as the physical health and child psychiatric services are available only in big cities of Pakistan covering only 30% of the total population. There are several causes that may contribute to the mental health problems in Pakistan, including interfamily marriages, high rates of birth injuries, economic decline and high rates of unemployment, fragmentation of the social and family system and loss of religious value[12]. The salient feature of the present study was to determine the frequency, age and gender distribution of psychiatric illnesses in children attending psychiatric clinic, their assessment, recognition, and treatment strategies.

CONCLUSION

Research is needed in understanding the pathogenesis of childhood mood disorders. Mental health morbidity is an important issue as seen in children attending the "Psychiatry Clinic" in a Pediatric OPD. Most common psychiatric problems found in children are conduct/ oppositional defiant disorders, ASD, ADHD, anxiety and mood disorders. Sensitization of parents, teachers and family physicians is required to enable them for playing their role in early recognition and interventions. There is need for further studies to rule out contributions of factors like cost effectiveness, course of illness, identification of risk factors, attitude towards treatment, adherence, compliance and neurobiological correlates.

Author's Contribution:
Concept & Design of Study: Shakeel Asif
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