Original Research Article

Social anxiety disorder among medical students in a tertiary care hospital in Davangere, Karnataka

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ABSTRACT

Background: Social anxiety disorder is a common psychiatric illness characterized by fear of being observed and scrutinized by others. It can impair academic performance and can lead to serious withdrawal from society and depression. The objective of the study was to measure the proportion and study the associated factors of Social Anxiety Disorder among students of a tertiary medical college and hospital.

Methods: This hospital-based, cross-sectional study was conducted among the 272 medical students of a Tertiary care medical college and hospital at Davangere, Karnataka from October to December 2018. The social phobia inventory (SPIN) questionnaire was used to diagnose SAD among students.

Results: Social anxiety disorder (SAD) was present among 30.5% (n=83) of the medical students. The female students (31.1%, n=45) documented a higher proportion of SAD compared to male students (29.9%, n=38). There was a higher incidence among above the 20 years age group and Muslims especially girl students.

Conclusions: A higher proportion of medical students had social anxiety disorder which was influenced by increasing age, female gender, Muslim religion and higher academic years of exposure till final year.

Keywords: Social anxiety disorder, Social phobia, Medical students, Social phobia inventory

INTRODUCTION

Social phobia, also known as social anxiety disorder (SAD) is a type of anxiety characterized by persistent fear of exposure to one or more social situations or public performance scenarios where the person is exposed to unfamiliar people or to possible scrutiny by others.¹ The individual with this disorder persistently bothers about the embarrassment to be encountered due to one or more of his/her activities due to which there is a fear of performing common daily activities.² This may need to loss of confidence and social isolation. The somatic symptoms like excessive sweating, palpitations, nausea, blushing, slurred speech, and tremors may occur in social anxiety disorder.³ Social anxiety disorder is the third most common psychiatric disorder in USA with a lifetime prevalence of 13±3%.⁴ Medical professional education encompasses a long and stressful curriculum imposing wide spread mental problems on medical students. Further medical teaching learning/assessment pattern includes various student participatory learning methods like seminars, clinical case presentations, demonstrations and viva voce which further aggravates the anxiety of being socially observed. Hence this study was undertaken with an aim of studying the magnitude, age and gender based differences of social anxiety disorder among medical students.

METHODS

This hospital-based, cross-sectional study was conducted among the 272 medical students of a tertiary care medical
college and hospital at Davangere, Karnataka from October to December 2018. All the medical students from second year to final year who were present and willing to participate were included in the study following informed consent. First year medical students were excluded from the study.

The social phobia inventory (SPIN) questionnaire was used to diagnose SAD among students. It is easily administered self-rating scale that captures the spectrum of fear, avoidance and physiological symptoms in a likert scale for each item. It has a sensitivity of 73-85% and a specificity of 69-84% in regard to diagnosis of SAD. The severity of SAD is graded based on the total score obtained viz: Less than 20–None; 21–30-Mild; 31–40-Moderate; 41 – 50-Severe; 51 or more- very Severe.\(^5\)

**Statistical analysis**

Data entry and analysis was done using SPSS version 20. The association between age, gender and SAD severity scores was established using chi-square test. Mean scores were compared using student t-test. A p value of <0.05 was taken as statistically significant.

**RESULTS**

The study included 272 medical students with a mean age of 20.8±1.3 years, with almost similar proportion of male and female students (male:female=1:1.14). Social Anxiety Disorder (SAD) was present among 30.5% (n=83) of the medical students. The socio-demographic variables associated with SAD are given in Table 1.

**Table 1: Socio-demographic characteristics associated with SAD (n=272).**

| Socio-demographic factors | SAD present | SAD absent | P value* |
|---------------------------|-------------|------------|----------|
| Age (in years)            |             |            |          |
| <20                       | 35 (25.7)   | 101 (74.3) | 0.036    |
| >20                       | 48 (36.6)   | 83 (63.4)  |          |
| Gender                    |             |            | 0.47     |
| Male                      | 38 (29.9)   | 89 (70.1)  |          |
| Female                    | 45 (31)     | 100 (69)   |          |
| Religion                  |             |            | 0.01     |
| Hindu                     | 67 (30.3)   | 154 (69.7) |          |
| Christian                 | 6 (23.1)    | 20 (76.9)  |          |
| Muslim                    | 8 (57.1)    | 6 (42.9)   |          |
| Others                    | 2 (18.2)    | 9 (81.8)   |          |
| Year of study             |             |            | 0.19     |
| Second year               | 36 (35)     | 67 (65)    |          |
| Third year                | 20 (23.3)   | 66 (76.7)  |          |
| Final year                | 27 (32.5)   | 56 (67.5)  |          |

*Chi square test.

The female students (31.1%, n=45) documented a higher proportion of SAD compared to male students (29.9%, n=38). There was a higher incidence among above the 20 years age group and Muslims especially female students.

**Figure 1: Gender-based distribution of SAD.**

Among the students (n=272), 20.6% (n=56) had Mild (considered as normal), 7.7% (n=21) had moderate, 1.5% (n=4) had severe and 0.7% (n=2) had very severe SAD as scored by SPIN (Figure 1).

**DISCUSSION**

The new competency based curriculum for health professional education demands medical students to not only learn the subject theoretically but also demonstrate certain skills under observation or by self to fulfill the training as medical graduates. The assessment methods also emphasize on evaluation of student skills by observation of experts in the field. Such changing curriculum can really be a hard say to students with Social phobia. Unless the students are identified and proper intervention done earlier, the professional medical training will be a difficult journey. In the present study, we observed that 30.5% (n=83) of the medical students suffered social phobia. In the study done by Amit et al, the 46% of the medical students suffered SAD.\(^3\) This was higher compared to the present study but the study included 1st, 2nd and 3rd year students whereas our study excluded first year students as they would not be subjected much to skill demonstrations or clinical presentations. The presence of SAD was higher among the female students (31.1%, n=45) in the present study. In the study by Alkhalfiah et al, higher percent of females 20.3% suffered very sever social phobia than males (19%) which was similar to our study.\(^4\) In contrast another study by Alkhathami et al showed that males had higher social phobia scores than females which is variable based on the environment and personality traits of the gender specific to each region.\(^7\) In the present study significant SAD (moderate to very severe SAD) was encountered among 9.9% (n=27) of the medical students. The presence of mild phobia in notable situations is common which includes exam tension, fear of failure,
loss of memory power and fear of teacher. The question whether this would interfere with academic performance or improve alertness is a debate. There was an increasing proportion of SAD as the academic year passed from second to final year. Mazhari et al in their study clearly proved that there was no correlation between academic performance and social phobia. Hence further prospective research would be necessary to prove if academic performance would be hindered by social phobia especially with forthcoming changes in medical education system with competency based training in vogue.

CONCLUSION

The study showed that a higher proportion of medical students had social anxiety disorder. The proportion of SAD increased with age, female gender, Muslim religion and higher academic years of exposure till final year. The medical curriculum should address social phobia among young medical students by revamping social interaction of students in the community, personality development training and repeated clinical exposure in the earlier part of the course to reduce anxiety of being evaluated.

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