



Prevalence of Distress among College Going Students in Nagpur city: A cross sectional study

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Abstract

Introduction: Adolescents are most important asset and wealth of a nation. Mental health is the balance development of an individual's personality and emotional attitude. Adolescents with mental health morbidities are at risk for increased hospitalizations, recurrent depressions, psychosocial impairment, alcohol abuse, and antisocial behaviours as they grow up.

Methodology: A descriptive cross sectional study was carried out in one junior college and one senior college of Nagpur city during February 2017 to May 2017 to find out prevalence of distress among college going students.

Results: Out of the total study subjects, Majority of study subjects 125 (44.96%) were in the age group of 18 to 20 years with mean age of 18.12 years and standard deviation of 1.79 years. Total 155 (55.76%) of male and 123 (44.24%) female study subjects were included in the study. Prevalence of mild distress was present in 134 (48.20%) of study subjects while moderate among 39 (14.03%) and none were having severe distress.

Discussion: The prevalence of distress was found higher than studies conducted by other authors.

Conclusion: college going students are facing some problems leading to distress.

Recommendations: From results obtained by study, it is obvious that there is a need to take joint conscious actions

by parents, guardians, teachers and professionals to lessen the suffering caused by stress in many of these students.

Introduction

Today, 1.2 billion adolescents stand at the crossroads between childhood and the adult world. Around 243 million of them live in India. As they stand at these crossroads, so do societies at large – the crossroads between losing out on the potential of a generation or nurturing them to transform society. (1) Adolescents are the most important asset and wealth of a nation. Healthy adolescents make healthy nation. (2) In India, adolescents (10-19 years) constitute 21.4% of the population, comprising one fifth of the total population. (3)

Students in their adolescent period are the ones who are going through the transitional phase, which is an intermediate of childhood and adulthood. During the adolescent years, a lot of biological, physical, mental and emotional changes are happening, as well as the changes in responsibility and role. In order to stabilize these changes, the students are always confronted with problems and conflicts. For some students who are not capable of dealing with it, the changes will create stress and tension to them. If it is not dealt with in the early stages, the student may experience mental problems. (4)

Mental health is the balance development of an individual's personality and emotional attitude which

enables him to live harmoniously with his fellow men, mental health is not exclusively a matter of relation between persons, it is also a matter of relation of the individuals towards the community he lives in, towards the society of which the community is a part and towards to social institution which for a large part guides his life, determine his way of living, working, leisure and the way he earns and spend his money, the way he sees happiness, stability and security. (5)

Adolescent mental health may affect the teen's socialization, family relations, and performance at school, often with potentially serious long-term consequences. Adolescents with mental health morbidities are at risk for increased hospitalizations, recurrent depressions, psychosocial impairment, alcohol abuse, and antisocial behaviours as they grow up. (6)

The General Health Questionnaire (GHQ) was developed in England as a self-administered screening instrument to identify psychological distress for use general population surveys, or among general outpatients. (7) The 12-item General Health Questionnaire (GHQ-12) is a measure of psychological morbidity, intended to detect "psychiatric disorders...in community settings and non-psychiatric settings". It is widely used in both clinical practice, epidemiological research and psychological research. (8)

For the purpose of the present study, the GHQ-12 was chosen as a screening tool for distress faced by college students. It is surprising to note that there are only few studies about adolescent's distress in central India. Present study aims to find out prevalence of distress among college going students in Nagpur city of Maharashtra in central India.

Methodology

A Descriptive cross-sectional study of college going students in Nagpur city. One junior and one senior college was selected purposively for the same. Present study was

conducted from February 2017 to May 2017. All 11th, 12th year and three year graduation students were selected for this study because of this age group comprises of highest percentage among adolescent and young adults age group. For Data collection, the Principal of the colleges were contacted. He was informed about the purpose of the study, and apprised of the fact that anonymity and confidentiality of the respondents will be maintained in the study. A written permission and consent from the principal was obtained prior to conducting the study in school. This research protocol was cleared by Institutional Ethical Committee of GMC, Nagpur. Also from each study subject written consent was taken. In the study sample size was calculated on the basis of study conducted by Roy R et al in delhi, prevalence of distress which is 22% of the study population, allowing a relative error of 10% and for a confidence interval of 95%, using the Epi Info ver 7.02 software, the estimated minimum sample size was 264. Total 278 students were surveyed in campus. (5)

All students in the selected classes, present on the days of the survey, were eligible to participate, allowing for anonymous and voluntary participation. Few students were absent on the first day of data collection but again on the subsequent days of visit, we were able to contact few of them. A repeat visits were made for the absent students. The exclusion criteria were students of the class absent on the day of repeat visit of data collection and students who refused to participate in the study. Though we had kept these exclusions criteria but none of the students had refused to be part of this study.

The data was collected about demographic characteristics and GHQ 12 English version. Studies conducted in India and in world had found, GHQ-12 items is a very good scale to seek psychological health and distress. (4,9-11) Information regarding the various socio demographic

variables like class, gender, age, year of study, place of stay, father's education and occupation, mother's education and occupation, monthly income of the study subjects were collected. The GHQ 12 internal consistency reliability with chronbach alpha is ranging from 0.5-0.7. (9) In this GHQ 12, the score upto 15 were categorized in normal, 15 to 20 were in mild distress, 21-30 score were in moderate distress, up to > 30 suggests the study subject had severe distress. (5) Statistical analysis of the data was done on the Epi Info software ver 7.2.2.

Results

Out of the total study subjects, Majority of study subjects 125 (44.96%) were in the age group of 18 to 20 years with mean age of 18.12 years and standard deviation of 1.79 years. Total 155 (55.76%) of male and 123 (44.24%) female study subjects were included in the study. Ist year students 90 (32.37%) were highest followed by 12th year 54 (19.42%). Majority 216 (77.70%) were staying in the home. Father's education was maximum in graduate 158 (58.09%) while occupation was farm owner, shop owner or clerk in 133 (47.50%) study subjects. Mothers of 125 (45.13%) study subjects were educated upto graduation or postgraduation, while majority 229 (82.67%) of them were home-maker by occupation.

Table no. 1 various socio demographic variables.

Sr. No	Variables	Frequency	Percentage	
1	Age#	15 -- 17 yrs	119	42.81
		18 – 20 yrs	125	44.96
		21 – 22 yrs	34	12.23
2	Gender	Male	155	55.76
		Female	123	44.24
3	Year of study	11 th	49	17.63
		12 th	54	19.42
		Ist	90	32.37
		IInd	35	12.59
		IIIRD	50	17.99
4	Place of stay	Home	216	77.70
		Rent/PG	24	8.63
		Hostel	38	13.67
5	Father's education*	Illiterate	3	1.10
		Functional Literate/ Primary	0	0.00
		Middle school	3	1.10
		High school	37	13.60
		12 th pass	68	25.00
		Graduate	158	58.09
		Professional Degree	3	1.10
6	Mother's education**	Illiterate	3	1.08
		Functional Literate/ Primary	4	1.44
		Middle school	9	3.25
		High school	44	15.88
		12 th pass	91	32.85
		Graduate	125	45.13
		Professional Degree	1	0.36
7	Father's occupation*	Unemployed	6	2.21
		Unskilled	13	4.78
		Semi Skilled Worker	12	4.41
		Skilled Worker	188	69.12
		Clerk, Shop Owner, Farm Owner	21	7.72
		Semi Professional	10	3.68

		Professional	22	8.09
8	Mother's occupation**	Homemaker	229	82.67
		Unskilled	1	0.36
		Semi Skilled Worker	1	0.36
		Skilled Worker	20	7.22
		Clerk, Shop Owner, Farm Owner	0	0.00
		Semi Professional	3	1.08
		Professional	23	8.30

#mean±SD=18.12±1.79, Range: 15 - 22 yrs., *n=272, **n=277

Prevalence of mild distress was present in 134 (48.20%) of study subjects while moderate among 39 (14.03%) and none were having severe distress.

Table 2 Distribution of study subjects by GHQ-12 scale score.

Sr. No	Prevalence of distress	Frequency	Percentage
1	Normal (< 15)	105	37.77
2	Mild distress (15 - 20)	134	48.20
3	Moderate distress (21 - 30)	39	14.03
4	Severe distress (> 30)	0	0.00
Total		278	100.00

Discussion

The overall burden of disease among young people is not well understood, either globally or at the country level in many nations. (5) In this study distribution of age, gender, parent's education and occupation is consistent with existing population distribution in central India. In our study chronbach alpha was 0.64 suggestive of good internal consistency.

The mean age in our study was 18.12 years while Zulkefly et al had mean age of 20.87 years and SD of 1.61 years

(9), Montazeri A et al had mean age of 21.1 years (12), and Surwase K et al had 19.55 years. (13) In our study, male and female study participants distribution (M=55.76% Vs F=44.24%) was similar to study conducted by Panda P et al (M=59.54% Vs F=40.46%). (14)

In our study, majority of study subjects were in first year (32.37%). Surwase K et al had first year study subjects (35.79%) (13). The overall literacy status of the parents of our study population is less satisfying than the study conducted by Roy et al in Delhi as 93% of fathers were educated, whereas, in our study male literacy rate is 89%; again 85% mother is educated, while mothers in our study, 82.50 % were educated. (5)

The prevalence of distress (62.23%) in our study, was higher than study conducted by Roy R et al (22.00%), while Bansal V et al was having distress level around (15.20%).(5,6) Considering, mild level distress is required for human being, moderate level of distress (14.03%) is similar to study conducted by Bansal V et al (15.20)

Weakness: Being cross-sectional study design, it did not allow us to study the cause-and effect relationship of psychological distress. Therefore for future research, a prospective study is necessary to study the association of psychological morbidity with demographic variables, sources of stress and also need to study coping strategies.

Strengths: Present study is an attempt to bring to notice not just the fact that such morbidity is prevalent among

the student population. Also large study subjects sample were representative of adolescent population.

Conclusion

The mental health of college going student is important, many of them these have mental health problems and these problems are real and painful and can be leading serious morbidities. So we can conclude from this study that our college going students are facing some psychological problems leading to distress.

Recommendations

From results obtained by study, it is obvious that there is a need to take joint conscious actions by parents, guardians, teachers and professionals to lessen the suffering caused by stress in many of these students. There is need to raise community awareness about the prevalence of these often concealed emotional disorders in Indian adolescents.

Findings emphasize the need for an emergency, more detailed research on large samples with more validated scale to better understand stress and its causes, effects in college going students is recommended. Also we need to study, coping strategies adopted by these students for further understanding of disease process.

Conflict of interest: None.

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