Research Paper Medical Science

Mental health problems among Adolescents and Its psychosocial correlates

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ABSTRACT

Psychiatric problems in children are rising and there is limited data on childhood mental disorders and mental health needs in India. This study was conducted from four different schools as a cross sectional study among adolescents of 10 to 17 years of age with the objectives of eliciting the burden of the mental health problems and the risk factors associated with it. The study was conducted in Royapet area during June and July 2012 using PSC Y questionnaire. A total of 478 students were included in the study and the results showed the prevalence of 67 (14%) of the study population. The mental health problem in this study was associated with female sex, less age, higher socio economic status, unhealthy home environment (parents fighting, parental abuse), sibling rivalry, unhealthy school environment (fight with friends) and the type of family, single parent were not associated with the mental problems.

Keywords: Adolescents, psychosocial correlates, mental health problems, attention problem, internalizing problems, externalizing problems, suicidality

INTRODUCTION

Mental health is not mere absence of mental illness. A sound mind in a sound body has been recognized as a social ideal for many centuries. Mental health is thus the balanced development individual's personality and emotional attitudes which enable him to live harmoniously with his society. Mental health problems are difficult to define. The term covers a wide range of problems, from the worries and concerns of everyday life, to severe and debilitating disorders such as depression. These problems become a cause for concern when they severely affect the individual's ability to function on a day-to-day basis. It is often not easy to distinguish between normal and abnormal behavior; the boundaries are not clear cut, and different social and cultural customs and habits influence the behavior. World Health Organization expert committee observed that mental health is influenced by both biological and social factors. The biological factors includes some key points in the life cycle of human beings in the view of mental health like prenatal period, first five years of life, school going age, adolescence and old age. Out of all these the adolescence stage is most crucial and this transition is often a stormy and fraught with dangers to mental health, manifested in the form of mental ill health. The social and environmental factors associated with mental ill health at this age comprise emotional stress, frustration, broken homes, poverty, industrialization, urbanization, changing family structure, rejection, neglect etc.,

Many children and adolescents have mental health problems that interfere with their normal development and daily life activities. Some mental health problems are mild, while others are more severe. Some mental health problems last for only short periods of time, while others, potentially, last a lifetime. From the early 1960s, there have been efforts at conducting epidemiological studies in community, clinic and school settings. Prevalence of mental disorders among children has been reported to be 14 to 20% in various studies1. According to World Health Report (2000), 20% of children and adolescents suffer from a disabling mental illness worldwide2. The issue of childhood psychiatric morbidity is more serious in middle and low income countries because these countries have a much larger proportion of child and adolescent population, poorer infrastructure and resources to deal with this problem. Adding to this, many such factors like poverty, broken homes, neglect, sexual and physical abuse, discontinuous relationships, which are becoming more common because of rapid urbanization and industrialization have an impact on the mental health of children and adolescents. So this study was conducted with the intention of identifying the burden of mental health problems among the school going children and adolescents and its associated risk factors.

AIMS AND OBJECTIVES

1. To assess the burden of mental health problems among adolescents between 10 to 17 years
2. To find out the psycho social correlates that determine the mental health disorders
3. To counsel the parents, and adolescents about the mental health disorders
4. To refer the parents and adolescents to psychiatrist for further follow up and management.

MATERIAL S AND METHODS

This study was conducted as a cross sectional study among school going adolescents of 10 to 17 years age group in randomly selected four schools from Royapet area during June and July 2012.

Sampling method and sample size: There are around 20 private and 5 government schools in the Royapet area of Chennai. The Royapet area was selected because this is the area where the higher, middle and lower socio economic status people reside and the study population from the schools will be representative of their family status. Out of 20 and 5 four schools were selected by simple random method. All students of 10 to 17 years age group in those four schools who were willing to participate in the study were administered with the

questionnaire after getting informed consent. The identity and the confidentiality about the details of the study participants were assured.

Study tool and data collection method: Data was collected by Pre formed and predetermined Questionnaire method by personal interview. The questionnaire has two parts, one with general information and on the factors like family history of mental illness, type of family, single parent, both parents working etc and the next part will be the 35 item pediatric symptom checklist – youth (PSC-Y)3 will be used to assess the mental disorders. The Pediatric Symptom Checklist for Youth (PSC-Y) is a 35-item self-completion screening questionnaire designed to detect a broad range of behavioral and psychosocial problems in youth. It includes questions that focus on internalizing, externalizing and attention problems. Two additional questions regarding suicidal thinking and attempts have been added to the PSC-Y. This questionnaire has the sensitivity 94% and specificity 88%. Scoring –each item on the PSC – Y is scored as Never = 0, Sometimes = 1, often = 2. Total score more than or equal to 30 is considered as positive. Statistical stool – The data will be entered in Epi-info 2008 version 3.5.1 software and the results will be expressed in percentage and association of factors will be analyzed by test of significance.

RESULTS AND ANALYSIS

AGE AND GENDER DISTRIBUTION OF THE STUDY

A total of 478 students of 10 to 17 years from four different schools were participated in the study and the mean age of the study population was 13.9. Ten to fourteen years age group constituted 65% (311) and the remaining 35% (167) were of 15 years and above. Majority were females 188 (39%) and 189 (39.5%) were belonged to sixth, seventh and eighth standard students.

TYPE OF FAMILY AND PARENT RELATED FACTORS

Out of total study participants 371 (77.6%) were from nuclear family and the remaining 107 (22.4%) were from joint family. Among the study participants 39 (8.2%), of their parents were not living together. The reasons for not living together were death of the spouse; marital disharmony, polygamous relationships and some were unknown. Majority of the parents approach towards the mistakes of their children were by advise 210 (44%) and scolding the children is 164 (34.3%). Twenty percentage (164) study participants said that their parents approach them by friendly way. Some of the parents 84 (17.6%) abuse the children for various reasons regarding studies, for even small mistakes, spending time with friends etc. About 151 (31.6%) of the parents fight among themselves frequently which disturbs the children.

SIBLING RELATED FACTORS

About 57 (11.9%) of the study participants were single children with no siblings. Among study participants those who have siblings, many of them 149 (31.2%) feel that their parents and other family members are giving more importance to their siblings than to them. Mostly there exist some fight 319 (66.7%) between the siblings in the home. Even though they fight with the siblings, many of them 267 (56%) answered that their siblings care them when they come across any problems.

TIME FACTOR (TIME SPENT WITH PARENTS, SIBLINGS, FRIENDS AND IN SPORTS ACTIVITY)

The time spent with the parents, siblings and friends were asked to the study participants, including the time spent with recreational and sports activity. The answers were classified into sufficient and insufficient. The time spent with parents was insufficient among 136 (28.5%) study subjects. Similarly the time spent with siblings and friends were insufficient among 99 (20.7%) and 178 (37.2%) respectively. The number of study participants who involve themselves in recreation or sports activity was 303 (63.4%).

FRIENDS AND PEER RELATED FACTORS

Majority of the study participants 131 (27.4%) do not have any recent fights with their friends but 131 (27.4%) had some fight with their friends. Reason for fights – majority was very silly reasons and remaining was due to misunderstanding, occupying the place, possessiveness etc., Fifty seven (11.9%) study participants gave the history of recent love disharmony or strained relationship.

PREVALENCE OF MENTAL HEALTH PROBLEMS

The overall prevalence of mental health problems was 67 (14%) out of total study participants that means this many study participants had scored 30 and above the PSY questionnaire. The other mental problems which were diagnosed by this screening tool was attention problems 77 (16%), internalizing problems 99 (20.7%), externalizing problems 34 (7%) and suicidality 124 (26%).

ANALYSIS

In this study 10 to 14 years group had more 52 (77.6%) mental health problem than higher age group and which is statistically significant (Chi square = 4.8 and P value – 0.029). This study showed that the female sex is significantly associated with mental health problems than male with the p value of 0.028 (Chi square = 4.83). In our study the increase in socio economic status was significantly associated with mental health problems and it showed highly significant (Chi square with Yates correction = 32.5 and P value = 0.00001).

PARENT RELATED FACTORS VS MENTAL HEALTH PROBLEMS

Parent's abuse was not associated with mental health problem in this study. Other parent related factors like parents approach towards mistakes (p = 0.5), single parent (p =0.09) were not significantly associated with the mental health problems. But the parents fighting among themselves frequently (unhealthy home environment) was significantly associated with mental health problems (Chi square = 5.35 and P value – 0.02).

TYPE OF FAMILY VS MENTAL HEALTH PROBLEMS

Mental health problem was present among 53 (79%) of adolescents belonging to Nuclear family when compared to 14 (21%) from Joint family. But it was not statistically significant (Chi square value = 0.025 and P value – 0.87).

SIBLINGS RELATED FACTORS VS MENTAL HEALTH PROBLEMS

For analysis of sibling related factor a total of 57 were excluded from analysis because these study participants are single. Study participants with recent fight with siblings were significantly associated with mental problems (Chi square with Yates correction = 9.939 and P value = 0.002). When the study subjects were asked about whether the siblings are given more importance than to them 149 (35%) replied as yes. But the mental health problems were not significantly (Chi square = 0.773 and P value – 0.37) associated with it. The behaviors of the siblings towards the study participants were analyzed and it was found to be statistically significant (Chi square = 6.575 and P value – 0.01). Fifty one percentage of the siblings irritate and fight with the study participants which was associated with mental problems.

FRIENDS RELATED FACTORS VS MENTAL HEALTH PROBEMS

Recent fight with friends was also associated with mental health problems in this study population (Chi square = 6.51 and P value – 0.01). The time spent with the friends was significantly associated with mental health problem. The time spent friends was insufficient among 35 (52.2%) with mental health problems which was statistically significantly (Chi square = 7.5 and P value – 0.006). The time spent with parents (p = 0.13), spent in recreational and sports activity (p = 0.22) and with siblings (p = 0.7) are not statistically significant.

DISCUSSION

In this study the prevalence of mental health problems were 67 (14%) whereas the study conducted among school going adolescents by Ahmad et al4 in Aligarh involving 390 students

using the same screening tool showed 82 (21.2%) were positive for PSC –Y which is more than our study. The study conducted by WHO in four developing countries (1981) including India in the state Haryana, showed prevalence of 21%5. A study by Indian Council of Medical Research (ICMR) in 2001 showed prevalence to be 13.4% in the age group 0-16 years6 study have revealed the prevalence rates to be 12.5% in 0-16 yrs community based sample from Bangalore7. But the studies from kerala8 showed little less prevalence 9.4% in 8-12 yrs olds compared to our study and 6.3% in 4-11 yrs old school children in Chandigarh.9 Our study corroborates with most of the other studies especially ICMR study 2001 and Bangalore study. This study population who showed positive for externalizing problems, internalizing problems, attention problems and suicidality were 34 (7%), 99 (20.7%), 77 (16%) and 124 (26%) respectively. The most comparable study is a recent survey from south India10 which also reported a relatively low prevalence of emotional and conduct disorders (externalizing problems) of 3.9% among 4- to 16-year-olds. Another study from south India11 reported a 3% prevalence of depression among school-attending adolescents (13–19 years). The socio demographic factors associated with mental health problems were less age (p value = 0.029), female sex (p value = 0.028) higher socioeconomic status (p value = 0.00001). This is similar to the study of Kessler et al showed that 50% of mental disorders have their onset before age 1512. The study conducted in USA on gender differences of mental disorders in terms of emotional disturbances showed higher levels in girls as com-pared to boys13. Most of the studies showed the higher rates of mental disorders among adolescents among lower socio economic status. Some of the psychiatric epidemiological surveys since the late 1930s have reported higher rates of mental illness in low-income communities14. In contrast to these studies there is a positive correlation between higher socio economic status and mental problems in this study, which may be attributed to nuclear family concept, isolation from others, changing lifestyle, both parents working, loneliness, no siblings or longing for love. The family and parent related factors were associated with mental health problems were repeated fight (p value = 0.02) among the parents and the parental abuse (p value = 0.07) towards the study participants. Similar results were shown in many studies in terms of violence in home, repeated quarrels among parents, other reasons resulting unhealthy environment in home has a major impact effect on mental health. One among the study done by Campbell JC et al elicited that witnessing violence in the home has a negative effect, since children may perceive the world as unsafe, adults as untrustworthy, and events as unpredictable or uncontrollable15.This violence may result in depression and externalizing disorders that cause secondary reactions by disrupting his/her ability to cope with the social world16. The other family and parent related factors which were not associated with mental health problems were single parent, parents approach towards mistakes and type of family. This is in contrast to a study Mental Health of Young People in Australia which states that Children and adolescents living in sole-parent, step/blended families were more likely to have mental health problems17.The fights with siblings (p = 0.002) and the way the siblings treat (0.01) the study participants were significantly associated with the mental health problems but giving importance to their siblings by the parents was not associated with the mental problems. The literature on conflict with parents during adolescence is extensive, but nothing is about arguments with siblings. This lack of information is surprising since much of the theoretical and clinical writing on the sibling relationship emphasized on sibling rivalry and competition. But in our study the fights with siblings and siblings' behavior towards them (siblings' rivalry) showed significantly association with mental health problems. It requires further and in depth studies to actually elicit the relationship of this factor. Fights with friends and time spent with friends were significantly associated with the mental problems. But the times spent in sports activity or with siblings or with parents were no statistically significant. This can be attributed to the fact that the adolescents have more emotionally dependence on their peer group (friends).

CONCLUSION

Poor mental health awareness, limited school and other community-based services combine to make adolescents an underserved population in our country. The combination of ignored psychosocial problems and the lack of mental health services in our country amplify the risk of precipitating the mental health problems. So there is a need to raise public awareness about the prevalence of these often "hidden" mental health problems, sensitizing the parents and teachers in identifying the problems and training the medical and paramedical workers in using the screening tools and techniques for identifying the mental problems.

Table – 1
Mental health problems

Outcome	Prevalence
Mental health problem (Scoring > or equal to 30)	67 (14%)
Attention problems	77 (16%)
Internalizing problems	99 (20.7%)
Externalizing problems	34 (7%)
Suicidality	124 (26%)

Table – 2 Distribution of study participants

Variables	Frequency (n = 478)	Percentage
Age group 11 to 14 years 15 and above	 311 167	 65.1% 34.9%
Gender Male Female	 290 188	 61% 39%
Socioeconomic status Class I Class II Class III Class IV Class V	 142 61 54 102 119	 29.7% 12.8% 11.3% 21.3% 24.9%
Type of family Nuclear Joint	 371 107	 77.6% 22.4%
Parental related factors		
Parent living together Yes No	 439 39	 91.8% 8.2%
Time spent with your parents Insufficient Sufficient	 136 342	 28.5% 71.5%
Parents abuse you Yes No	 84 394	 17.6% 82.4%
Do your parents fight often? Yes No	 151 327	 31.6% 68.4%
Sibling related factors (n = 421)	(n = 421)	
Time spent with your siblings Insufficient Sufficient	 97 324	 20.7% 67.8%
Siblings are given more importance than you? Yes No	 149 272	 31.2% 57%
Do you fight with siblings? Yes No	 319 102	 66.7% 21.3%
Friend related factors (n = 478)		
Time spent with your friends Insufficient Sufficient	 178 300	 37.2% 62.8%
Recent fight with friends Yes No	 131 347	 27.4% 72.6%
Recreational activities Yes No	 433 45	 90.5% 9.5%

Table – 3 Distribution of factors versus mental health problems

Variable	Sample size (N = 478)		Chi square and P value
	Mental health problems present	Mental health problems absent	
Age group 11 to 14 years 15 years and above	52 15	259 152	4.78 and 0.029 (S)
Gender Female Male	35 32	153 258	4.83 and 0.028 (S)
Type of family Joint Nuclear	14 53	93 318	0.0248 and 0.88
Socio economic status Class I Class II Class III Class IV and V	34 13 5 15	108 48 49 206	32.48 and 0.0000 (HS)
Parents fight often Yes No	13 54	138 273	4.71 and 0.0298 (S)
Parents abuse you Yes No	17 50	67 344	2.6765 and 0.101(NS)
Recent fight with friends Yes No	27 40	104 307	5.77 and 0.016 S)
Fight with siblings often (N= 421) Yes No	54 4	265 98	9.939 and 0.002 (HS)
Siblings are given more important than you(n=421) Yes No	24 34	125 238	0.773 and 0.37 (NS)
How siblings treat you?(n=421) Care and affection Irritate and fight	28 30	242 121	6.575 and 0.01 (S)
Time spent with friends? Insufficient Sufficient	35 32	143 268	7.5 and 0.006 (HS)
Recreational activities Insufficient Sufficient	29 38	146 265	1.1793 and 0.277 (NS)

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