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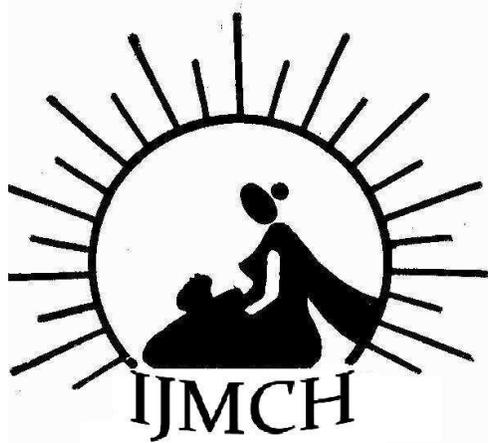
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What is the morbidity pattern of the adolescent patients coming to seek treatment in Psychiatry Dept?

Morbidity Pattern in Adolescents in Psychiatry Department of a Tertiary Care Facility

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ABSTRACT

Research Question: What is the morbidity pattern of the adolescent patients coming to seek treatment in Psychiatry Dept?

Objectives: To evaluate the epidemiological factors and pattern of mental disorders in adolescents.

Study Design: Hospital based cross-sectional study.

Setting: Dept. of Psychiatry, Govt. Medical College**,** Patiala.

Participants: 500 adolescents aged 10-19 interviewed in hospital.

Results: More of the morbid patients were from nuclear families. 6.4% were married among whom 2.4% were either divorced or separated. 13.2% patients had positive history of any family member having psychiatric problem. Only 21.2% had contacted a psychiatrist at first instance while 50.8% had visited traditional healers. The most common diagnosis was mood (affective) disorders followed by neurotic, stress-related and somatoform disorders. Next was mental retardation followed by schizophrenia and delusional disorders. The most common diagnosis among males was neurotic and stress related while among females was mood disorder. The difference of distribution of diagnosis among urban and rural, nuclear and joint families was statistically significant.

Conclusion: Patients reporting to the hospital with psychiatric disorders were urban males. Most of the patients were eldest in birth order and belonged to nuclear

families. Most of the patients had been to traditional healers. The most common diagnosis was mood disorders followed by neurotic stress related illness.

Key words: Adolescents, Mental Disorders, Morbidity.

INTRODUCTION

World Health Organization defines adolescents as young people aged 10-19 years. Presently, there are 1.2 billion adolescents, a fifth of world population, with four out of five living in developing countries. Twenty-one percent of India's population is in age group of 10-19 years. [1] In US, one in ten children suffer from mental disorders severe enough to cause some level of impairment. Psychiatric morbidity among adolescents in other countries had been reported in range of from 10-40 %.[2]

There are several challenges to meet the mental health needs of children and the adolescents. One major challenge is that children and adolescent mental health needs often go undetected. Mental health problems during childhood and adolescence are often difficult to recognize and diagnose because normal child development includes periods of rapid physical, mental and emotional change. Another challenge is changing perceptions around mental health and mental health services especially combating pervasive stigma attached to mental illness.[3] There is a natural reluctance to diagnose mental disorder in adolescents for fears of adverse effects of labeling and of stigmatizing young people by identifying them as psychiatric patients. Nevertheless, a transition point has to be recognized at which what might be regarded as 'normal' mental health problems become mental 'disorders', despite the fact that this is difficult to operationalize. Adolescent health problems are usually the result of their behavioural disorders. If the children entering the adolescent age are properly cared and groomed physically and emotionally at home and school, they enjoy good mental health.[4]

This clinic based study was attempted to explore the morbidity load of categorized mental disorders in the region. This study was undertaken in order to know the epidemiology, psychological and socio-cultural factors influencing the adolescents seeking mental health services due to psychiatric morbidity.

MATERIAL AND METHODS

This study was conducted in Department of Community Medicine and Department of Psychiatry, Rajindra Hosptial, Patiala which is attached to Government Medical College, Patiala.

The period of study was from August 2005 to July 2006. The first 500 adolescent patients in the age group of 10-19 years, who attended the psychiatric OPD and/or admitted in the psychiatric ward, were included. The study was conducted with the help of a pre-structured and pre-tested proforma comprising of three parts: socio-demographic questionnaire, psychiatric case history and psychological and socio-

cultural factors. Then International Classification of Diseases, ICD-10, was used for categorizing the diagnosis.

Before filling the proforma, written consent was obtained from the study subjects after explaining the purpose of study in vernacular language. In case of minors appropriate consent was obtained from the guardians.

RESULTS:

Table I: Age and Sexwise distribution

Age (in years)	Males	Females	Total	%	Cumulative Frequency
10	20	4	24	4.8	4.8
11	8	4	12	2.4	7.2
12	16	4	20	4.0	11.2
13	20	16	36	7.2	18.4
14	8	6	14	2.8	21.2
15	18	18	36	7.2	28.4
16	30	14	44	8.8	37.2
17	42	26	68	13.6	50.8
18	60	34	94	18.8	69.6
19	86	66	152	30.4	100
Total	308	192	500		

Out of 500 patients, 308 (61.6%) were males and 192 (38.4%) were females. The age distribution ranged from 10-19 years with the frequency of morbidity increasing with increase in age. The maximum frequency of 152 (30.4%) was seen in the age group of 19 years, while the mean age calculated for the distribution was 16.5 years and median age was 17 years.

Out of the total 500, 278 (55.6%) were urban residents while remaining 222 (44.4%) were from rural background. The maximum number of patients [300 out of 500(60%)] were eldest in their families, 124 (24.8%) were youngest while 76(15.2%) were of some other birth order.

Table II: Distribution of various psychiatric diagnoses according to ICD-10 in relation   to sex

Diagnosis according to 1CD-10	Males	Females	Total
Organic disorders F00-F09	-	-	-
Psychoactive substance use F10-F19	26(5.2%)	4(0.8%)	30(6.0%)
Schizophrenia & delusions F20-F29	48(9.6%)	14(2.8%)	62(12.4%)
Mood (affective) disorders F30-F39	62(12.4%)	62(12.4%)	124(24.8%)
Neurotic, stress related F40-F48	72(14.4%)	46(9.2%)	118(23.6%)
Behavioural syndromes F50-F59	4(0.8%)	6(1.2%)	10(2.0%)
Adult personality & behaviour disorders F60-F69	12(2.4%)	4(0.8%)	16(3.2%)
Mental retardation F70-F79	42(8.4%)	26(5.2%)	68(13.6%)
Disorders of psychological development F80-F89	2(0.4%)	2(0.4%)	4(0.8%)
Behaviour and emotional disorders (onset in childhood and adolescence) F90-F98	8(1.6%)	2(0.4%)	10(2.0%)
Unspecified mental disorders F99	-	-	-
Epilepsy G40	32(6.4%)	26(5.2%)	58(11.6%)
Total	308(61.6%)	192(38.4%)	500

{χ^2=27.46,   df= 9,   p value <0.001(HS)

Table III: Pattern of Psychiatric diagnosis according to Residence

Diagnosis	Urban	Rural	Total
Psychoactive substance use	16	14	30
Schizophrenia & delusions	30	32	62
Mood (affective) disorders	60	64	124
Neurotic, stress related	80	38	118
Behavioral syndromes	8	2	10
Adult personality & behaviour disorders	8	8	16
Mental retardation	34	34	68
Disorders of psychological development	4	0	4
Behaviour and emotional disorders (onset in childhood and adolescence)	6	4	10
Epilepsy	32	26	58
Total	278	222	500

{χ^2=17.85,   df= 9,   p value <0.05(S)}

Table IV: Psychiatric diagnosis according to Type of family

Diagnosis	Nuclear	Joint	Total
Psychoactive substance use	24	6	30
Schizophrenia & delusions	32	30	62
Mood (affective) disorders	54	70	124
Neurotic, stress related	64	54	118
Behavioral syndromes	6	4	10
Adult personality & behaviour disorders*	14	2	16
Mental retardation	34	34	68
Disorders of psychological development	2	2	4
Behaviour and emotional disorders	8	2	10
Epilepsy	36	22	58
Total	274	226	500

{χ^2=25.79,   df= 9,   p value <0.01(S)} *Onset in childhood and adolescence.

Table V: Prevalence of various risk factors

RISK FACTORS	NUMBER	%age
Non-congenial teacher student relation	116	23.2
Worry about studies	140	28.0
Not satisfied with academic performance	250	50.0
Worse relation with father	52	10.4
Worse relation with mother	48	9.6
No friends	184	36.8
H/o physical abuse/punishment at home	118	23.6
H/o sexual abuse	12	2.4
Addiction in parents	126	25.2
Addiction in self	62	12.4
Marital discord among parents	220	44.0
Loss of loved one	58	11.6
Lack of Interest	290	58.0
Introvert personality	332	66.4
Emotional behaviour	232	46.4
Frequent antisocial behaviour	110	22.0
Dependent in problem solving	390	78.0
No belief in God	92	18.4
No role model	282	56.4
Not satisfied with achievement	436	87.2
Passive lifestyle	358	71.6

DISCUSSION

Male preponderance was consistent with Anita *et al.*[2] Also more male patients were attending psychiatric clinics as indicated by Chowdhary.[5] This is unexpected as most studies world wide showed female predominance in psychiatric clinics (higher female vulnerability due to biological factors, stress and social pressure). Perhaps lack of proper information about mental illness and clinics, apathy of family members to get females treated and stigma about mental illness prevented many females from attending the clinics. Malhotra and Chaturvedi[6] reported 3:2 ratios between males and females which reflected more attention and care given to well being of a male child.

The urban population has better information regarding the health services available and also the most of tertiary hospitals are located in urban areas. Thus the access is better for urban population. Another reason could be that the mental problems are actually more in urban areas may be due to industrialization, modernization and small family structures. This may lead to coping difficulties in urban adolescents.

Most commonly affected was the eldest sibling as was also described by Anita *et al*.[2] This could be one of the facts that the eldest child is more vulnerable to parental coerciveness, over protection and strictness.

As per study by Singhal *et al*, [7] majority of the children belonged to unitary/nuclear family. This could be due to projection of tension and anxiety experienced by parents in a unitary set up into their own children.

Although the legal age of marriage is 18 years for females and 21 years for males. Our study showed that few of the adolescents were married before the marriageable age. There were 8.8% of the patients who were either married or divorced. This might contribute as a burden for adolescents to cope up with early responsibilities and thus contribute to as a risk factor in development or aggravation of the mental disorders.

Sourander[8] stated that adverse effects of parental psychiatric problems may be mediated by shared genes, shared environment, direct modeling, or children's exposure to parental hostility and marital discord.

The utilization of mental health services at the first instance was very less. People generally preferred to go to the traditional healers in whom they confide faith. It was only after worsening of the situation or after advice from some relatives or doctors that people took their children to psychiatry department. It was seen that most of the patients reported to psychiatry department after being suggested by doctors and relatives. Pal[9] in the study of 200 patients coming to psychiatry OPD and ward, found that 54% had consulted traditional healers at one stage or other and rest 46% did not go at all to traditional healers.

The most common diagnosis was mood disorders in 24.8% of patients followed by neurotic disorders in 23.6% patients. Next is mental retardation in 13.6% followed by schizophrenia in 12.4% patients. Then is epilepsy in 11.6% patients and mental and behavioral disorders due to psychoactive substance use in 6.0% patients. 3.2% patients had disorders of adult personality and behaviour. The proportion of behavioral syndromes associated with physiological disturbance, physical factors, behaviour and emotional disorders with onset usually occurring in childhood and adolescence was equal i.e. 2.0% in each. The remaining (0.8%) was contributed by disorders of psychological development. The most common diagnosis among males was neurotic stress related (14.4%) and among females was mood disorders (12.4%), while the least common diagnosis was disorders of psychological development, behaviour and emotional disorders (0.4%) among females and disorders of psychological development (0.4%) among males. The difference was statistically significant in males and females with p<0.001 and was highly significant.

Out of the total psychoactive substance users, 53.33% were in urban area and 46.66% were from rural area. In case of schizophrenia and mood disorders, 48.38% were urban and 51.61% were rural. For neurotic, stress related disorders, 67.79% were urban while 32.2% were rural. In behavioral syndromes, 80% were urban while 20% were rural. For adult personality and behavioral disorders there was equal distribution i.e. 50% urban and 50% rural and the same distribution was seen for mental retardation. Disorders of psychological development were exclusively i.e. 100% found in urban areas. Behaviour and emotional disorders (onset in childhood and adolescence) was 60% in urban and 40% in rural areas. Epilepsy was 55.17% in urban and 44.82% in rural areas. These differences were seen to be statistically significant with p <0.05.

In case of psychoactive substance use there were 80% who belonged to nuclear families and 20% belonged to joint families. In schizophrenia 51.61% were from nuclear and 48.38% were from joint families. In mood disorders 43.5% were from nuclear and 56.4% belonged to joint families. For neurotic and stress related, 54.23% were from nuclear and 45.76% were from joint families. For behavioral syndromes 60% were from nuclear and 40% from joint families. For adult personality and behaviour disorders, 87.5% were from nuclear and 12.5% were from joint families. For mental retardation the distribution was equal among nuclear and joint families i.e. 50% each. For disorders of psychological development again there was equal distribution. For behaviour and emotional disorders (onset in childhood and adolescence) 80% belonged to nuclear families and 20% belonged to joint families. In case of epilepsy the distribution was 62% from nuclear and 38% from joint families.

CONCLUSIONS AND RECOMMENDATIONS

Limitations of the study: The present study had few limitations. There was no denominator since it was not a population based study. Being a hospital based study, it addressed only to those problems of adolescents which were severe enough to seek referral. Many of the mild mental disorders for which parents did not seek treatment remained hidden. Also being a hospital study, it was not representative of the general population. As it was a cross-sectional study so the response to treatment was not checked. Nevertheless, the study brings out the common disorders which are encountered in the hospital and if diagnosed in the early stages in the population can help us to facilitate promotive, preventive, curative and rehabilitative measures.

The high morbidity seen seems to suggest much scope in all the three levels of prevention.

At the level of primary prevention we can do adolescent counseling, setting up of parent guidance clinics, workshops for parents, starting school counseling programs, extra curricular activities and public health efforts aimed at prevention of substance disorders.

Secondary prevention includes concept of mental health literacy to prevent stigma, discrimination and neglect of patients so as to scale up the utilization of available

mental health services. Psychiatry as a subject in the undergraduate curriculum should be given more importance. Psychiatric check up among schools and screening programs need to be started. The National Mental Health Program (1982) and The District Mental Health Program (1996) need to be strengthened. Designated centers at a state level to provide training and research facilities need to be established. Finally further research and training in the field of community mental health, substance abuse and child/adolescent psychiatric clinics should be given importance.

A small percentage of adolescents will require the tertiary intervention. At this level long term treatment to limit any disability, psycho-social and vocational rehabilitation and minimization of stress are the key strategies.

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