# **Original Research Article**

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# A study on psychosocial problems among adolescents in urban slums in Kolkata, West Bengal

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#### **ABSTRACT**

**Background:** Puberty is the unique stage of growth and development associated with the social and psychological changes referred to as adolescence. The adolescent psychosocial development is the process through which the dependent child becomes a self reliant adult. A large number of adolescents suffer from psychosocial problems and many of these problems are of transient in nature and are often not even noticed. The objective of the study was to find out the prevalence of psychosocial problems among adolescents.

**Methods:** A cross-sectional study was conducted in ward no 58 of Tangra area of Kolkata. The study group comprised of 420 adolescents, selected by multistage stratified random sampling. Data was collected on a predesigned and pre-tested questionnaire by interviewing the adolescents and was subsequently analyzed by using suitable statistical package.

**Results:** Anxiety was maximum (34.76%) in adolescent boys whereas conduct disorder was found to be maximum (28.57%) in adolescent girls. Majority (35.62%) of late adolescent boys were attributed to substance abuse. Anxiety was found to be the commonest problem among adolescent males in all religions. Educational difficulties were maximum among Muslim adolescents. The problems per subject (with psycho-social problems) were more in adolescent boys (4.4) and girls (3.8) having joint family. None of the class I adolescent girls claimed to have any educational difficulties.

**Conclusions:** A holistic approach to underlying causes of psycho-social problems of adolescents should be undertaken. There is need of strengthening the existing "package" of services for adolescents in various initiatives and programmes.

**Keywords:** Psycho-social problems, Conduct disorders, Educational difficulties, Anxiety, Depression, Substance abuse

#### INTRODUCTION

Puberty is the unique stage of growth and development associated with the social and psychological changes referred to as adolescence. WHO defines adolescence both in terms of the age (spanning the ages between 10

and 19 years) and in terms of a phase of life marked by special attributes. These attributes include rapid physical growth and development; physical, social and psychological maturity, but not all at the same time; sexual maturity and the onset of sexual activity; experimentation; development of adult mental process

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and adult identity; transition from total socio-economic dependence to relative independence.<sup>1</sup>

We need to study the health problems of adolescents because they face significant problems and risk related to their healthy development. Adolescents have very special and distinct needs, which can no longer be overlooked. It is also essential to invest in adolescents, as they are the future of the country.

The adolescent psychosocial development is the process through which the dependent child becomes a self reliant adult. During the period of adolescence, a large number of children suffer from psychosocial problems at one time or the other during their development. Many of these problems are of transient in nature and are often not even noticed. The process of the

Studies on children of school age have tended to focus on nutritional and other health problems related to communicable diseases. School-age children may also suffer a variety of physical disabilities and psychosocial problems (emotional and behavioural), as well as learning disorders.

The report on Work Force Need in India (2001) documented that throughout the 20<sup>th</sup> century, many reports addressed the magnitude of the emotional, behavioral and developmental problems in the nation's children, adolescents and their families. All these psychosocial problems include conduct disorders, educational difficulties, depression, anxiety, substance abuse, psychosomatic disorders, delinquency, truancy, insomnia, fatigue, antisocial behaviours and low self esteem.<sup>4</sup>

As the psychosocial problems encompass a wide variety of disorders, prevalence of psychosocial problems also vary on the basis of the types of problems and screening tools used by the researchers.

#### **METHODS**

The present cross sectional study was conducted in ward no 58 of Tangra area of Kolkata, West Bengal comprised of adolescent girls and boys (10-19 years). The ward is having many slum areas. Total population of ward no 58 is 88465 as per 2011 census. Total male population is 46207 and female population is 42258. Worldwide more than 1.2 billion are adolescents, this indicates that roughly one in every six persons is an adolescent. About 21% of Indian population is adolescents (about 243 million). Thus the total population of adolescent in the ward 58 of Tangra are roughly 18,000.

The study was carried out for a period of one year (15<sup>th</sup> March 2017 to 14<sup>th</sup> March 2018). An adequate sample (210 adolescent boys and 210 adolescent girls) was drawn to carry out the present study. House to House survey was done and the requisite sample of 420 adolescents was drawn on the basis of proportionate

probability sampling technique (PPS). The sample of 420 adolescents was selected by the standard 30 cluster systematic random sampling technique (14 adolescents in each cluster). The instrument for data collection was selfadministered questionnaire which was divided in two parts. Part I related to socio-demographic information, part II was the standard tool to measure psychosocial problem (paediatric symptom checklist – youth report). The tool was pretested among 20 adolescents who met the similar characteristics of study samples and they were not included in the main study. The respondents were given full authority to withdraw their participation without any fear or clarification at any time during the investigation. Confidentiality had maintained throughout the study. Obtained data was used for research purpose only. Time taken for data collection was 25-30 minutes from each respondents. The questions were clearly read out and explained by the researcher to make it clear and easy for the respondents as well as for the completeness.

For the active support and participation, it was imperative to explain the aim of the study to the head of the families and the targets and consent was taken for the same. For the purpose of this study detailed information was collected on a pre-designed and pre-tested questionnaire. All the data were tabulated in Microsoft Excel 2007 and analyzed by using Statistical Package for the Social Sciences (SPSS) version 20.0 software for proportions and chi-square tests as test of significance and binomial logistic regression analysis.

## **RESULTS**

The study was conducted amongst the adolescents between 10-19 years of age in the Tangra area of Kolkata, West Bengal. A total of 420 adolescents (210 adolescent boys and 210 adolescent girls) were surveyed regarding their various psycho-social problems and the findings are as follows-

A total of 420 persons were interviewed and examined during the study period which revealed that majority (37.14%) belonged to 16-19 year age group. Majority were Hindus (76.90%) followed by Muslims (12.86%) and Christians (9.52%). Male and female were 50% each. Majority 42.86% were from lower middle followed by 20.71% from upper middle class according Modified Prasad socio-economic scale10 (based upon per capita monthly family income in Indian currency regularly updated as per consumer price index of India). 75% belonged to nuclear families and 25% from joint families (Table 1).

Table 2 shows that anxiety was found to be maximum (34.76%) in adolescent boys whereas conduct disorder was found to be maximum (51.43%) in adolescent girls. Depression, educational difficulties and substance abuse was found to be higher in adolescent boys. The difference between males and females with or without psycho-social

problems was found to be statistically significant. The overall problems per subject (with psycho-social

problems) were found to be 3.51 and were a bit high in males (3.66) as compared to females (3.32).

Table 1: Distribution of study sample according to socio-demographic factors.

Attributes		Frequency (N=420)	Percentage (%)
Age (in completed years)	10-13	110	26.19
	14-15	154	36.67
	16-19	156	37.14
Sex	Male	210	50.00
Sex	Female	210	50.00
	Illiterate	35	8.33
Literacy status	Up to primary	178	42.38
Literacy status	Secondary	165	39.29
	Higher secondary and above	42	10.00
Social class (modified Prasad scale)	VI (Below poverty line)	46	10.95
	V (poor)	37	8.81
	IV (lower middle)	180	42.86
	III (upper middle)	87	20.71
	II (upper)	53	12.62
	I (upper high)	17	4.05
Type of family	Nuclear	315	75.00
	Joint	105	25.00
Religion	Hindu	323	76.90
	Muslim	54	12.86
	Christian	40	9.52
	Others	3	0.71

Table 2: Distribution of adolescents according to their sex and psychosocial problems.

Psycho-social	Male (N=210)		Female (N=210)		Total (N=420)	
Problems *	No.	(%)	No.	(%)	No.	(%)
No problem	138	65.71	152	72.38	290	69.05
Conduct disorder	54	25.71	108	51.43	162	38.57
Educational difficulties	41	19.52	32	15.24	73	17.38
Substance abuse	34	16.19	12	5.71	46	10.95
Depression	65	30.95	41	19.52	106	25.24
Anxiety	73	34.76	51	24.29	124	29.52
Total						
Average problems/ subject	3.66		3.32		3.51	

<sup>\*</sup>Multiple problems; ( $\chi^2$ =4.94, df=1, p<0.05); significant.

Table 3: Distribution of adolescents according to their sex, age group and psychosocial problems.

Psycho-social problems*	10-13 (yrs)		14-15 (yrs)		16-19 (yrs)		Total	
	M: n=56 F: n=54		M: n=81 F: n=73		M: n=73 F: 83		M: n=210 F: n=210	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
No problem					•			·
Male	39	69.64	54	66.67	45	61.64	138	65.71
Female	41	75.93	50	68.49	60	72.29	151	71.90
Conduct disorder								
Male	15	26.79	17	20.99	23	31.51	55	26.19
Female	11	20.37	23	31.51	26	31.33	60	28.57

Continued.

Psycho-social problems*	10-13 (yrs)		14-15 (yrs)		16-19 (yrs)		Total	
	M: n=56		M: n=81		M: n=73		M: n=210	
	F: n=54		F: n=73		F:83		F: n=210	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Educational difficulties								
Male	15	26.79	16	19.75	13	17.81	44	20.95
Female	13	24.07	9	12.33	12	14.46	34	16.19
Substance abuse	-	•	•	•	•	·		·
Male	4	7.14	8	9.88	26	35.62	38	18.10
Female	1	1.85	4	5.48	9	10.84	14	6.67
Depression								
Male	16	28.57	24	29.63	29	39.73	69	32.86
Female	8	14.81	14	19.18	23	27.71	45	21.43
Anxiety	-	•	•	•	•	·		·
Male	18	32.14	27	33.33	27	36.99	72	34.29
Female	8	14.81	19	26.03	26	31.33	53	25.24
Total								
Male	68	24.46	92	33.09	118	42.44	278	100
Female	41	19.90	69	33.49	96	46.60	206	100
Average problems/subject								
Male	3.8		3.4		3.8		3.7	
Female	3.2		3.0		3.7		3.3	

<sup>\*</sup>Multiple problems,  $\chi^2$ =6.18, df = 2, p<0.05 significant.

Table 3 depicts that maximum males and females who had no psycho-social problems were early teens (69.64 and 75.93% respectively). Conduct disorder was found to be maximum in late adolescent boys (31.51%) and mid adolescent girls (31.51%). Early adolescent boys and girls had more educational difficulties as compared to other groups (26.79 and 24.07% respectively). Majority (35.62% and 10.84%) of late adolescent boys and girls were attributed to substance abuse. Depression was found to be maximum in late adolescent boys (39.63%) and girls (27.71%). Anxiety was also maximum in late adolescent boys (36.99%) and girls (31.33%). The problems per subject (with psycho-social problems) were found to be lowest in mid adolescent boys (3.4) and girls (3.0). The difference between different age groups when compared with or without psycho-social problems was found to be statistically significant.

### **DISCUSSION**

The present study revealed that out of 420 adolescents 30.95% had some or the other psychosocial problem. The problems were more in males (34.76%) as compared to females (51.43%). Anxiety was found to be maximum (34.76%) in adolescent boys whereas conduct disorder was found to be maximum (51.43%) in adolescent girls (Table 2). A lower prevalence of psycho-social problems in adolescents boys have been reported by Ahmad A, 2004 (17.9%), with prevalence of 25.5% in mid adolescents.<sup>5</sup>

Conduct disorder was found to be maximum in late adolescents i.e. 30.6% (Table 3). And it was commonest

among adolescent girls in all religions. According to National Mental Health association, India (2004), the conduct disorder is more common among boys than girls, with studies indicating that the rate among boys in the general population ranges from 6-16% while the rate among girls ranges from 2-9%.

Depression, anxiety, educational difficulties and substance abuse were found to be higher in adolescent boys while conduct disorder were more in females. The difference between males and females with or without psycho-social problems was found to be statistically significant. The average problems per subject (with psycho-social problems) were found to be 3.51 (Table 2).

In the present study early adolescent boys and girls had more educational difficulties as compared to other groups (26.79 and 24.07% respectively) (Table 3). A lower prevalence of 18.7% of educational difficulties had been reported by Kumar from Meerut.<sup>7</sup> A similar prevalence had been reported by Ahmad A (2004) in adolescent boys from Aligarh (17.9%). Educational difficulties were found to be maximum among Muslim adolescents.<sup>5</sup>

In the present study depression was found to be maximum in late adolescent boys (39.73%) and girls (27.71%) (Table 3), though a rising trend of depression with age was observed by Lewindohn et al in developed nations. However, Khurana et al has reported a comparatively lower prevalence of depression (8.0%) amongst the adolescent. Similar findings have been reported by Nair et al in their study among adolescents. He observed the prevalence of severe and extreme depression to be 9.5% and 1.7% respectively.

In the present study substance abuse was observed in 24.76% adolescent. The commonest one being tobacco chewing and smoking. A comparable finding had been reported by Kushwaha in 10-18 years adolescents (18.0%). Ahmad has also reported a prevalence of 20.9 percent in late adolescent boys of Aligarh.

#### **CONCLUSION**

There are significant psychosocial problems amongst the adolescents. Thus it is recommended that a holistic approach to underlying causes of psycho-social problems of adolescents should be undertaken. There is need of strengthening the existing "package" of services for adolescents in various initiatives and programmes.

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