

## **A Cross Sectional Study of Prevalence of Distress among College Going Students in Nanded City**

**Dr. Kishor Surwase<sup>1</sup>, Dr. Hemant Adikane<sup>2\*</sup>, Dr. Prashant Bagdey<sup>3</sup>, Dr. Alka Kaware<sup>2</sup>, Dr. Dadasaheb Dhage<sup>4</sup>**

<sup>1</sup>Medical Officer, Civil Hospital, Parbhani - 431401, India

<sup>2</sup>Assistant Professor, Department of Community Medicine, Government Medical College, Gondia-441610, India

<sup>3</sup>Associate Professor, Department of Community Medicine, Government Medical College, Nagpur-440003, India

<sup>4</sup>Taluka Health officer, Umerkhed, Dist: Yawatmal – 445206, India

### **Original Research Article**

#### **\*Corresponding author**

*Dr. Hemant Adikane*

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**Abstract:** Adolescents are most important asset and wealth of a nation. During the adolescent years, a lot of biological, physical, mental and emotional changes are happening, as well as the changes in responsibility and role. A descriptive cross sectional study was carried out in Government poly-technique College of Nanded city during Nov 2015 to Jan 2016 to find out prevalence of distress among college going students. Out of the total study subjects, Majority of study subjects 121 (42.46%) were in the age group of 20 to 21 years with mean age of 19.95 years and standard deviation of 1.55 years. Total 165 (57.89%) male students and 120 (42.11%) of female study subjects were included in the study. The prevalence of distress was found higher than studies conducted by other authors. About one fifth of the study population had some psychological problems leading to distress. There is need to raise public awareness about the prevalence of these often hidden emotional disorders in Indian adolescents.

**Keywords:** Distress, College students, GHQ – 12, Adolescents, Nanded.

### **INTRODUCTION**

Adolescents are most important asset and wealth of a nation. The adolescents constitutes about 40 % of population [1]. 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 [2].

Even in the ancient Indian scriptures and mythological texts, a number of mental illnesses and disorders were often discussed but only severe forms of illnesses have captured the public attention. Nowadays, Mental Health disorders include a wide variety of conditions as mentioned in different classificatory systems like International Classification of Diseases (ICD)-10 and Diagnostic and Statistical Manual of Mental Disorders (DSM-V) [3].

There are several reasons why attention to the mental health of adolescents appears to be so important. Firstly, in the period of early adolescence several specific physical and social changes occur which have an impact on psychological development. This period has been described as an especially stressful phase of development. Secondly, the latest studies demonstrate the important roles of some psychological factors, particularly stress, anxiety and depressive mood on adolescents' health risk behaviour [4]. 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 [5].

The schools and colleges are the major socialization institution for any adolescents. It is the individual's first contract with the world outside the house [6]. The nation strongly encourages its people to gain their college education. Citizens with higher education are able to create a bright and successful future, and thus support the nation's vision to attain a developed country status. Inadvertently, college students are experiencing high demands and expectations that have been placed upon them. These have created stress on them to perform well in their studies and students who are unable to cope with the pressures of studying are often more prone to

experience mental, emotional, physical and psychological problems [7].

Nowadays, because of rapid industrialization and urbanization majority of young couple are employed and live in unitary setup, so unavoidably they get less time to look after their children. Under these circumstances, psychosocial (emotional and behavioural) problems and psychiatric problems are on the rise[8].

The General Health Questionnaire (GHQ) was developed in England as a self-administered screening instrument to identify psychological distress for use in general population surveys, or among general medical outpatients[4]. 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[9].

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 Maharashtra. Present study aims to find out prevalence of distress among adolescents in Nanded city of Maharashtra.

## **METHODOLOGY**

A Descriptive cross-sectional study of college going students in Government poly-technique college, Nanded was conducted from November 2015 to January 2016. All three year 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 college 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 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 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 285 students were interviewed in campus [10].

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 may refuse 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 Hindi version. Regarding the various socio demographic information 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 Hindi Version of GHQ 12 was used, keeping in mind that the study subjects were from first, second, third year, to assess the psychological distress among students. The GHQ 12 internal consistency reliability with chronbach alpha is ranging from 0.8-2.9. (7) In this GHQ 12, the score upto 12 were categorized in normal, 13 to 20 were in mild distress, 21-30 score were in moderate distress, up to > 30 suggests the study subject had severe distress. Statistical analysis of the data was done on the Epi Info software version 7.2.2.

## **RESULTS**

Out of the total study subjects, Majority of study subjects 121 (42.46%) were in the age group of 20 to 21 years with mean age of 19.95 years and standard deviation of 1.55 years. Total 165 (57.89%) male students and 120 (42.11%) of female study subjects were included in the study. IInd year students 138 (48.42) were highest followed by Ist year 102 (35.79%). Majority 195 (68.42%) were staying in the home. Father's education was maximum in higher secondary / 12<sup>th</sup> passed 92 (32.86%) while occupation was farm owner, shop owner or clerk in 133 (47.50%) study subjects. Mothers of 72 (25.71%) study subjects were educated upto high school, while 261 (93.21%) were home-maker by occupation.

Table-1: Various socio demographic variables

Sr. No	Variables	Frequency	Percentage	
1	Age#	< 19 yrs	115	40.35
		20 – 21 yrs	121	42.46
		22 – 23 yrs	49	17.19
2	Gender	Female	120	42.11
		Male	165	57.89
3	Year of study	Ist	102	35.79
		IIInd	138	48.42
		IIIrd	45	15.79
4	Place of stay	Home	195	68.42
		Rent/PG	36	12.63
		Hostel	54	18.95
5	Father's education*	Illiterate	31	11.07
		Functional Literate/ Primary	11	3.93
		Middle school	13	4.64
		High school	53	18.93
		12 <sup>th</sup> pass	92	32.86
		Graduate	78	27.86
		Professional Degree	2	0.71
6	Mother's education*	Illiterate	49	17.50
		Functional Literate/ Primary	35	12.50
		Middle school	38	13.57
		High school	72	25.71
		12 <sup>th</sup> pass	58	20.71
		Graduate	28	10.00
		Professional Degree	00	00.00
7	Father's occupation*	Unemployed	5	1.79
		Unskilled	19	6.79
		Semi-Skilled Worker	9	3.21
		Skilled Worker	86	30.71
		Clerk, Shop Owner, Farm Owner	133	47.50
		Semi Professional	14	5.00
		Professional	14	5.00
8	Mother's occupation*	Homemaker	261	93.21
		Unskilled	7	2.50
		Semi-Skilled Worker	00	0.00
		Skilled Worker	4	1.43
		Clerk, Shop Owner, Farm Owner	2	0.71
		Semi Professional	2	0.71
		Professional	4	1.43

#mean±SD=19.95±1.55 years, \*n=280

Prevalence of mild distress was present in 167 (58.61%) of study subjects while moderate among 49 (17.19%) and severe in 2 (0.70%).

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

Sr. No	Prevalence of distress	Frequency	Percentage
1	Normal (< 13)	67	23.51
2	Mild distress (13 - 20)	167	58.61
3	Moderate distress (21 - 30)	49	17.19
4	Severe distress (> 30)	2	0.70
Total		285	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. In this study distribution

of age, gender, parents education and occupation is consistent with existing population distribution in central Maharashtra [10].

The mean age in our study was 19.95 years while Zulkefly *et al.* had mean age of 20.87 years and SD of 1.61 years [7], Montazeri A *et al.* have mean age of 21.1 years [11]. In our study, male and female study participants distribution was similar to study conducted by Panda P *et al.* [12].

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 [10].

The prevalence of distress (76.49%) 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 (15.2%)[10,13].

#### **Weakness**

Cross-sectional design did not allow us to study the cause-and effect relationship of psychological morbidity with stress and coping strategies. Therefore, a prospective study is necessary to study the association of psychological morbidity with demographic variables, sources of stress and coping strategies.

#### **Strengths**

An attempt has also been made to bring to notice not just the fact that such morbidity is prevalent among the student population but also large study subjects sample were representative of adolescent population.

#### **CONCLUSION**

The mental health of each college student is important, many of them these have mental health problems and these problems are real and painful and can be serious. So we can conclude from this study that about one fifth of the study population had some psychological problems leading to distress.

#### **RECOMMENDATIONS**

From this study it is evident that there is a need to take joint conscious actions by parents, teachers and professionals to alleviate the suffering caused by stress in many of these children. There is need to raise public awareness about the prevalence of these often hidden emotional disorders in Indian adolescents.

Findings underscore the need for an emergency, more detailed research on large samples with more validated scale to better understand stress and its causes in college going students is recommended.

**Conflict of interest:** None.

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