



INFLUENCE OF SOCIODEMOGRAPHIC FACTORS ON THE PSYCHOSOCIAL WELL-BEING OF ADOLESCENT GIRLS: A CROSS-SECTIONAL STUDY

Sayli S. Bhagat	Assistant Professor, Department of Community Medicine, N.K.P. Salve Institute of Medical Sciences & Research Centre & Lata Mangeshkar Hospital, Nagpur, Maharashtra
Sanjeev V. Chincholikar*	Professor & Head, Department of Community Medicine, M.I.M.E.R. Medical College, Talegaon (D), Pune, Maharashtra*Corresponding Author
Swati S. Rajee	Assistant Professor, Department of Community Medicine, M.I.M.E.R. Medical College, Talegaon (D), Pune, Maharashtra

ABSTRACT Background: The term 'adolescence' has been defined as including those aged between 10 and 19 years. Psychosocial problems reflect behavioral problems such as conduct disorders, educational difficulties, substance abuse, hyperactivity etc. and emotional problems like anxiety, depression etc. This study was conducted to assess the psychosocial profile of adolescent girls and determine the association between socio-demographic factors and the psychosocial morbidities. Material and methods: A cross-sectional study was carried out in schools and junior colleges in rural area of Maharashtra. A structured questionnaire containing socio-demographic details along with a standardized strengths and difficulties questionnaire was used. Results: The proportion of psychosocial morbidities was found to be 19.29%. There was a statistically significant association of SDQ results with age and type of family. Conclusion: The prominent risk factors emerged from the study are age and nuclear family structure. Family environment plays a very important role in shaping up a child's personality.

KEYWORDS :

INTRODUCTION

Adolescence is a transitional period in the human life span, linking childhood and adulthood. The term 'adolescence' has been defined as including those aged between 10 and 19 years.¹ In India, adolescents (10-19 years) constitute 21.4 percent of the population, comprising one-fifth of the total population.² It is a critical period of life characterized by physiological, psychological and social development.³ This is the period of growth spurt where maximum changes can be observed in an individual.

Hall denoted this period as "Storm and Stress" and states that "conflict at this developmental stage is normal". Adolescence is characterized by rapid physical, emotional, social, moral and intellectual developments and changes.⁴ This transition period from childhood to adulthood creates a state of turmoil and stress that makes the adolescents vulnerable to various psychosocial problems.⁵ This is particularly among adolescent girls especially in rural India, who also face gender discrimination.⁶

Psychosocial problems reflect behavioral problems such as conduct disorders, educational difficulties, substance abuse, hyperactivity etc. and emotional problems like anxiety, depression etc. The emotional problems have been relatively neglected compared with the behavioral problems. This is because emotional problems cannot be easily detected by the parents or teachers.² The emotional and behavioural problems in childhood have serious negative consequences for a child's academic achievement and social development.⁷

Childhood psychosocial disorders exhibit as an iceberg phenomenon and are one of the hidden public health problems. So, the diagnosis of childhood psychosocial disorders is delayed. Many epidemiological surveys on school going children and adolescents have reported a wide variation (20-33%) in the prevalence of psychosocial problems. Individual studies illustrated the prevalence of psychosocial problems ranging between 10-40%.⁸

Globally, 1 out of 10 (20%) adolescents encounters at least one behavioral problem.⁴ Mental health among the adolescent population is a public health issue. In developing countries, such as Nepal and other South-Asian countries, the scenario of mental health care system is worse as compared to developed countries. In the Indian context, 14-40% of adolescent students are assumed to have mental health problems.⁴

Adolescent girls constitute a socially disadvantageous group in our society, especially in rural areas. Also, there is a stigma associated with psychological problems.⁸ The psychosocial morbidities among

adolescent girls show a rising trend in our society.⁹ This is an important but neglected aspect. This is because the health of adolescent girls determines the health of future generations. But the efforts to improve this situation have not optimally worked out. Also, there is a paucity of relevant studies involving adolescent girls.⁶

A very substantial lack of manpower trained in psychology, psychiatry, social sciences and related fields has been the real hurdle in this respect. Recent initiatives in the field of community mental health research have brought out simple rapid screening methods for identifying psychosocial morbidities. Strengths and difficulties questionnaire (SDQ) is an outstanding breakthrough which promises fruitful application in a whole range of situations.

Keeping this in view, the present study aims to assess the psychosocial profile of adolescent girls and determine the association between socio-demographic factors and the psychosocial morbidities.

MATERIAL AND METHODS

A cross-sectional study was carried out in schools and junior colleges in the rural area of Maharashtra. The study period was from January 2016 to August 2017. Permission was obtained from the Institutional Ethics Committee and the concerned school and college authorities. Adolescent girls studying in schools and junior colleges were considered as the reference population. Strengths and difficulties questionnaire (SDQ) used for the assessment of psychosocial morbidities is a screening tool for 4-17 years of age group. The self-report version of SDQ used in this study is standardized for 11-17 years.^{12,17,18} So, the study population consisted of adolescent girls between 11-17 years.

The prevalence of psychosocial morbidities reported by various studies is 20-50%.^{9,10,11,12} A pilot study was carried out which confirmed the proportion of psychosocial morbidities as 20%. The final sample size is 425.

All the adolescent girls studying in schools and colleges which provided education up to 10th and 12th standard were considered as the reference population. As there were no government schools or colleges providing education up to 10th standard or above, only private schools and colleges were represented in the data. Thus, reference population consisted of 17 schools and 3 junior colleges, all private. Out of these 17 schools and 3 junior colleges, 2 schools and 1 junior college were selected by simple random sampling. The strength of adolescent girls was approximately 150-200 in each school and college. All the adolescent girls from the selected schools/college were included in the study till the sample size was met.

A structured questionnaire was used which was pretested on a group of 25 adolescents. Along with this, a standardized strengths and difficulties questionnaire (SDQ) was used. The SDQ is an instrument that has been widely used to assess mental health problems, emotional and behavioral problems and strength among children and adolescents. The Strengths and Difficulties Questionnaire (SDQ) is one of the most commonly used instruments for screening psychopathology in children and adolescents. The self-rated SDQ possesses 25 items in the following 5-item scales: emotional and conduct problems, hyperactivity/ inattention, peer relationship problems, and pro-social behavior.19

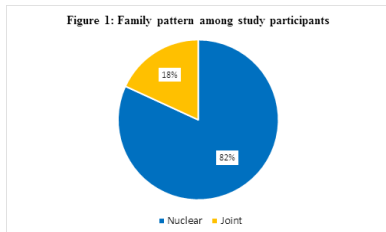
All the adolescent girls were informed about the purpose of the study. The assent of the participants as well as consent forms duly signed by the parents were collected. Doubts of the participants were cleared on the spot. The verbal responses of the younger participants were entered in the questionnaire by the researcher. A qualified psychiatrist from the department of psychiatry was consulted for the administration of SDQ.

Results

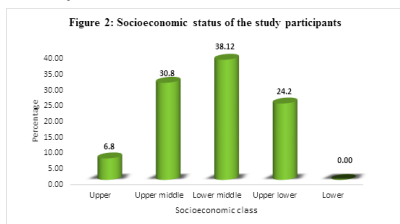
Table 1: Age distribution of study participants

Age in years	Number	Percentage
11-14	145	34.12
14-15	66	15.53
>15	214	50.35
Total	425	100

Table 1 shows that majority of the study participants were above 15 years of age followed by 11-14 years.



An enquiry was made regarding the family members and type of family. Figure 1 indicates that majority (82%) of the participants were from nuclear family.



Modified Kuppuswamy's Classification, the most widely used socioeconomic classification revealed that most of the study participants were from lower-middle-class families. There was no participant from the lower class.

Table 2: SDQ results among adolescent girls

SDQ	Number	Percentage
Normal	231	54.35
Borderline	112	26.36
Abnormal	82	19.29
Total	425	100

Table 2 shows that majority (54.3%) of the participants were in the 'normal' SDQ category while 26.35% were in the 'borderline' category. 19.29% of the participants were in the 'abnormal' SDQ category which indicates that these participants had a risk of psychiatric morbidities.

Table 3: Association of age with SDQ results

Age in years	Normal (%)	Borderline (%)	Abnormal (%)	Total
11-14	84 (59.15)	29 (20.42)	27 (20.42)	140
14-15	46 (60.52)	13 (17.10)	16 (22.36)	75
>15	107 (48.79)	69 (33.81)	34 (17.39)	210
Total	231	112	82	425

As seen from the above table, around 50-60% of the study participants

were in the 'normal' SDQ category in all the age groups. The proportion of participants in 'abnormal' SDQ category was higher in 14-15 years of age group.

After applying chi-square test, a statistically significant association was found between age of adolescent girls and SDQ results. ($\chi^2=11.9$, $p<0.05$)

It appears that SDQ results were affected by age of the participants. Thus, age may be considered as an important risk factor for determining psychosocial morbidities among adolescent girls.

Table 4: Association of type of family with SDQ results

Type of family	Normal (%)	Borderline (%)	Abnormal (%)	Total
Nuclear	180 (51.4)	99 (28.2)	71 (20.2)	350
Joint	51 (68)	13 (17.3)	11 (14.6)	75
Total	231	112	82	425

Table 4 reveals that the percentage of participants in 'abnormal' SDQ category was more in the nuclear families (20.2%) as compared to joint families (14.6%).

There was a statistically significant association between type of family and psychosocial morbidities ($\chi^2= 6.94$, $p<0.05$). It would mean that type of family is a crucial risk factor for development of psychosocial morbidities. In this study, psychosocial morbidities were found more in the nuclear families.

Table 5: Association of socioeconomic status with SDQ results: I

Socio-economic classes	Normal (%)	Borderline (%)	Abnormal (%)	Total
Upper	16 (55.17)	4 (13.79)	9 (31.03)	29
Upper middle	71 (54.19)	39 (29.77)	21 (16.03)	131
Lower middle	93 (57.40)	46 (28.39)	23 (14.19)	162
Upper lower	51 (49.51)	23 (22.33)	29 (28.15)	103
Lower	0	0	0	0
Total	231	112	82	425

Table 5 shows the SDQ results in various socio-economic classes. It can be observed that the percentage of participants with 'normal' SDQ score was more in the upper class. Owing to the unacceptably small value in one of the cells of the table, which would undermine the utility of chi-square test, the data for upper, upper-middle and lower-middle class and that for upper lower and lower class was pulled for statistical analysis and has been shown in table 6.

Table 6: Association of socioeconomic status with SDQ results: II

SES (Socioeconomic status)	Normal (%)	Borderline (%)	Abnormal (%)	Total
Class I (Upper, upper middle, lower middle)	180 (55.9)	89 (27.6)	53 (16.4)	322
Class II (Upper lower, lower)	51 (49.5)	23 (22.3)	29 (28.1)	103
Total	231	112	82	425

As seen from the above table, percentage of participants with 'abnormal' SDQ score was more in lower class. When SDQ results were correlated with socio-economic status of the participants, it was found that there was a significant difference between SDQ results in these 2 groups ($\chi^2=6.95$, $p<0.05$). It appears that occurrence of probable psychiatric morbidity i.e. SDQ positivity varies according to socio-economic status.

It would mean that as socio-economic status becomes better, SDQ

positivity decreases i.e. participants belonging to lower socioeconomic class may have more risk of getting psychiatric maladjustment than those in higher classes. This confirms that socio-economic status is one of the important factors in deciding the probable psychiatric morbidity among adolescent girls.

DISCUSSION

As revealed in table 2, the overall proportion of psychosocial morbidities among adolescent girls was 19.29% shown by the SDQ results. SDQ findings in the present study are quite comparable with other studies.^{13,14}

Bista B et al⁴ in their study found that psychosocial dysfunction was most common in 14–15 years of age group. Vaibhav Jain et al¹⁰ in their study found that psychosocial problems were maximum (53.49%) in adolescents belonging to nuclear families as compared to those from joint families. Various other studies have also reported similar results.^{2,8,15}

There are many studies which found a strong association between socioeconomic status and psychosocial dysfunction.^{2,8,14} Balgir R. S. et al¹⁴ in their study reported that adolescents in lower socioeconomic classes had higher psychiatric morbidity as compared to upper class in both rural and urban areas and this difference was statistically significant. They have reported that prevalence of psychosocial morbidities increased as the socio-economic status is lowered. Our findings are in accordance with these studies.

The proportion of psychosocial dysfunction rose with the rise in age group. Belonging to a nuclear family was found to be conducive to the generation of mental disorders in children, probably due to relative lack of attention paid to them in the absence of grandparents, uncles, aunts, etc. Thus, they might have been emotionally deprived.¹⁵ There is increased risk of psychosocial morbidities in lower socioeconomic class. This may be because the factors like malnutrition, illiteracy, ignorance and negligence in the childcare are associated with the socio-economic status.²

CONCLUSION

The prominent risk factors emerged from the study are age, nuclear family structure and lower socioeconomic status. The increased risk of psychosocial problems during the adolescent period may be because of lack of proper care and attention. Family environment plays a very important role in shaping up a child's personality. Thus, along with the children, counseling the family members is also of utmost importance so that they can help to contribute for a wholesome environment for the child to grow. Decreased awareness, illiteracy, lack of mental health services may be the important factors for increased risk of psychosocial problems in lower social class. There is a need to raise awareness about early diagnosis of these morbidities. Life skills education should be included as a part of student's curriculum which includes anger management, positive thinking, effective communication and methods to cope with the changing emotions and different life situations and crises. This will help to positively influence the immediate and future health of the adolescents.

Limitations:

1. 'Adolescence' is defined as the age group between 10-19 years. The strengths and difficulties questionnaire (SDQ) is a screening tool for 4-17 year old children and its self-report version is standardized for 11-17 years. So, in the present study, the study group consisted of adolescents between 11-17 years of age studying in schools and college.
2. The responses given by the study participants had to be relied upon.
3. The present study was conducted in schools and colleges of rural area of Maharashtra. So, the results can't be generalized.
4. As there were no government schools/colleges, only private schools and college were included in the study.
5. Community based studies on a larger representative sample of adolescents will be needed for confirming and quantifying the epidemiological determinants of psychosocial morbidities.

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