A study of Pattern of Psychiatric Disorders and Contributing Factors among Adolescents in a Psychiatric Hospital in Delhi

Vijay Kumar[1]

ABSTRACT

Introdction: Adolescence, a period of life between childhood and adulthood is very important for biological, social and psychological growth of human beings but often psychiatric problems appear during this period. The aim of the study was to see the pattern and the factors affecting the occurrence of psychiatric disorders in adolescents and to suggest measures for prevention

Material and Methods: The descriptive study was conducted in a psychiatric hospital in Delhi. The sample size comprised of 400 adolescents between 12 to 18 years. Confidential in depth interview method was used to collect data from the sample respondents and secondary data was taken from the case sheets.

Result: Relationship of boys with their father ($p < 0.05$), and girls with their mother ($p < 0.005$) has emerged as the most significant factor in the development of psychiatric disorders. Other factors found to be statistically significant in relation to psychiatric disorders were presence of worries about study ($p < 0.005$), and chronic illness in the family ($p < 0.05$). The factors most commonly stated which led to the precipitation of the syndrome were parental disharmony or single parent and poverty. 44.5 percent boys and 36.1 percent girls reported being worried all the time about studies and exams. 28 adolescents reported their father died due to accident / illness leading to a great degree of stress and strain.

Conclusion: The Mental Health Programme and the School Health Programme should jointly address the problem of adolescent mental health, by sensitizing parents, establishing Adolescent Health Clinics and training a cadre of school based counselors to identify, diagnose, counsel and refer needy adolescents in time so that the minor emotional disorders are prevented from turning into major chronic psychiatric disorders.

Keywords: Adolescents, psychiatric disorders, contributing factors, study and examination, family

INTRODUCTION

“Adolescence” has been described by WHO as “the period of transition from childhood to adulthood which is characterized by a) efforts to achieve goals related to the expectations of the mainstream culture b) by spurts of physical, mental, emotional and social development”(WHO, 1986). The group of young people, in the ages of 10 to 19 years, is special because they are undergoing the complex process of adolescence.

There is evidence that the ever changing period of adolescence with its attendant expectations and aspirations, places a lots of strain on the mental fabric of the adolescent and consequently on his mental health. The adolescent is sometimes not able to come unscathed from this physical, physiological, emotional and psychosocial roller coaster, giving rise to a pattern of mental ill health dependent on the forces acting at those times. Many young people are confronted by relatively serious problems connected with their home life, their school experiences, their work activities and their social relationships.[1-4] The factors most commonly cited are those which are likely to predispose toward adolescent maladjustment[5] and include the following: economic instability, parental discord, inadequacy of schooling opportunities, lack of understanding of adolescent psychology on the parts of parents and school faculties, unwholesome neighborhood or community conditions, inadequate recreational facilities, unpreparedness for vocational activities, and unintelligent job placement.

Considering the uniqueness of the adolescence phase; as usually characterized by uncertainties, mood swings and even indulgence in risk behaviors, their mental and emotional needs have to be addressed with openness, understanding and empathy. Often the mental and emotional problems may precipitate into psychiatric illness in adolescents such as: Schizophrenia, Anxiety reaction, Depression and Suicide, School phobia, Delinquent behavior, Obsessive – compulsive reaction, Autism[6] etc. The family and the community should be sensitized to the special needs of the adolescent and the need for intervention.

MATERIAL AND METHOD

The descriptive study was conducted at Institute of Human Behaviour and Allied Sciences (IHBAS) located at Dilshad Garden, Delhi. This is a major psychiatric hospital in Delhi dealing with only psychiatric and neurological patients. Adolescent patients of both sex attending the psychiatric hospital were taken for the study.

Sampling Methodology and Sample Size

The present study was done in adolescents in the age group 12 to 18 years. Since the beginning of adolescence is usually defined in physiological terms- its duration and cessation, in psychological terms[7] - these age ranges (12 to 18 years) can be taken to represent biological sexual maturation at one end and completion of secondary education at the other.

Owing to a wide range and to get a good sample size, anticipated population proportion (P) has been taken as 50% i.e.0.5 prevalence rate with confidence level of 95% (probability), margin of error (d) as 5% i.e. 0.05.

$$\text{Sample Size (N)} = \frac{(1.96)^2 * P(1-P)}{D^2}$$

$$= \frac{(1.96)^2 * 0.5\,(1-0.5)}{(0.05)^2} = 384$$

[1]Assistant Professor, Department of Community Medicine, Rama Medical College Hapur, India

Corresponding author: Vijay Kumar, Assistant Professor, Department of Community Medicine, Rama Medical College Hapur, India

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Eligible adolescent patients already diagnosed to have psychiatric disorders coming regularly for treatment for the last 6 months, were taken till the sample size of 400 adolescents was completed. Patients attending both OPD as well as indoor patients were selected.

Data collection

Primary data**:** A semi-structured interview schedule was used to gather data regarding the socio-demographic profile, and school / home peer groups, the diagnoses profile of each adolescent patient was crosschecked from the treating physician. Secondary data was obtained from case sheets. Adolescent patients and sometimes accompanying attendants were interviewed after obtaining verbal consent.

Classification used for Diagnoses

DSM III-R diagnosis was used to classify the psychiatric disorders in adolescents and according to Achenbach and Edelbrock,[8] these psychiatric disorders were subsumed under the following types of syndromes.

I. Internalizing syndromes:	**DSM-III-R (Diagnosis)**
Withdrawn	1) Avoidant Disorder
2) Somatic Complaints	2) Somatization Disorder
3) Anxious/ Depressed	3.a) Overanxious Disorders
	b) Major Depression
	c) Dysthymia
II. Externalizing Syndromes:	
1) Delinquent Behaviour	1) Group Delinquent Conduct Disorder
2) Aggressive Behaviour	2) Solitary Aggressive Conduct Disorder
III. Others:	
1) Social Problems	1) Behavioral Disorder
2) Thought Problems	2.a) Schizotypal Personality
3) Attention Problems	b) Psychotic Disorder
	3) Attention Deficit- Hyperactivity Disorder

Type of Syndrome	Number	Percent
I. Internalizing syndrome		
1) Withdrawn	18	4.5
2) Somatic	22	5.5
3) Anxious/Depressed	158	39.5
Total	198	49.5
II. Externalizing		
1) Delinquent	40	10
2) Aggressive	60	15.0
Total	100	25.0
III. Others		
1) Social	18	4.5
2) Thought	72	18
3) Attention	12	3.0
Total	102	25.5
Base total	400	100

Table-1: Pattern of psychiatric disorders in adolescents

STATISTICAL ANALYSIS

Statistical analysis was done to find out proportions as percentages and chi square test was done to find statistical association between the variables.

RESULTS

Majority 63% of both male and female adolescents were from the urban area and nearly two third were males. Sixty seven percent of both male and female patients were from nuclear families.

The anxious depressed syndrome was the commonest psychiatric problem 40 %.(Table 1).The externalizing syndrome and others were 25% each. The factors most commonly stated which led to the precipitation of the syndrome were parental disharmony and poverty (Figure-1).

Some sort of addiction in the family was also stressful. Thirty four percent had no obvious stress.

One hundred and ninety four (48.5 percent) adolescents were satisfied with their academic performance while 124 (31 percent) of adolescents were not satisfied with their academic performance and the rest had no comments. There were 46 percent boys and 51.3 percent girls in satisfied group but no significant association between the sex of the patients and academic satisfaction amongst the cases was noted ($p > 0.05$). The satisfaction of the parents with the academic performance of their children was the same as that of the patients themselves

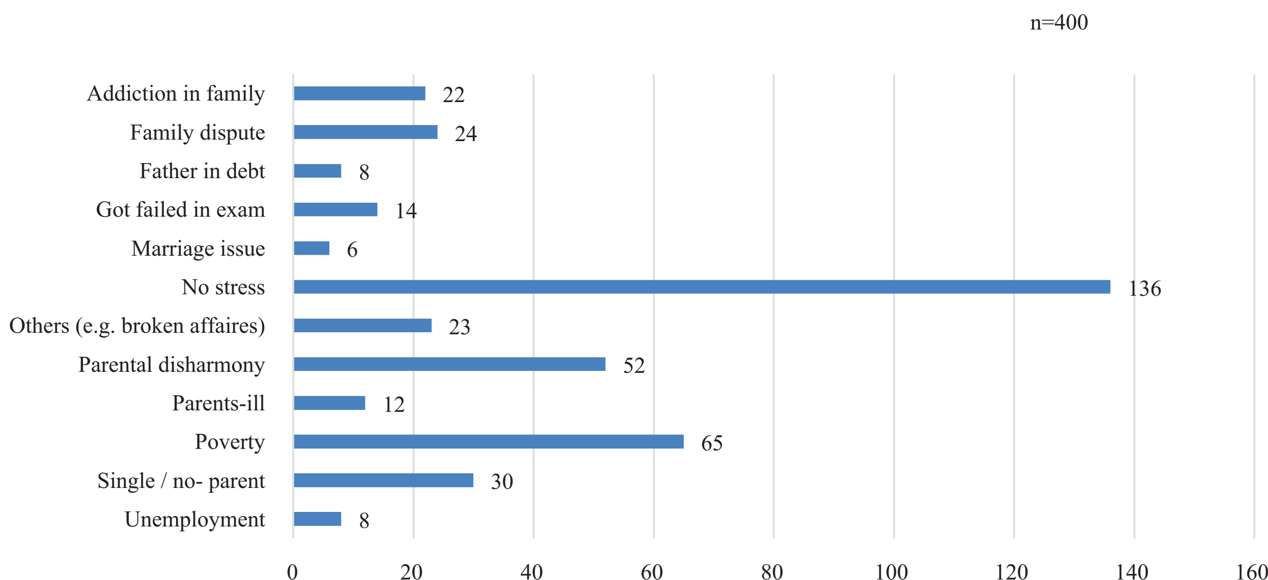

Figure-1: Psychiatric disorders and any stress at home

Sex of Adolescent Patients	Presence of Addiction in Father				Father absent		Total
	Yes		No				
	Number	Percent	Number	Percent	Number	Percent	
Male n= 256	62	24.2	176	68.7	18	7.0	256
Female n-=144	22	15.2	112	77.7	10	6.9	144
Total N=400	84	21	288	72	28	7	400
Chi square = 3.39, df = 1, p > 0.05, Not Significant							

Table-2: Sex wise distribution of patients and the presence of some addictions in the father

Addiction in Self	Adolescents	
	Number	Percent
Alcohol	22	5.5
Alcohol/Smoking	16	4.0
Alcohol/Drugs	8	2.0
Drugs	6	1.5
Smoking	12	3.0
Tobacco chewing	18	4.5
Nil	318	79.5
Total	400	100

Table-3: Psychiatric disorders and presence of addiction in adolescents

Type of Tragedy	Cases	
	Number	Percent
Father died due to Accident / Illness	28	48.2
Mother died due to Accident / Illness	8	13.7
Both parents died due to Accident	4	6.8
Father not staying together	6	10.3
Close relative died due to Accident / Illness	6	10.3
Met Accident by himself / herself	2	3.4
Property dispute within the family-leading frequent fights	3	5.1
Witnessed a murder	1	1.7
Total	58	100

Table-4: Distribution of adolescent patients and type of tragedy in the family

and had no statistical association (p>0.05). Exam time was a cause of worry for many adolescents and it was observed to be a significant factor (p<0.005) especially amongst boys with 44.5 percent boys and 36.1 percent girls reported being worried all the time.

Only 4.6 percent boys and 4.1 percent girls reported to have some problems at school that included either problem with teachers, classmates or simply school phobia. Similarly very few boys and girls 2.5% complained of problem with peer groups including broken affairs. The relationship with father and mother had a bearing on the occurrence of illness with statistical significance. 20% had poor relations with father especially boys (24%) compared to girls (12.5%). Similarly 30% girls and only 9% boys complained of poor relations with their mother, the association being significant (p< 0.001). The quality of relationship between the parents did not correlate significantly though boys were more affected than girls.

In 21% cases father had some addiction. Alcohol was the most common addiction followed by tobacco chewing. Fathers of male patients, 24% had some type of addiction while only 15% fathers of female patients were addicted (table 2). The sex of the patient and the presence of addiction in father did not play a role in precipitating the disease (p>0.05).

Majority of patients (79.5%) did not have any addiction. Maximum addiction was found to be of Alcohol in adolescents followed by tobacco chewing and smoking Addiction was found only in male adolescents.

33.5% male adolescents reported that they were victim of physical violence by their adult family members, boys more than girls (37% vs. 28%), mostly by their close relatives like father, mother, brother, uncle etc leading to stress and strain in their life. Reasons varied from indiscipline to shirking of duties at home.

Presence of chronic illness in the family had a significant role in precipitating psychiatric amongst illness adolescents. Boys were nearly twice as affected with anxiety and depression in relation to girls if some family member was chronically ill at home. Statistically, the association was significant (p < 0.05).

58 adolescent (14.5 percent) reported a recent tragedy in the family, which could have played a role in etiopathogenesis of psychiatric disorders.

Commonest cause of stress factor was early death of father and/or mother. Father not staying together and death of close relative was also contributing factors.

DISCUSSION

The population between 10-19 years comprises 21 percent of India's population. Psychiatric problems in this age group are distressing. They are an indication of the development of a mentally unhealthy adult. As India progresses and becomes more technologically advanced, problems of urbanization and westernization are cropping up. Stress has become a leading cause of mental ill health[9,10] It has emerged as a major precipitating factor for children as well adults.

This study was undertaken to find the pattern of psychiatric disorders among adolescents aged 12 to 18 years who were seeking treatment from a psychiatric hospital in Delhi. It was done to identify the pattern of psychiatric disorders and to understand the factors associated with this.

Age Wise Distribution of Patients

In this study, the frequency of adolescent's patients between 12 to 18 years ranged from 34 to 116 in each age group respectively. As the age advanced, number of patients also increased.[11,12] So in the age group 17 to 18 years, there was maximum number of patients i.e.116 (28 percent).

The pattern is similar to that reported by Cohen et al.[13] They

observed that in 10 to 20 years old, prevalence of psychiatric disorders increased in the 14-16 years old as compared to 10-13 years. According to them, this rise can be attributed to the post pubertal disorders in adolescents.
The results of Rutters Isle of Wight (1976)[14] study are similar to the present study. According to their observations, prevalence increases from age 10 to 14 years from 10.9 percent to 12.5 percent.

Relationship of socio-demographic and behavioral factors with psychiatric disorders

Psychiatric disorders present in an individual can be associated with certain socio-cultural factors. These factors if modified can lead to improvement in the mental health of the patients. Therefore it is important to understand them.

Psychiatric Disorders and Adolescent's Academic Performance

166 (41.5 percent) adolescents reported being worried all the time about the study. There was significant association between the sex of the patients and presence of worry ($p < 0.005$).
Sharma (2003)[15] observed that in our country, parents expect children to take their formal education very seriously. In some households adolescents are under stress to perform well. The tension is the highest in the board going classes- X and XII. Those who do not get the required percentage are made to feel dejected and incompetent by others. Disappointed students have been known to attempt suicide, run away from home or go into depression. Vanya (1989)[16] reported that low academic achievement lead to dissatisfaction and behavioural problems among 14 to 16 year old school students in Delhi.
Nagpal et al (1999)[17] reported that school students in Delhi were highly stressed due to academic burden. According to them, 50 percent of adolescents were suffering from emotional maladjustment. Nalini (1998)[18] and Rubin et al (1992)[19] also reported that lack of academic achievement was an important factor.
Chorghade (1998)[20] explained why academic dissatisfaction has become so common among the young population. According to him, in India, the current high technological age and industrial growth has led to a need for more education and training before placement for a job or entry into any profession. Large number of adolescent's population in the process has been pushed into a stage of uncertainty and a world of competition and new challenges.

Psychiatric Disorders and Relationship with Father

Majority of adolescents (73.0 percent) had a good relationship with their father, while 20.0 percent reported that they did not have a good relationship with their father. Quality of relationship with father and the sex of the patient were significantly associated.
This factor may play a role in genesis of psychiatric disorders. This fact is supported by various other studies. Palosaori et al (1996)[21] had observed that adolescents lack of closeness to their father is an important link to development of depression.
Christi et al (1993)[22] observed a similar trend in 12-17 years. She found that, lack of ability to communicate well with the father significantly increased the risk of development of depression for both boys and girls.
In this study, in the interview session with adolescents who were classified as clinical cases of depression, discord with their father featured prominently. Authoritarian fathers were not communicative with their siblings. As a result, adolescents did not feel close to them. The adolescents cited this lack of closeness to father as a reason for stress.

Psychiatric Disorders and Relationship with Mother

87.5 percent boys and 69 percent girls were having good relationship with mother while 9.3 percent boys and 30 percent girls did not had a satisfactory relationship with mother. Mother's love and their relationship with adolescents especially with girls were found to be significantly related to psychiatric disorders.

Psychiatric Disorders and Quality Of Relationship Between Parents

63.5 percent adolescents reported that their parents had a good relationship. 28.5 percent adolescents reported that the relations between their parents were bad.
The quality of relationship between parents has emerged as a highly significant factor in development of psychiatric disorders in adolescents.
The effect of a bad relationship between parents on the mental well-being of adolescents has been widely studied. Inter-parental conflict has been reported to be a factor significantly related to suicide among adolescents by Rubenstein et al (1998).[23] Monk et al (1994)[24] noted the state of mother's relationship with her spouse to be a significant factor for development of depressive symptoms in adolescents. Likewise, Hillevi et al (1992)[25] found that 16 year old adolescents, whose parents were divorced, had more somatic complaints and lower self-esteem than adolescents whose families were intact did.
On talking to the adolescents during the course of this study, some cited rows and discord as a reason for stress. Some adolescents felt that that frequent fighting between their parents was a great source of stress for them.

Psychiatric Disorders And Addictions in Father

During the interviews with the adolescents who had major depression or Dysthymia, some reported that their fathers addictions particularly to alcohol, was a constant cause of discord between their parents.
Family alcohol abuse was found to be disturbing the adolescent's social support system by Holden et al (1998).[26] Youngsters whose parent abused alcohol did not rely on their parent. They took more support from friends and siblings.

Psychiatric Disorders and Physical Violence by Family Members

33.5 percent adolescents reported that they were victim of physical violence by their adult family members. Mostly by their close relatives like father, mother, brother, uncle and so on. Sometimes leading to anxiety and depression. Occasionally they were beaten to maintain discipline at home.
There were 36.7 percents boys and 27.7 percent girls who reported physical violence by their family members.
Berger et al (1988)[27] has closely related physical punishment or abuse to development of psychiatric disorders. Furthermore, Kaplan et al (1998)[28] reported that physically abused children 12-18 years experienced more internalizing as well as externalizing psychiatric problems. Styron et al (1997)[29] cited physical abuse as an important factor in the development of depression and

disruptive behaviour in adolescents. Gladstone et al (1999)[30] reported the same. Flisher et al (1997)[31] had a similar finding that history of physical abuse was significantly associated with poor social competence, major depression, disruptive and anxiety disorders.

So, physical abuse or punishment by adult family members has emerged as a significant factor related to psychiatric disorders and it really warrants attention.

Psychiatric Disorders and Presence of Chronic Illness in Self and in the Family

7% adolescents reported that they were suffering from some chronic illness. But this was a factor associated with depression in these adolescents.

The chronic illnesses that adolescents described during the research were epilepsy, Polio, tuberculosis. Few girls were having gynecological problems.

Adolescents who reported that someone in the family were sick numbered 29.5 percent. There were 35.1 percent boys and 19.4 percent girls reported someone sick in the family. This could be a causative factor of Anxiety and Depression.

Presence of a chronic illness in family and the sex of the patient were significantly associated ($p < 0.05$). Suris et al (1996)[32] also noticed that 14-19 year old who were suffering from chronic illness had significantly higher number of emotional problems.

CONCLUSION

On the basis of this study, it is evident that psychiatric disorder is a serious health concern amongst adolescents. For the promotion of their positive mental health and prevention of their negative mental health, it is therefore necessary to understand and empirically evaluate their ideas, ideals, value system and the significant persons, ideologies and social institution affecting them or appealing to them.

One has to understand and accept their personality, their families, friends, relatives, teachers, neighbors as well as their thinking and interaction both at interpersonal as well as cognitive levels. A correct appraisal of these may help one to make a right management plan and to make them grow – up to face real challenges of life. Quality of life of adolescents and their families depends upon these factors and also upon how these interventions can be done at individual, family and community level.

Adolescence is the most vulnerable age for development (onset) of a psychiatric disorder. Some subtype of schizophrenia, bipolar mood disorders, depressive disorder and anxiety disorder are known to typically have onset in this age. Suspicion, consultation and institution of intervention as early as possible is of utmost importance to avoid chronicity so notoriously dreaded in the psychiatric disorders. Social stigma about seeking help from a mental health professional is a major stumbling block that needs to be focused as a top priority especially in case of adolescents. Apart from these established entities, there are psychological and emotional reactions related to body growth, sexual maturity, conflict with parents, scholastic pressure and career stress, moral and traditional values and so on. These common reactions only need an empathic listening and a supportive reassurance.

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