

**A CROSS SECTIONAL STUDY ON PREVALENCE OF DISTRESS AMONG COLLEGE GOING STUDENTS IN GONDIA CITY****<sup>1</sup>Dr. Alka Kaware and <sup>2</sup>Dr. Hemant Adikane**<sup>1</sup>Assistant Professor, Seth G.S. Medical College & K.E.M. Hospital, Mumbai.<sup>2</sup>Assistant Professor, Department of Community Medicine, Government Medical College, Gondia-441610.**\*Corresponding Author: Dr. Hemant Adikane**

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**ABSTRACT**

**Introduction:** 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 Government Poly-technique College, Gondia during February 2018 to May 2018 to find out prevalence of distress among college going students. **Results:** Out of the total study subjects, Majority of study subjects 262 (68.59%) were in the age group of 18 to 20 years with mean age of 18.18 years and standard deviation of 1.30 years. Total 216 (56.54%) of male and 166 (43.46%) female study subjects were included in the study. Prevalence of mild distress was present in 184 (48.43%) of study subjects while moderate among 61 (15.97%) 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.

**KEYWORDS:** Distress, College students, GHQ – 12, Adolescents, Gondia.**INTRODUCTION**

Today, 1.2 billion adolescents stand at the crossroads between childhood and the adult world. Around 243 million of them live in India.<sup>[1]</sup> In India, adolescents (10-19 years) constitute 21.4% of the population, comprising one fifth of the total population. Adolescents suffer from psychosocial problems at one time or the other during their development. Many of these problems are of transient nature and are often not noticed.<sup>[2]</sup> Mental Health is vital for the growth and productivity of every society and for a healthy and happy life. The definition of health includes mental health along with it's physical, emotional, social and spiritual components.<sup>[3]</sup>

College going students in their teens are the ones who are going through the transitional phase, which is an intermediate of childhood and adulthood. During these 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.<sup>[4]</sup>

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 one 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.<sup>[5]</sup>

Adolescent with psychological morbidity may affect the teen's socialization, family relations, and performance at school, often with potentially serious long-term consequences. These are at risk for increased hospitalizations, recurrent depressions, psychosocial impairment, alcohol abuse, and antisocial behaviours as they grow up. Of course, the most devastating outcome of concern for adolescent depression is suicide, the third leading cause of death among older adolescents.<sup>[6]</sup>

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 Gondia city of eastern Maharashtra in central India.

## METHODOLOGY

### Setting

Present study of college going students was conducted in Gondia city. Gondia district is socially disadvantaged because of left extremist activities and major proportion of tribal and rural population. This study was conducted from February 2018 to May 2018.

### Design

Considering aim of the study, cross sectional study design was used.

### Population

All the college going adolescents and young adults in the gondia city was considered for the study. These students were selected for this study because this age group comprises of highest percentage among adolescent and young adults age group.

### Sampling procedure/technique

A complete list of colleges were obtained from education department. With the help of simple random sampling procedure, Government Poly-Technique College in gondia was selected.

### Sample size

In the study sample size was calculated on the basis of study conducted by Surwase K et al in nagpur, prevalence of distress which is 62.23% 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 361. Additional 10% nonresponse rate was added. Total 400 students were surveyed in campus setting. Out of these, 382 samples were taken into final analysis.

### Data measure

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.<sup>[4,7,9]</sup> 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.<sup>[8]</sup> 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.<sup>[5,10]</sup>

### Data collection

For Data collection, the Principal of the colleges was 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 college. The interviews of study subjects were conducted by investigators in working days at campus setting. All students present on the days 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. 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.

### Data analysis

The data entry and cleaning was done with help of the Epi Info software ver 7.2.2. Sociodemographic variables and prevalence of distress had been represented by frequency tables.

### Ethical consideration

This research protocol was cleared by Institutional Ethical Committee of GMC, Gondia. Also from each study subject written consent was taken. At the end of the study, those who were having high level of distress were referred to educational counsellor.

## RESULTS

Out of the total study subjects, Majority of study subjects 262 (68.59%) were in the age group of 18 to 20 years with mean age of 18.18 years and standard deviation of 1.30 years. Total 216 (56.54%) of male and 166 (43.46%) female study subjects were included in the study. Ist year students 166 (43.46%) were highest followed by IInd year 157 (41.10%). Father's education was maximum in high school completion 143 (38.03%) while occupation was either farm owner, shop owner or clerk in 189 (50.27%) study subjects. Similarly, Mothers of 174 (45.91%) study subjects were educated upto high school completion, while majority 351 (92.61%) of them were home-maker by occupation.

**Table no. 1: Various socio demographic variables.**

Sr. No	Variables		Frequency n=382	Percentage
1	Age#	15 – 17 yrs	102	26.70
		18 – 20 yrs	262	68.59
		21 – 23 yrs	18	4.71
2	Gender	Male	216	56.54
		Female	166	43.46
3	Year of study	Ist	166	43.46
		IIInd	157	41.10
		IIIrd	59	15.45
5	Father's education*	Illiterate	3	.80
		Functional Literate/ Primary	16	4.26
		Middle school	37	9.84
		High school	143	38.03
		12 <sup>th</sup> pass	96	25.53
		Graduate	75	19.95
		Professional Degree	6	1.60
6	Mother's education**	Illiterate	5	1.32
		Functional Literate/ Primary	27	7.12
		Middle school	58	15.30
		High school	174	45.91
		12 <sup>th</sup> pass	84	22.16
		Graduate	28	7.39
		Professional Degree	3	0.79
7	Father's occupation*	Unemployed	2	0.53
		Unskilled	66	17.55
		Semi Skilled Worker		
		Skilled Worker	103	27.39
		Clerk, Shop Owner, Farm Owner	189	50.27
		Semi Professional	5	1.33
		Professional	11	2.93
8	Mother's occupation**	Homemaker	351	92.61
		Unskilled	12	3.17
		Semi Skilled Worker	3	0.79
		Skilled Worker	4	1.06
		Clerk, Shop Owner, Farm Owner	0	0.00
		Semi Professional	1	0.26
		Professional	8	2.11

#mean±SD=18.18±1.30, Range: 15 – 23 yrs., \*n=376, \*\*n=379

Prevalence of mild distress was present in 185 (48.43%) of study subjects while moderate among 61 (15.97%) 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)	136	35.60
2	Mild distress (15 - 20)	185	48.43
3	Moderate distress (21 - 30)	61	15.97
4	Severe distress (> 30)	0	0.00
Total		382	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.<sup>[5]</sup> 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 0.65 suggestive of good internal consistency.

The mean age in our study was 18.18 years and SD of 1.30 years while Zulkefly et al had mean age of 20.87 years and SD of 1.61 years<sup>[8]</sup>, Montazeri A et al had

mean age of 21.1 years<sup>[11]</sup>, and Surwase K et al had 19.55 years.<sup>[12]</sup> In our study, male and female study participants distribution (M=56.54% Vs F=43.46%) was lower than study conducted by Panda P et al (M=59.54% Vs F=40.46%).<sup>[13]</sup>

In our study, majority of study subjects were in first year (43.46%). Surwase K et al had first year study subjects (35.79%).<sup>[12]</sup> 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 94%; again 85% mother is educated, while mothers in our study, 92% were educated.<sup>[5]</sup> Due to rural background of study setting, majority of parents of study subjects were involved in agriculture industries. Father of majority of study subjects 50.27% were farmers, while mother of 92.61% of study subjects were involved in home making. Similar findings were observed by Surwase K et al.<sup>[12]</sup>

The total prevalence of distress (63.70%) 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%).<sup>[5,6]</sup> Similar results were found by Surwase K et al (58.61%) in Nanded<sup>[12]</sup> and Adikane H et al (62.23%) in Nagpur.<sup>[10]</sup> Considering, mild level distress is required for human being, which was maximum in our study, moderate level of distress (15.97%) is similar to study conducted by Bansal V et al (15.20%) and Adikane H et al (14.03%).<sup>[6,10]</sup>

### Weakness

Due to cross-sectional study design, it did not allow us to study the causal relationship of psychological distress and mental health. 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 endeavour to bring to notice 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 student is important. Many of them 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 achieved by study, it is noticeable that there is a need to take joint conscious actions by parents, guardians, teachers and professionals to lower the suffering caused by stress in many of these students. There is need to promote community awareness about

the prevalence of these often buried 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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