



# Social phobia and its associated factors among college-going nursing students in the post-COVID era: Findings from west Bengal, India

Kunal Singh Sullar <sup>1</sup>, Pallabi Dasgupta <sup>1\*</sup>

<sup>1</sup> Department of Community Medicine, North Bengal Medical College, Siliguri, West Bengal, India

\* **Corresponding author:** Pallabi Dasgupta, Department of Community Medicine, North Bengal Medical College, Sushrutanagar, Darjeeling, Siliguri - 734 012, West Bengal, India. **E-mail:** dasguptapallabi@yahoo.in

**Received:** 27 January 2023 **Revised:** 2 March 2023 **Accepted:** 15 March 2023 **e-Published:** 31 July 2023

## Abstract

**Objectives:** The study was conducted to determine the prevalence of social phobia, related functional disability, and factors associated with social phobia among students in the College of Nursing, Darjeeling, West Bengal.

**Methods:** A descriptive, cross-sectional study was conducted among 248 nursing students. The Social Phobia Inventory, a validated self-administered questionnaire, was used to assess social phobia; the Sheehan Disability Scale was used to assess functional disability. Analytical statistics were done using the Chi-square test.

**Results:** The majority (54.4%) of students had social phobia; among them, 59.3% had associated functional disability. The proportion of social phobia was higher among students aged >30 (64.7%). Social phobia was significantly higher among students who never participated in extracurricular activities ( $P=0.000$ ), who were ever bullied ( $P=0.013$ ), and having unsatisfactory academic performance ( $P=0.011$ ). The proportion of social phobia was higher among those who experienced any major traumatic incident (64.8%). The majority of students felt that involvement in peer group activities (68.5%), extracurricular activities (61.7%), and group studies (49.2%) could prevent social phobia. About 17.6% of students showed marked functional disability in social life, 11.2% in family life, and 7.4% at work.

**Conclusion:** Social phobia is highly prevalent among nursing students. Extracurricular and peer group activities with institutional support might help students to overcome social phobia.

**Keywords:** COVID-19, Nursing Students, Social Anxiety Disorder, Social Phobia.

## Introduction

Social phobia is defined as “marked and persistent fear of social or performance-related situations.”<sup>[1]</sup> It is also known as a social anxiety disorder (SAD) characterized by an intense or marked, fear or anxiety of social situations in which the individual may be scrutinized by others.<sup>[2,3]</sup> Social phobia is caused by a complex interplay between genetic, neurobiological, and developmental factors. A special social event or interaction that was particularly embarrassing may also be associated with social phobia.<sup>[1]</sup> Around 3%–4% of the whole population is having a social phobia, with onset from under-5-year-old children, puberty to 35 years with a female:male ratio (2.5:1).<sup>[4]</sup> People having social phobia may have functional disabilities in varied areas leading to lower educational achievements, work absenteeism, and decreased productivity.<sup>[5]</sup>

The COVID-19 pandemic had a huge impact on people’s social situation. Those already having social phobia got opportunity to retreat into isolation, free of the pressure of social interactions. Moreover, transition from offline to online education created an environment that reserved students’ social communication with peers, teachers, and other persons.<sup>[3]</sup> Many are facing new or more social anxiety as society reopens after the pandemic with burden of risk more than other psychological disorders.<sup>[6]</sup> Individuals with social phobia do not have skill impairment but performance impairment.<sup>[7]</sup> It can severely challenge the performance of health-care providers, as relationship with patients is extremely important for both information sharing (medical information and educating patients) and emotional aspects (empathy, respect, and acceptance) of health-care services, thus improving clinical capabilities.<sup>[8,9]</sup> Social

phobia can also result in difficult relationships and isolation, substance abuse, and suicide.<sup>[10]</sup> In West Bengal, there is a paucity of research in this area.

## Objectives

The study was conducted to determine the prevalence of social phobia, related functional disability, and factors associated with social phobia among nursing students in the College of Nursing, Darjeeling, West Bengal.

## Methods

A descriptive study with cross-sectional design was conducted in July–August 2022 in the College of Nursing, North Bengal Medical College and Hospital, Darjeeling. Darjeeling is northernmost district of West Bengal in Eastern India in the foothills of the Himalayas. The college offers bachelor's degree (B.Sc. and postbasic B.Sc. Nursing) and master's degree in nursing.

The study participants were students pursuing bachelor's degree with four B.Sc. batches and one postbasic B.Sc. batch. Each batch had 50 students, with a total of 250 students. Sample size was estimated to be 251, considering the anticipated prevalence of social phobia as 41.7%,<sup>[5]</sup> 15% relative precision, 95% confidence interval, and 5% nonresponse. Complete enumeration of students was done with inclusion criteria of availability in person within college premises during data collection and willing to participate in the study.

A self-administered questionnaire was provided to the participants comprising sociodemographic variables such as age (in completed years), place of stay (within or outside college premises), type of family (nuclear or joint), state of origin (West Bengal or other states of India), and permanent residence (rural area under administrative set up of *Gram Panchayats* or urban area under municipalities). Schooling history included medium (language) of schooling, participation in extracurricular activities, academic performance, and bullying experience, i.e., if experienced repeated psychological or physical oppressions during their schooling period.

The Social Phobia Inventory, which is a validated 17-item scale, was used to assess social phobia. The scale captures spectrum of fear (six items), avoidance (seven items), and physiological symptoms (four items). Each item in the scale can be scored from 0 to 4 for responses ranging between not at all (0), to extremely (4).<sup>[11]</sup> The total score ranges from 0 to 2

68, with a score of  $\geq 19$  suggesting social phobia. Validation of the tool in the Indian context reported

Cronbach's alpha of 0.77. The tool has a sensitivity of 73%–85% and a specificity of 69%–84% to screen social phobia.<sup>[12]</sup>

Functional disability secondary to social phobia was assessed by the Sheehan Disability Scale (SDS).<sup>[5]</sup> SDS assesses functional impairment in domains of work, social, and family. Each domain is evaluated on an 11-point continuum from (0 = no impairment to 10 = most severe). A score of 1–3, 4–6, 7–9, and 10 indicates mild, moderate, marked, and extreme functional disability, respectively.

Following permission from the college authorities, students were approached personally with the help of teachers. All participants were given an overview of the questionnaires, and any doubts were cleared. The participants were asked to fill up the questionnaire within the classrooms without hampering their academic activities and encouraged to submit completed questionnaires. During collection, questionnaires were cross-checked for completeness.

## Statistical analysis

Statistical analysis was done using the Chi-square test to find association between the categorical dependent variable of the presence/absence of social phobia and sociodemographic and schooling history-related independent variables. IBM SPSS version 20, Armonk, New York, USA, IBM Corp. was used for analysis.  $P < 0.05$  was considered statistically significant.

## Ethical considerations

The Ethical approval was obtained from Institutional Ethics Committee, North Bengal Medical College (IEC/NBMC/M-October 01, 2022). An informed consent was taken before data collection from the students maintaining privacy, confidentiality, and anonymity. The study was conducted in accordance with the Declaration of Helsinki.

## Results

A total number of 248 students consented and participated in the study. Nonresponse rate was 0.8%. All 248 students were females, with the mean age of participants as  $22.6 \pm 4.2$  years (range 18–36 years) and the majority, 142 (57.3%) belonging to the age group of 21–30 years. About 238 (96%) were from West Bengal, 203 (81.9%) dwelled in the nuclear family, 203 (81.9%) were staying within college premises, and 128 (51.6%) of the students belong to rural background [Table 1]. A nuclear

family consists of a married couple and their dependent children. Joint family consists of married couples and their children living in the same household.<sup>[13]</sup>

Majority of the students, 182 (73.4%), studied in Bengali (local vernacular) medium school. Rest belonged to either English (61 [24.6%] or Hindi (5 [2%]) medium schools. Two hundred and twelve (79.7%) actively participated in extracurricular activities, 55 (22.2%) were ever bullied during their school life and 142 (57.2%), 62 (25%), and 44 (17.7%) had average, satisfactory, and unsatisfactory

academic performance, respectively [Table 2].

Majority 135 (54.4%) students had social phobia. No significant association of social phobia was found with the sociodemographic variables [Table 1]. Students who had not participated in extracurricular activities during their schooling ( $P = 0.000$ ), ever bullied in school life ( $P = 0.013$ ), and who had unsatisfactory academic performance ( $P = 0.011$ ) had significantly higher prevalence of social phobia [Table 2].

**Table 1.** Association between socio-demographic variables and social phobia (n=248)

Variables	Total (%)	Absent (%)	Present (%)	ChiSq; df	P value	
Age group (years)	< 21	89 (100)	42 (47.2)	47 (52.8)	0.820; 2	0.664
	21-30	142 (100)	65 (45.8)	77 (54.2)		
	≥31	17 (100)	6 (35.3)	11 (64.7)		
Place of stay	Within college premises	203 (100)	92 (45.3)	111 (54.7)	0.027; 1	0.870
	Outside college premises	45 (100)	21 (46.7)	24 (53.3)		
Type of family	Nuclear	203 (100)	93 (45.8)	110 (54.2)	0.028; 1	0.868
	Joint	45 (100)	20 (44.4)	25 (55.6)		
State of origin	West Bengal	238 (100)	109 (45.8)	129 (54.2)	0.130; 1	0.718
	Others	10 (100)	4 (40.0)	6 (60.0)		
Permanent residence	Urban	120 (100)	58 (48.3)	62 (51.7)	0.719; 1	0.397
	Rural	128 (100)	55 (43.0)	73 (57.0)		
	Total	248 (100)	113 (45.6)	135 (54.4)		

**Table 2.** Association of schooling history and social phobia (n=248)

Variables	Total (%)	Absent (%)	Present (%)	ChiSq; df	P value	
Medium of schooling	Bengali	182 (100)	87 (47.8)	95 (52.2)	1.138; 1	0.240
	Others	66 (100)	26 (39.4)	40 (60.6)		
Participation in extra-curriculum activities	Not active	36 (100)	6 (16.7)	30 (83.3)	18.004; 2	0.000 <sup>#</sup>
	Somewhat active	142 (100)	65 (45.8)	77 (54.2)		
	Very much active	70 (100)	42 (60.0)	28 (40.0)		
Academic performance	Unsatisfactory	44 (100)	12 (27.3)	32 (72.7)	8.946; 2	0.011 <sup>#</sup>
	Average	142 (100)	66 (46.5)	76 (53.5)		
	Satisfactory	62 (100)	35 (56.5)	27 (43.5)		
Ever bullied in school	Yes	55 (100)	17 (30.9)	38 (69.1)	6.120; 1	0.013 <sup>#</sup>
	No	193 (100)	96 (49.7)	97 (50.3)		
	Total	248 (100)	113 (45.6)	135 (54.4)		

# Statistically significant  $p < 0.05$

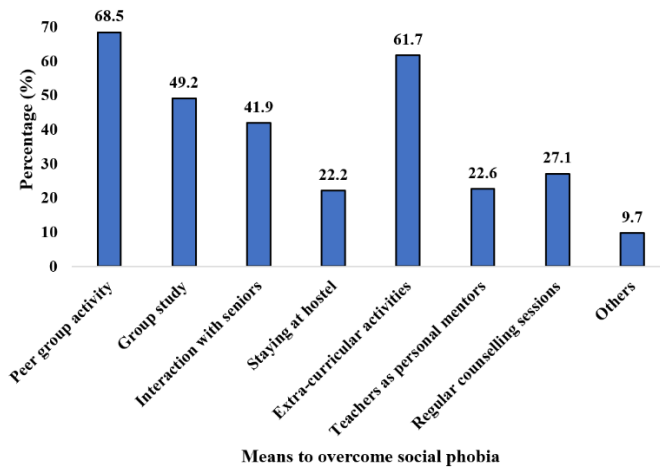
Most of the students felt that involvement in peer group activities 170 (68.5%) could prevent social phobia among the nursing students, followed by participation in extracurricular activities 153 (61.7%) and group studies 122 (49.2%) [Figure 1].

Among 135 nursing students having social phobia, most of them 80 (59.3%) had functional disability. Majority of

students with social phobia had 33 (41.3%) moderate, 31 (38.7%) mild, and 31 (38.8%) no functional disability in domains of work, social life, and family life, respectively [Table 3].

Out of 80 students with social phobia having functional disability, majority 74 (92.5%) students missed their college and were not unable to carry out their normal daily

responsibilities for 1–3 days, and 57 (71.3%) students went to the college but they felt so impaired by their symptoms, that even after attending the college, their productivity was reduced for 1–3 days [Table 4].



**Figure 1.** Perceived means to overcome social phobia among the nursing students. Others-Interaction with loved ones, interactive college lectures and meditation.

**Table 3.** Degree of functional disability among the nursing students having social phobia (n=80)

Degree of Functional Disability	Domains of Functional disability		
	Work (%)	Social life (%)	Family life (%)
Not at all	13 (16.3)	08 (10.0)	31 (38.8)
Mildly	28 (35.0)	31 (38.7)	20 (25.0)
Moderately	33 (41.3)	27 (33.7)	20 (25.0)
Markedly	04 (5.0)	13 (16.3)	09 (11.2)
Extremely	02 (2.4)	01 (1.3)	00 (0.0)
Total	80 (100.0)	80 (100.0)	80 (100.0)

**Table 4.** Effect of functional disability among the nursing students having social phobia (n=80)

No of days/ week	Effect of functional disability	
	Days lost n (%)	Days unproductive n (%)
0	00 (0.0)	01 (1.3)
1 to 3	74 (92.5)	57 (71.3)
>3	06 (7.5)	22 (27.4)
Total	80 (100)	80 (100)

## Discussion

In this study, more than half of the nursing students suffered from social phobia. Similar finding was present in a study of 2021 showing 78.4% of nursing students have social phobia. in India.<sup>[11]</sup> Other studies indicate that there are maximum chances to have social anxiety and posttraumatic stress anxiety disorder because of

COVID-19.<sup>[6]</sup> Compared with other studies conducted in 2015 among nursing students show only 28.6%<sup>[14]</sup> and 30%<sup>[10]</sup> of students have social phobia. This might be because, during the COVID-19 situation, the preexisting social phobia in the students might got insulated by the social isolation. After recovering from this situation and attending the college, that preexisted social phobia probably got aggravated in the social environment. However, in Iraq, study conducted in 2016, shows similar findings in nursing college with 55.7% of students had social phobia.<sup>[4]</sup> This might be because of place of study being abroad and social environment might be the influencing factor leading to huge proportion of students facing social phobia.

Students who had not participated in extracurricular activities during their schooling show significant social phobia. In comparison to our study, other studies show that students with SAD reported significantly more perceived difficulties in extracurricular activities than students not having SAD.<sup>[15]</sup> Leisure activities curriculum significantly decreased nurses' job stress and perceived anxiety in China.<sup>[16]</sup>

School life experiences may lead to social phobia among students in their further life. Students who ever experienced bullying in their school life had significantly higher proportion of social phobia. The outcomes of this study align with some of the prior research findings showing childhood bullying is associated with social phobia.<sup>[17]</sup> During childhood, peer bullying will have a significant impact on mental health in students' adult life.<sup>[18]</sup> Some studies show that social phobia disturbs the ability to establish contact with peers, so adolescents with significant social phobia are likely to be singled out for harassment and then augment their social phobia.<sup>[19]</sup> Moreover, fear of humiliation and adverse appraisal by others in social relationships can influence students' fear of social interactions.<sup>[20]</sup>

Students who had unsatisfactory academic performance had significantly higher prevalence of social phobia among them. Similar findings in other studies show that fear of society has been the most important factor for poor academic performance.<sup>[11]</sup> However, there was no significant association between subjective assessment of academic performance and social phobia among undergraduate students in Nigeria. Although, majority were not satisfied with academic performance.<sup>[21]</sup>

In this study, there was no relation found between student's permanent residence and current place of stay with social phobia similar to a study done in Gujrat.<sup>[22]</sup> However, residence was a significant factor in a study



conducted in Iran.<sup>[12]</sup> As contradictory to our study, a study by Shah and Kataria shows significant levels of social phobia in students residing in hostel.<sup>[23]</sup> This might be because their study population includes undergraduate students with different courses that are different from our study population.

Studies found that children practicing team sports exhibited a decrease in social anxiety over time.<sup>[24]</sup> In this study, students also recognized that extracurricular activities play a vital role in confronting social phobia among them. Furthermore, in other studies, it was observed that the active involvement of students in free-time activities activity significantly influenced social anxiety in a positive statistically.<sup>[25]</sup>

A study among 1<sup>st</sup>-year students of a university situated in Mangaluru, Karnataka, shows majority of participants had mild functional disability in all the three domains, namely, 62.44%, 69.27%, and 64.89% in the work, social, and family life domain, respectively.<sup>[5]</sup> Similarly, in a study conducted among adolescents shows individuals with social phobia had disability in these domains.<sup>[21]</sup> Individuals with social phobia reportedly had reduced employment productivity, social interaction, and impaired social support, which are in line with our study findings.<sup>[26]</sup> Negative correlation between social anxiety and professional adjustment was found elsewhere.<sup>[27]</sup>

The study was first of its kind in the area in postpandemic era. However, the findings are limited to similar study setting. Cross-sectional nature of the study does not enable analysis of all possible causal associations. Few qualitative insights were gained in the topic which supplemented the quantitative findings. However, these were beyond the purview of the present study. All of participants in the study were female. In comparison with other findings (except studies conducted among nurses in India), this should be considered accordingly.

## Conclusions

Social phobia among nursing students is highly prevalent. Findings are likely to hint at complex interactions between social phobia and explanatory variables. Stress of educational performance, intimidation, and introversion in school life can continue in later life. Peer group and extracurricular activities with institutional support at college level can help students to overcome social phobia. The medical university should develop guidelines for early detection of high-risk individuals.

## Acknowledgment

None.

## Competing interests

The authors declare that they have no competing interests.

## Abbreviations

Social anxiety disorder: SAD.

## Authors' contributions

Dr. Kunal Singh Sullar: Data acquisition, analysis of data, initial draft of the manuscript. Dr Pallabi Dasgupta: Conception and design of the study, Analysis, and interpretation of data, critically revising the manuscript for important intellectual content. All authors read and approved the final manuscript. All authors take responsibility for the integrity of the data and the accuracy of the data analysis.

## Funding

None.

## Role of the funding source

None.

## Availability of data and materials

The data used in this study are available from the corresponding author on request.

## Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki. Institutional Review Board approval was obtained.

## Consent for publication

By submitting this document, the authors declare their consent for the final accepted version of the manuscript to be considered for publication.

## References

1. Jefferson JW. Social anxiety disorder: More than just a little shyness. *Prim Care Companion J Clin Psychiatry* 2001;3:4-9. doi:10.4088/PCC.v03n0407b PMID:15014606 PMCID:PMC181187
2. Stein MB, Stein DJ. Social anxiety disorder. *Lancet* 2008; 371: 1115-25. doi:10.1016/S0140-6736(08)60488-2 PMID:18374843
3. Singh R, Joshi HL. Social phobia among college-going students following the Covid-19 Outbreak: Links with internet addiction. *Indian J Clin Psychol.* 2022;49:59-64.
4. Ali SK, Kareem MS, Al-Banna DA. Assessment of social phobia among students of nursing college in Hawler Medical University at Erbil City- Iraq. *Kufa J Nurs Sci* 2016; 6:1-6. doi:10.36321/kjns.vi20162.2687
5. Akram MS, Naik P, Nirgude AS. A study on social phobia and functional disability among university students of Dakshina Kannada District. *Natl J Community Med* 2016; 7:909-13.
6. Kumar D, Bajaj G, Bhorla A, Banerjee S, Yadav P, Kumar S, et al. The manifestation of anxiety as repercussion of COVID-19: a

- survey of medical practitioner's opinion. *Arab J Sci Eng.* 2022; 47:189-95. doi:10.1007/s13369-021-05686-5 PMID:33968599 PMCID:PMC8095473
7. Hopko DR, McNeil DW, Zvolensky MJ, Eifert GH. The relation between anxiety and skill in performance-based anxiety disorders: A behavioral formulation of social phobia. *Behav Ther* 2001; 32:185-207. doi:10.1016/S0005-7894(01)80052-6
  8. Kelley JM, Kraft Todd G, Schapira L, Kossowsky J, Riess H. The influence of the patient clinician relationship on healthcare outcomes: A systematic review and meta analysis of randomized controlled trials. *PLoS One* 2014;9:e94207. doi:10.1371/journal.pone.0094207 PMID:24718585 PMCID:PMC3981763
  9. Eggenberger E, Heimerl K, Bennett MI. Communication skills training in dementia care: A systematic review of effectiveness, training content, and didactic methods in different care settings. *Int Psychogeriatr* 2013; 25:345 58. doi:10.1017/S1041610212001664 PMID:23116547
  10. Sharma R, Sharma P. A correlational study to assess the relation of anxiety and social phobia with academic performance of students in a selected nursing college Ludhiana, Punjab. *Int J Nurs Educ* 2015; 7:26 30. doi:10.5958/0974-9357.2015.00067.7
  11. Koteswaramma D, Nair R. Prevalence of social phobia among nursing undergraduates. *Nurs J India* 2021; 112:137 42.
  12. Gupta K, Semwal J, Sharma N, Srivastava A, Vyas S. Do social phobia and depression go hand in hand? A cross sectional study among school going adolescents of Northern region of India. *J Educ Health Promot* 2022; 11:321. doi:10.4103/jehp.jehp\_1805\_21 PMID:36568011 PMCID:PMC9768701
  13. Priya A. From joint to nuclear: Some observations on the changing pattern of family as a social institution. *IOSR J Humanit Soc Sci* 2017; 22:28 31. doi:10.9790/0837-2206032831
  14. Momeni M, Zeyghami R, Moradi M, Taherpour M, Sarichloo ME. Prevalence, and factors associated with social phobia in nursing and midwifery students. *J Health Care* 2015; 17:137 45.
  15. SoohindaG, SampathH. Social phobia among school students prevalence, demographic correlates and socio academic impairment. *J Indian Assoc Child Adolesc Mental Health* 2016; 12:211 29. doi:10.1177/0973134220160302
  16. Chen F, Zang Y, Dong H, Wang X, Bian J, Lin X. Effects of a hospital based leisure activities programme on nurses' stress, self perceived anxiety and depression: A mixed methods study. *J Nurs Manag* 2022; 30:243 51. doi:10.1111/jonm.13484 PMID:34590366 PMCID:PMC9293447
  17. Lin H, Yang Z, Huo S, Su C, Zhang Z, Rao Y, et al. Social phobia among Chinese college students in the context of COVID 19 pandemic: A cross sectional study. Available at SSRN 4263486.
  18. Wang Q. Association of childhood intrafamilial aggression and childhood peer bullying with adult depressive symptoms in China. *JAMA New Open* 2020;3: e2012557. doi:10.1001/jamanetworkopen.2020.12557 PMID:32749469 PMCID:PMC7403920
  19. Liu TL, Hsiao RC, Chou WJ, Yen CF. Social anxiety in victimization and perpetration of cyberbullying and traditional bullying in adolescents with autism spectrum disorder and attention deficit/hyperactivity disorder. *Int J Environ Res Public Health* 2021; 18:5728. doi:10.3390/ijerph18115728 PMID:34073617 PMCID:PMC8198472
  20. Ghezalbash S, Rahmani F, Peyrovi H, Inanloo M. Study of social anxiety in nursing students of Tehran universities of medical sciences. *Res Dev Med Educ* 2014; 4:85 90. doi:10.15171/rdme.2015.014
  21. Donald CC, Olayinka O. Prevalence and correlates of social phobia and its impact on academic performance among university students at a tertiary of hospital in Nigeria. *Int J Med Res Pharm Sci* 2017; 4:55 61.
  22. Upadhyaya S, Raval C, Sharma D, Charan J. Risk factors of social anxiety in medical college students. *J Health Specialties* 2016; 4: 207. doi:10.4103/2468-6360.186496
  23. Shah P, Kataria L. Social phobia, and its impact in Indian university students. *Internet J Mental Health* 2010; 6:1 8. doi:10.5580/2072
  24. Dimech AS, Seiler R. Extra curricular sport participation: A potential buffer against social anxiety symptoms in primary school children. *Psychol Sport Exerc* 2011; 12:347 54. doi:10.1016/j.psychsport.2011.03.007
  25. Ozen G. The effect of climbing community activities as a leisure on university students' social anxiety. *Anthropologist* 2015; 21:558 64. doi:10.1080/09720073.2015.11891847
  26. Davidson JR, Hughes DL, George LK, Blazer DG. The epidemiology of social phobia: Findings from the Duke Epidemiological Catchment Area Study. *Psychol Med* 1993; 23:709 18. doi:10.1017/S0033291700025484 PMID:8234577
  27. Reghuram R, Mathias J. A study on occurrence of social anxiety among nursing students and its correlation with professional adjustment in selected nursing institutions at Mangalore. *J Health Allied Sci NU* 2014; 4:064 doi:10.1055/s-0040-1703766

**How to Cite this Article:**

Sullar KS, Dasgupta P. Social phobia and its associated factors among college-going nursing students in the post-COVID era: Findings from West Bengal, India. *Int Arch Health Sci* 2023; 10(2):70-75. doi: 10.48307/IAHSJ.2023.176373