



Depression in Younger Population in Faisal Abad, Pakistan

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ABSTRACT

Objective: Determining of the severity and frequency of depression among the adolescents of Faisal Abad.

Materials and Methods: The group sampling accumulated the data by using the systematic random sampling technique. KADS for Depressive Illness was used and thereafter analysing of data with the use of SPSS 18. In a group of 300 participants, depression prevalence is 10 % with men 122 (40.6 %) and women 178 (59.3 %) whereas 1.1 %, 4.7 % and 5.3 % have severe, moderate and mild level of depression respectively.

Conclusion: The results showed that the treatment plan should be determined by the clinician not limited to the assessment only, but it should be extended to the addressing of the risk factors as well.

Key Words: Depression, Prevalence, Severity.

INTRODUCTION

Depression can be referred as a psychiatric problem, which has negative impact on a person's thinking, feeling and actions (Nair, Paul & John 2004). It results in sadness feelings and loss of interest in daily activities. Due to depression, emotional and physical concerns may rise for a

person. The personal and professional life of a person may get affected (Chauhan, Lal & Nayak 2014).

The age of 10 to 24 years is accompanied by extensive growth and development. The health and safety of youngsters is susceptible to a variety of risk and protective factors in this age (Park, Kim & Jang 2016). Factors such as being bullied, drug addiction, life tragedies, violence, socio-demographics, sexual or physical abuse, feeling lonely and absence of parental supervision have been associated with depression among youngsters (Auerbach, Eberhart & Abela 2010). The depression among adolescents can lead to self-injuries, academic problems, lower income levels, risky behaviors, higher divorce and suicide rates. Almost 75 % of the adolescents are thought to attempt to for suicide in adulthood (Glied & Pine 2002).

In Pakistan, young population comprises of largest cohort. At present, there are twenty five million youngsters within age range of 15 to 24 in Pakistan (Kessler & Bromet 2013). The youth is considered important for economical, social, and political stability and development of a country. It constitutes the future leadership of Pakistan (Barroilhet et al. 2012). Many national programs have been established to address problems of youth such as education, malnutrition, child labor. A study has shown that 48.2% of adolescents have never gone to a school, whereas, 31% females and 66% adolescent males have witnessed physical abuse (Chen et al. 2013). It has been found that youngsters face higher level of social and interpersonal problems when they witness depression. Resultantly, they may develop temptation towards suicide. The adolescents who undergo depression encounter adjustment problems in later life (Auerbach et al. 2014).



The feelings of guilt makes an individual depressed and socially isolated. This is accompanied by drastic behaviors such as anger, suicidal temptations and obsession. Along with depression, other issues may arise such as drug abuse, criminal activity and violence (Fatiregun & Kumapayi 2014). In the last few years, suicide rate in adolescents have risen dramatically. However, youth depression is still ignored by majority of the people especially parents teachers and health care workers. The young people witness a life under dramatic changes with the need of making critical decisions about themselves (Uglesic et al. 2014). They are facing alteration towards adulthood and becoming responsible towards their community. If a youngster suffers from depression, it causes economic burden for himself, his family and the country (Kroenke, Spitzer & Williams 2001). In Pakistan, no study has been conducted to assess depression in youngsters, whereas, education and nutritional requirements have highly been addressed (Kaur et al. 2014).

The complete functionality and quality of life gets disturb with depression (which is a disorder with high disability rate). Depression rate ranges from 14 to 20 % in different studies and the result could be anxiety, conduct problem, school refusal, substance misuse, truancy, with criminal inclination among the adolescents and children (Sarwat, Ali & Ejaz 2009). The depressed patients have the mortality risk for suicide more than twenty times which is high as compared to population in general and also have the high risk of stroke and ischemic heart disease (Harrington 2012). This article has discussed in detail that the life quality may get affected and the burden on family and social life may increase due to disabling disorder of depression (Jayanthi & Thirunavukarasu 2015). Although treatment with remission is successful, disorder of depression lays significant pressure on patient. It is the main reason for being absent

from school, reduced functionality, increased impairment of the functions across social, family and academic domains in adolescents, children and adults (Sunitha & Gururaj 2014). The work is examining the course, prevalence, protective elements, risk elements, treatment and prevention plans for symptoms of depression in adolescence (Lepine & Briley 2011). The earlier studies investigated about epidemiology, aetiology, biological elements, environment elements, genetic elements, risk elements, management result, precipitating element, treatment of suicidal behaviour and depression in the adolescents (Kaminer, Connor & Curry 2007). In this age group, stress and serious events of life like friendship issues and bullying are probably relevant. Children of parents with depression have high risk of adjustment issue, depression, anxiety, and may result in family difficulty, separation, divorce, neglect, childhood loss at early stage, insecure attachment, sexual and physical abuse (Seguin et al. 2003). The aetiology of depression in adolescence may have connections with parenting. There are 3 key forms for treating the depression: electroconvulsive therapy, psychotherapy or counselling and medication of antidepressant (Kaur, Deepti & Lal 2014). The focus of the current study is on the comprehending the relationship existing between the depression and elements like the hormonal system, circadian rhythms, neuronal receptors and circuits, genetics, MRI during medication like selective serotonin, PET/SPECT scan, nor-epinephrine and dopamine reuptake blockers are the treatment's backbone (Rani 2010). There are numerous socio-demographic elements having part in the pathogenesis of depression which includes problems in role transitions for example marital disruption, low education, difficulties in employment, child bearing, persistence, earning at low level, severity of secondary disorder and high risk of death because of suicide and physical disorder (Sabate 2004). Depression of disorder was ranked as third main reason responsible for

YLDs in women 13.4 % and in men 8.3 % and also foretold as bad result for the other co-morbidities (Avenevoli et al. 2015). There is increased level of co-morbidities in the adolescents and children with major disorders of depression like disorder of anxiety, oppositional defiant disorder/conduct disorder, attention deficit hyperactive disorder and misuse of substance such as alcohol, benzodiazepines, cannabis, cocaine and opioids (Ferrari et al. 2013). The current research will show the future strategies with regard to the status of health of adolescents and a child and can perform a pivotal role in planning and deciding the type of mental health services, recognition of causes and risk elements, depression prevalence, rehabilitation and intervention services needed for psychological health and medical (Cook, Peterson & Sheldon 2009).

MATERIALS AND METHODS:

The current research was performed in different hospitals of Faisal Abad, Pakistan. The research is in descriptive nature as cross-sectional study. The duration of the research was for six months starting from July 2017 to Feb 2018. The calculation of the sample size was made according to World Health Organisation. The size of the sample was 300 participants, level of confidence was 95%, precision was 1.85%, and population proportion was 3.7%. The used technique for sample was consecutive non-probability. The criterion for inclusion was;

1. Patients with age ranging from 10 to 19 years irrespective of the gender with any or mixture of the following; school performance poor, irritability, disturbance of behaviour, disturbed appetite and sleep for 1 week.
2. The consent was taken from the guardian with regard to the participation in the study.

Exclusion criteria:

The patients who are mentally retarded, had psychiatric disorder such as ADHD and inability to communicate.

Collection of data procedure:

Informed consent was received from those who qualify the criteria of inclusion, after having the approval from the ethic committee of the hospital. The earlier designed Performa was handed over to the entrants of the study and all the required information like age, education, and gender was collected. The depression was screened in the adolescents by using the Kutcher Adolescent Depression Scale (KADS). The patients having illness of depression were examined for gravity of the depression with the use of ICD10 depression criterion. Thereafter, the Statistical Program for Social Sciences (SPSS) version 18 was used for analysing data. The calculation of quantitative variables such as age, ICD10, KADS, Mean \pm S.D. was made. The qualitative variable such as depression and its severity, sex, percentages and frequencies were presented. Keeping the p value at 0.05, chi square was used.

The Patient Health Questionnaire (PHQ-9) was utilized to evaluate depression level in the participants. The PHQ-9 consists of nine items designed to assess depression. The 4 point scale was used to rate each item ranging like 0 for never, 1 for several days, 2 for more than half the time and 3 for nearly every day. The cut off score for this questionnaire was 9 and the scores ranged from 0 to 27. This questionnaire had specificity of 88 % and sensitivity of 88 % for detection of depression.

RESULTS

The group was comprised of 300 children age ranging from 10 to 19 years and its duration was six months.

Gender Distribution: There were 122 (40.6 %) were men and 178 (59.3 %) were women in the group (Table 1).

Table 1: Gender distribution

Gender	Frequency	Percentage
Male	122	40.6
Female	178	59.3

KADS Scores: Between the age of 10 to 19 years the mean KADS score was $4.17 \pm S.D 2.445$ (Table 2).

Table 2: Mean KADS score

KADS Score			
Min	Max	Mean	Std. Dev
2	15	4.17	2.445

Depression Frequency: In the group of 300 entrants, 30 (10 %) participants had depression whereas 270 (90 %) did not have (Table 3).

Table 3: Distribution of depression

Depression	Frequency	Percentage
Present	30	10
Absent	270	90

Sr. No.	PHQ	Not at all Mean (SD)	Several days Mean (SD)	More than half a day Mean (SD)	Nearly every day Mean (SD)
1	Little interest or pleasure in doing things	59	82	94	65
2	Feeling down, depressed or hopeless	66	81	34	119
3	Trouble falling or staying asleep or sleeping too much	84	91	55	70
4	Feeling tired or having little energy	74	64	86	76
5	Poor appetite or over eating	55	75	62	108
6	Feeling bad about yourself-or that you are a failure or have let yourself or your family down	95	66	42	97
7	Trouble concentrating on things, such as reading the newspaper or watching television	63	83	86	68
8	Moving or speaking so slowly that other people could have noticed? Or the opposite being so fidgety or restless that you have been moving around a lot more than usual	53	66	75	106
9	Thoughts that you would be better off dead or of hurting yourself in the some way	82	78	77	63

Different Grades of Depression: Depression was absent in 270 (90%) whereas 16 (5.3%) were with mild depression, 14 (4.7%) were with moderate depression and 3 (1.1%) were having severe depression (Table 4).

Table 4: Distribution of depression grades

Severity	Frequency	Percentage
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Mild	16	5.3
Moderate	14	4.7
Severe	3	1.1

Chi-square analysis to connect age with severity of depression: p-value is revealed by Chi-square test as 0.001 i.e. < 0.05 therefore statistically a considerable connection exists between depression severity and age (Table 5).

Table 5: Association of age with depression severity

Age groups	Severity of depression				Total	p value
	Mild	Moderate	Severe	Absent		
10-12 years	2	3	0	44	49	0.000
13-15 years	5	3	1	104	113	
16-18 years	8	6	2	87	103	
> 18 years	1	2	0	35	38	
Total	16	14	3	270	300	

Chi-square analysis to connect gender with severity of depression: p-value is revealed by Chi-square test as < 0.05 therefore statistically a considerable connection exists between depression severity and gender (Table 6).

Table 6: Association of gender with depression severity

Gender	Severity of depression				Total	p value
	Mild	Moderate	Severe	Absent		
Males	4	5	1	44	122	0.000
Females	12	9	2	104	178	
Total	16	14	3	270	300	

DISCUSSION

It has been indicated in previous researches that 5% of adolescents suffer from depression. Symptoms of depression include declined academic performance, continuous sadness and lack of interest in daily activities. These are highly prevalent among females of lower socioeconomic



class (Naqvi & Khan 2005). Depression is thought to exist if suicidal thoughts and lack of interest persist for almost two weeks. Depression is a mental problem that comprises of guilt, shame, fear, sadness, disturbed sleep and results in disruption of a person's ability to work properly (Pandian et al. 2017). In case of high severity, depression results in suicide temptation. The mental health of a society is indicated through presence of depression. Higher level of stress indicates higher chances of depression prevalence in a society. The overall prevalence of depression in people of Pakistan is estimated to be 34% (Nock et al. 2013).

Depression is a mental illness of debilitating type which carries a considerable weight in shape of educational, social, economic, interpersonal and weak/damaged future development results, and creates issues for many youths during adolescence, childhood and beyond that (Chen et al. 2013). International burden gets reduced with the help of identifying and understanding the early signs of depression, prevention and treatment. Care providers and families are in a special position to give interference, promote positive environment of the family, depression's likelihood can be reduced in children with health lifestyle (Auerbach, Eberhart & Abela 2010). The importance of mental health is equal physical health and only 30% population of the country residing in big cities are having the service of child psychiatric. There are numerous issues involved in causing mental health such as birth injuries at high rate, inter family marriages, unemployment at high rate, economic fall, shattering of family and social system and absence of religious values. The main feature of the current research was to fix the age, sex and frequency of psychiatric illness in children who are visiting clinic, their identification, evaluation and treatment plans (Ferrari et al. 2013).



Depression is recognized as an important cause of morbidity all over the world. It has been estimated that 10-44% of people residing in developing countries witness depression, whereas, 50.8 million population undergoes depression. There is a high need to design policies and implement them in order to decrease depression among Pakistani population. Although Pakistan has system of extended families, its residents suffer from depression despite the social support (Nair, Paul & John 2004).

CONCLUSION

Research is required for comprehending the pathogenesis of mood disorder of children. Children visiting the “Psychiatric Clinic” in Paediatric Outpatient Department have been found with mental health morbidity. The most frequent issues of psychiatric identified in children are ASD, anxiety, ADHD, conduct/oppositional defiant disorder, and mood disorder. Teacher, parents and family physicians are needed to be sensitised in order to make them able to perform their part in early identification and intervention. There is more study needed to prevent the contribution of element such as course of illness, attitude towards treatment, cost effectiveness, recognition of risk elements, compliance, adherence and neurobiological correlates.

Although the depression reported in present study is less than those reported for other countries, it is still an important percentage. By putting forward intensive efforts, depression can be reduced by health care professionals and government. For this purpose, health care professionals should get sensitized about depression, its associated risk factors and the methods of its treatment. It is required that more studies are carried out to assess depression on the basis of

various populations in Pakistan. Moreover, their risk factors are needed to be explored along with their association with depression and the methods to overcome them.

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