

## Prevalence of loneliness among undergraduate medical students at a private medical college: A cross sectional study

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### ABSTRACT

**INTRODUCTION:** Loneliness can affect anyone at any point in their life. It can be detrimental to the wellbeing and quality of life of individuals and communities. Loneliness is defined as an unpleasant experience that derives from deficiencies (qualitative and quantitative) in one's network of social relationships. The main objective of the study is to Estimate the prevalence of loneliness and to study socio-demographic factors associated with loneliness among undergraduate medical students.

**METHODOLOGY:** A Cross-sectional study was conducted among third year MBBS students (6th semester) of Narayana Medical College for a period of one month i.e. April 2022 using a validated questionnaire by UCLA Loneliness scale. Data was collected through Google forms, entered in Microsoft Excel, and analyzed using "SPSS Version 25.0" software.

**RESULTS:** Out of 256 students, 198 students submitted their responses. The mean age of students was  $21 \pm 2$  years. 60.1% (119) were females and 39.9% (79) were males. 89.4% of the study subjects were Hindus, 52% were from town, 75.3% stayed in the hostel, 92.4% belongs to nuclear family.

**CONCLUSION:** In our study more than half of the students were found to have High loneliness. Therefore, novel interventions using digital platforms that provide a sense of belongingness and enhanced community engagement should be developed.

**Key word:** Loneliness, Medical students, Undergraduates, UCLA Loneliness scale

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### INTRODUCTION:

Loneliness can affect anyone at any point in their life. It can be detrimental to the wellbeing and quality of life of individuals and communities<sup>1</sup>. Loneliness is defined as an unpleasant experience that derives from deficiencies (qualitative and quantitative) in one's network of social relationships<sup>2</sup>.

Loneliness is an important health concern that has been strongly associated with various adverse mental and psychological consequences. Evidence has identified loneliness as a strong precursor of stress, depression, anxiety, and suicide, which could potentially exacerbate pre-existing psychological and mental issues (Lim et al., 2020)<sup>3</sup>.

Loneliness has often been thought of as a concern that peaks in older age. However, recent evidence has shown that the developmental trajectory is more U-shaped, with young adults having the highest levels of loneliness (Luhmann & Hawkley, 2016), followed by a second peak in older age groups.<sup>4</sup>

## OBJECTIVES

To Estimate the prevalence of loneliness among undergraduate medical students.

To study socio-demographic factors associated with loneliness among undergraduate medical students.

## METHODOLOGY

A Cross-sectional study was conducted among 236 medical students studying 6<sup>th</sup> semester MBBS at Narayana Medical College, Nellore Andhra Pradesh. The study was conducted during the month of April 2022 and the data was collected using a predesigned, pretested validated questionnaire by UCLA Loneliness scale.

The questionnaire was prepared in Google forms and the link was sent to the participants through WhatsApp application and the participants were requested to respond within one week of receiving the request. All the responses were verified for completeness of information. Responses with incomplete information were excluded from analysis. The data was uploaded to Microsoft Excel for further analysis. The data was analyzed by calculating frequencies, percentage, and chi square value.

**INCLUSION CRITERIA:** Final year part-I MBBS students who are willing to participate and given consent.

**EXCLUSION CRITERIA:** Those who are not willing to participate and not given consent.

## SAMPLE SIZE:

All the final year part-I MBBS students were included. So, a total of 236 students were taken as study population.

## STATISTICAL ANALYSIS:

Data collected through Google forms was analyzed using “SPSS Version 25.0” software. All the variables are represented as frequency & percentage; Chi-square test was used to test association between loneliness and other variables. Statistical significance was determined at  $p < 0.05$ . Loneliness was assessed by UCLA Loneliness Scale<sup>5</sup>. It is a 20-item scale used globally to measure one’s subjective feelings of loneliness and social isolation.

## ETHICAL CONSIDERATION:

After obtaining clearance from Institutional Ethics Committee, study commenced. Oral consent was taken. No participant was forced to participate in the study.

## RESULTS

Overall, 198 students submitted their responses of which 60.1% (119) were females and 39.9% (79) were males among 19-23 age group. Mean age is 21years. 89.4% of the study subjects were Hindus, 52% were from town, 75.3% stayed in the hostel, 92.4% belong to nuclear family (Table 1).

Out of 198 study subjects, 56.6% (112) of the study subjects had high degree of loneliness, 38.4% (76) had Moderate degree of loneliness and 5.1% (10) has Low/No loneliness and overall prevalence of loneliness was 95%( Table 2).

**Table 1: Socio-demographic details of participants (n=198)**

Variable	Frequency (%)
<b>Gender</b>	
Male	79 (39.9)
Female	119 (60.1)
<b>Place of origin</b>	
City	48 (24.2)
Town	103 (52)
Village	47 (23.7)
<b>Current place of stay</b>	
Home	42 (21.2)
Hostel	149 (75.3)
Private accommodation	7 (3.5)
<b>Family type</b>	
Nuclear	182 (91.9)
Joint	16 (8.1)

Among 256 students, 198 (77.34%) responded. The mean age of students was 21± 2 years. Among them 119(60.1%) were females and 79 (39.9%). 103 (52%) were from town and currently 149(79.3%) were staying in hostels. Most of them 182 (91.9%) belonged to the nuclear family.

**Table 2: Grading of loneliness among participants**

Loneliness grading	Number	%
High	112	57
Moderate	76	38
Low	10	5
Total	198	100

**Table 3: Association between socio-demographic factors and loneliness**

Variable	No Loneliness	Moderate loneliness	High loneliness	Total	X <sup>2</sup> value	p value
<b>Gender</b>						
Male	2 (2.5%)	34 (43%)	43(54.4%)	79	2.5	0.287
Female	8 (6.7%)	42 (35.3%)	69(58%)	119		
<b>Place of origin</b>						
City	3 (6.3%)	18 (37.5%)	27(56.3%)	48	2.62	0.623
Town	4 (3.9%)	44 (42.7%)	55(53.4%)	103		
Village	3 (6.4%)	14 (29.8%)	30(63.8%)	47		
<b>Current stay</b>						
Home	5(11.9%)	15(35.7%)	22(52.4%)	48	5.82	0.212
Hostel	5(3.4%)	59(39.6%)	85(57%)	103		
Private Accommodation	0 (0.0%)	2(28.6%)	5(71.4%)	7		
<b>Family type</b>						
Nuclear	8 (4.4%)	68 (37.4%)	106(58.2%)	182	7.97	0.019
Joint	3(18.8%)	8 (50%)	5 (31.3%)	16		

And 50.5% of the students’ fathers were professional by occupation and 58.1% mothers were home maker.

Table 3, Showing association between socio-demographic factors and loneliness, and it was observed that 85 (57%) staying at hostel has high

degree of loneliness, 106 (58.2%) belonging to nuclear family has high degree of loneliness and the association was found to be statistically significant. Loneliness was high among females when compared to males.

## DISCUSSION

In a study by Bhogle has shown that a greater proportion of adolescents experienced loneliness compared to adult males and females<sup>6</sup>. In another study by Nayyar and Singh (2011) of the sampled young people with an average age of 22 years, 60% reported higher scores on loneliness<sup>7</sup>.

The present study revealed that a high degree of loneliness in 112 (56.6%) of the participants, moderate among 76 (38.4%). The majority of them, about 149 (75.3%) stay at hostel. In a study conducted among young adults, the percentage of participants reporting moderate to severe loneliness ranged from 2.5% to 18.4% (Singh et al., 2020)<sup>8</sup>.

In this study, a greater number of females felt lonely compared to males. This result corroborates previous studies, which identified female young adults to be particularly more at risk of experiencing social loneliness than male young adults (Bu et al., 2020; Liu et al., 2020)<sup>9,10</sup>. 55% of the students has high degree of loneliness whose fathers were professional by occupation. Most of the participants i.e. 182 (91.9%) belonged to the nuclear family, of which 58.2% had high loneliness and it was found to be statistically significant.

## CONCLUSION

In the present study more than half of the students were found to have High degree of loneliness.

## LIMITATIONS

As the study was conducted only among a few medical students, results cannot be generalized.

## RECOMMENDATIONS

Therefore, novel interventions that provide a sense of belongingness and enhanced community engagement should be developed.

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