DEPRESSION, ANXIETY AND STRESS AMONG GOVERNMENT NURSING COLLEGE STUDENTS IN AKOLA: A COLLEGE-BASED STUDY

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ABSTRACT

BACKGROUND

Various studies done across the world found that the undergraduate students are at risk of developing psychological morbidity. Prevalence of depression and anxiety was found to be higher in medical students compared to general population. In the background of such studies in India among nursing students, the present study is envisaged.

The aim of the present study is to find out prevalence of Depression, Anxiety and Stress among Govt. nursing college students.

MATERIALS AND METHODS

A total of 52 students studying in Govt. Nursing College, Akola were included in study based on universal sampling method. A questionnaire-based study was conducted the Depression, Anxiety and Stress Scale (DASS-21).

RESULTS

Prevalence of depression, anxiety and stress among students was found to be 69.24%, 78.85% and 53.85% respectively.

CONCLUSION

Results may help to understand magnitude of problem, forming strategies to help them accordingly and promotion of mental health among students.

KEYWORDS

Depression, Anxiety, Stress, Nursing, College, Undergraduate, College.

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BACKGROUND

Emotional disorders like depression, anxiety, and stress among communities are important indicators of mental health. Failure to recognise and properly address these issues will lead to increased risk of psychiatric morbidity and undesirable impact on professional life.⁽¹⁾

There is growing concern over the mental health issues, especially depression and anxiety among adolescent and young adults. Studies around the world have found prevalence of depression, anxiety and stress among adolescent and young adult in the range of 5%-70%.⁽²⁾

Higher education can be stressful, students have to adapt to a new lifestyle. They have to cope with various stressful situations like staying away from home, academic demands, new social relationships, and uncertainty about future. Students in higher education are vulnerable to mental health problems.⁽³⁾ Various studies have found high psychological morbidity especially depression and anxiety among university students.⁽⁴⁾⁽⁵⁾⁽⁶⁾ Prevalence of depression, anxiety and stress among undergraduates in Malaysia was found to be 29.3%, 55.0%, and 21.6% respectively.

Medical undergraduates tend to have greater psychological distress than general population.⁽⁷⁾ A systemic review reported rates of depression, anxiety and stress among medical students varying from 6.0%-66.5%, 7.7%-65.5%, and 12.2-96.7% respectively.⁽⁸⁾ There is considerable evidence suggesting high prevalence of depression and anxiety among nursing students. As these types of studies are lacking in Indian setting, current study is envisaged.

MATERIALS AND METHODS

Design of Study

Present study is a cross-sectional study of nursing college students studying at Govt. Nursing College, Akola. Study was done during the month of July 2017.

Study Population

All undergraduate students studying in nursing college were included according to inclusion criteria. A total of 52 students were included in this study after applying inclusion and exclusion criteria.

Inclusion Criteria

1. Age between 18-25 years.
2. Students in Govt. Nursing College, Akola.
3. Providing written informed consent.

Exclusion Criteria

1. Not willing to give written informed consent.
2. Prolonged absentees.

Collection of Sample

According to inclusion and exclusion criteria, study population was recruited. The nature and purpose of the

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study was explained to study population. A semi-structured proforma was given to study population which aided in collecting sociodemographic details. Self-administered, standardised scale mentioned below was handed over to the sample population.

Sample Size

After applying inclusion and exclusion criteria, total 52 students were enrolled in study.

Socioeconomic Status

As per modified B.G. Prasad socioeconomic scale (2017).⁽⁹⁾

Socioeconomic Class	Per Capita Monthly Income
Upper class	≥6254
Upper middle class	3127-6253
Middle class	1876-3126
Lower middle class	938-1875
Lower class	<938

Table 1. Modified B.G. Prasad scale (2017)

Study Tool

Depression, Anxiety and Stress Scale (DASS-21)

A self-rating questionnaire, designed to assess severity of depression, anxiety and stress. This instrument has 21 items in three domains. Each domain comprises of seven items assessing three dimensions- depression, anxiety and stress. Based on their experience in the past week, subjects had to rate each item on 4-point rating scale (did not apply to me at all means score 0, applied to me very much or most of the time means score 3). Then score for depression, anxiety and stress are calculated by adding scores of relevant items. Each

subscale is divided into normal, mild, moderate, severe and very severe.

Scoring of DASS-21

The scale to which each item belongs is indicated by letters D (Depression), A (Anxiety) and S (Stress). For each scale (D, A & S), sum of the scores noted for identified items. Because the DASS-21 is short form version of DASS-42, the long form version which has 42 items, the final score of each item groups i.e. depression, anxiety and stress needs to be multiplied by two.

Interpreting the DASS-21

Once multiplied by 2, each score can now be transferred to DASS profile sheet, enabling comparison to be made between the three scales and also giving percentile rankings and severity labels.

Table 2. DASS-21

Name: _____ Date: _____

Please read the statement and circle a number 0, 1, 2, or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The Rating Scale is as Follows-

- 0- Did not apply to me at all- NEVER
- 1- Applied to me to some degree, or some of the time- SOMETIMES
- 2- Applied to me to a considerable degree, or a good part of time- OFTEN
- 3- Applied to me very much, or most of the time- ALMOST ALWAYS.

		N	S	O	AA	D	A	S
1	I found it hard to wind down	0	1	2	3			
2	I was aware of dryness in my mouth	0	1	2	3			
3	I couldn't seem to experience any positive feeling at all	0	1	2	3			
4	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3			
5	I found it difficult to work up the initiative to do things	0	1	2	3			
6	I tended to over react to situations	0	1	2	3			
7	I experienced trembling (e.g., in the hands)	0	1	2	3			
8	I felt that I was using a lot of nervous energy	0	1	2	3			
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3			
10	I felt that I had nothing to look forward to	0	1	2	3			
11	I found myself getting agitated	0	1	2	3			
12	I found it difficult to relax	0	1	2	3			
13	I felt down-hearted and blue	0	1	2	3			
14	I was intolerant of anything that kept me from getting me on with what I was doing	0	1	2	3			
15	I felt that I was close to panic	0	1	2	3			
16	I was unable to become enthusiastic about anything	0	1	2	3			
17	I felt that I wasn't worth much as a person	0	1	2	3			
18	I felt that I was rather touchy	0	1	2	3			
19	I was aware of actions of my heart in the absence of physical exertion (e.g., sense of heart rate increases, heart missing a beat)	0	1	2	3			
20	I felt scared without any good reason	0	1	2	3			
21	I felt that life was meaningless	0	1	2	3			
Total								

Table 2.

Severity	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely severe	≥28	≥20	≥34

Table 3. Categorisation of the DASS-21 Scale

Ethical Consideration

Study approval and written permission was granted by principal of nursing college to protect the rights of the subjects. Study procedure was explained and written information was given to the subjects. Informed written consent from the subjects was taken. Participants who were willing to participate were included in the study. Anonymity of the study subjects and confidentiality was maintained.

RESULTS

Characteristics	Number (n)	Percentage (%)
Age Group (in years)		
18-19	15	28.84%
20-22	27	51.92%
23+	10	19.23%
Gender		
Male	06	11.53%
Female	46	88.46%
Year		
1 st	19	36.53%
2 nd	17	32.69%
3 rd	16	30.76%
Religion		
Hindu	38	73.07%
Buddhist	12	23.07%
Muslim	2	03.84%
Residence		
Urban	10	19.23%
Rural	42	80.76%
Type of Family		
Joint	19	36.53%
Nuclear	33	63.46%
SES		
Upper	3	5.76%
Upper middle	6	11.53%
Middle	5	9.61%
Lower middle	20	38.46%
Lower	18	34.61%

Table 4. Distribution of Subjects According to Sociodemographic Characteristics

Age of students participated was in the range of 18 years to 25 years, majority (51.92%) of them were in the range of 20-23 years. Majority of students were females (88.46%), studying in first year (36.53%), Hindus (73.07%), from rural area (80.76%), living in nuclear families (63.46%), from lower middle class (38.46%).

DEPRESSION	NUMBER(n)	PERCENTAGE(%)
Normal	16	30.76%
Mild	12	23.07%
Moderate	20	38.46%
Severe	02	3.84%
Extremely severe	02	3.84%
ANXIETY	NUMBER(n)	PERCENTAGE(%)
Normal	11	21.15%
mild	5	9.61%
moderate	28	53.84%
Severe	4	7.69%
Extremely severe	4	7.69%
STRESS	NUMBER(n)	PERCENTAGE(%)
Normal	24	46.15%
Mild	11	21.15%
Moderate	12	23.07%
Severe	5	9.61%
Extremely severe	0	0%

Table 5. Distribution of Study Population as per Severity of Depression, Anxiety and Stress

Out of 52 students, 36 (69.24%) suffered from depression, majority (38.46%) had moderate depression. Prevalence of anxiety was found to be 78.85%, majority (53.84%) had moderate anxiety. Prevalence was stress was found to be 53.85%, majority (23.07%) had moderate stress.

DISCUSSION

Prevalence of depression in our study was found to be 69.24%. Similar study from West Bengal by Chatterjee et al (2014)⁽¹⁰⁾ found 63.9% prevalence of depression among nursing students.

In our study, anxiety among students was found to be 78.85%, which was higher than the nursing college student in Greece (71.8%).⁽¹¹⁾ A study by Iqbal et al (2015) among medical undergraduate students in India also found lower prevalence of anxiety (66.9%)⁽¹²⁾ compared to current study.

Prevalence of stress in our study was 53.85%, which is in line with Iqbal et al (53%).⁽¹²⁾ A study by Eva E et al (2015)⁽¹³⁾ among medical undergraduates from our neighbouring country Bangladesh have found overall 54% prevalence of stress among students.

CONCLUSION

Thus, we conclude that the prevalence of depression, anxiety and stress was high among nursing students. It may help educators to understand the difficulties of students, and help them accordingly. High prevalence of psychiatric morbidity warrants formation of strategies for early identification and intervention, and overall promotion of mental health among students.

Limitations

The present study was institution-based cross-sectional study. Due to small sample size, it lacks representativeness and results of the study cannot be generalised. Another limitation is that the study was based on results from self-administered questionnaire, hence reporting bias cannot be totally eliminated.

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