Prevalence and Correlation of Social Phobia and Interaction Anxiety among Newly Joined Undergraduate Nursing Students: A Descriptive Cross-Sectional Study

Shelly Dhawan[1]   Keerthi Mohanan[1]

[1] Department of Nursing, All India Institute of Medical Sciences, Patna, Bihar, India

Address for correspondence Shelly Dhawan, Department of Nursing, All India Institute of Medical Sciences, Patna, Bihar, 801507, India (e-mail: shellykrishna86@gmail.com).

Abstract

Introduction Social phobia is an overwhelming fearfulness of social situations. Social interaction anxiety includes intense terror of having an interaction or conversation with strangers or unknown people.

Aims and Objectives This study was conducted to assess prevalence and correlation of social phobia and interaction anxiety among newly joined undergraduate nursing students.

Methods and Materials A descriptive cross-sectional study was conducted on 84 newly joined undergraduate students at a government coeducational nursing college. Non-probability sampling technique of total enumeration was used to enroll all BSc nursing first-year students. Data regarding sociodemographic characteristics, interaction anxiety, and social phobia was obtained through self-prepared structured questionnaire, social interaction anxiety scale (SIAS), and social phobia inventory scale (SPIN), respectively.

Results Data revealed that mean age of the newly joined nursing students was 19.8 years. Most of the students were females (72.6%), belonged to nuclear families (67.9%), and resided in urban population (69%). Mean and median scores of SIAS were 19.9 and 19, respectively, whereas mean and median scores of SPIN were 17.2 and 14.4, respectively. Findings demonstrated that 81% of students had no social interaction anxiety as their scores for SIAS were less than 34. Only 3.6% students had social fears across specific situations and none of the student reported scores more than 43. Data also represented that 22.6% had mild social anxiety. A total of 8.3 and 1.2% had moderate and severe social anxiety, respectively. None of the student reported very severe social anxiety of score more than 51. A significant correlation was found between SPIN and SIAS scores with $r = 0.579$ and p-value $= 0.0001$. Findings showed that nursing students who reside in rural areas were having more social interaction anxiety ($23.0 + 6.1$) as compared with students from urban areas ($18.5 + 7.9$) with a statistically significant p-value of 0.003.

Conclusion Nursing students had mild-to-moderate social phobia. Future studies may focus on attributing factors and interventions to alleviate social phobia and anxiety, since effective communication is essential to become competent nurse.

Keywords
► anxiety
► interaction
► nursing students
► social phobia
► SPIN

Introduction

Social phobia is an overwhelming fearfulness of social situations such as social interactions, encounter to gatherings, requirement of verbal and nonverbal communication with group of people, meeting new people, and public speaking. Social interaction anxiety includes intense terror of having an interaction or conversation with strangers or unknown people. Physical symptoms of awkwardness while interaction are manifested in form of blushing, trembling, sweating, shakiness in voice, inability to maintain eye contact, difficulty to perform and palpitations, panic attacks,[1] etc.

People with younger age (18–29 years) are more frequently identified with social phobia.[2] Interaction anxiety and phobia from social exposure result in impairment of educational and vocational functions among nursing students because of the intense fear of being judged, observed, and evaluated by others. Communication is a key element of nursing profession, where nurses are expected to have excellent communication skills. Nurses utilize these skills to create an interpersonal relationship with patients, caregivers, healthcare team members, etc., which are vital for delivering quality nursing care.

It is absolutely necessary to pay attention regarding factors that can act as barriers to obtain and demonstrate interaction skills among newly joined students pursuing education in nursing. Social phobia and interaction anxiety might act as constituents to hinder the incorporation of psychomotor skills of interaction. These fundamental skills are learnt, practiced, and demonstrated during student period, which further grow with experience. Foundation to establish rapport and interpersonal relationship is built in early phase of studentship and could be shaken because of interfering components such as extreme shyness and social avoidance. Inadequate attention to factors that pose obstacles in acquiring precision, articulation, and naturalization of interaction skills might lead to poor academic performance, low self-esteem and confidence, ineffective communication, poor interpersonal relationship, unsatisfaction,[1] and educational choice. This is a known fact that students suffering from social phobia and interaction anxiety disorder comparatively perform lesser than peers in terms of education and career attainment. Identification of problem and diagnosis in early stage might assist in alleviating symptoms and evolvement of additional problems.[2,3]

There is a major transition of medical care from just the curative element to the comprehensive component where a person is taken care of as a whole being and this shift has made nursing profession even more complex, elaborated, and vast. Nursing is considered to be a social profession, which requires frequent social encounters. It becomes absolutely mandatory for nurses to implement and execute therapeutic interaction with patients. Effective communication can only be possibly implemented, when nurses are free from any kind of actual or perceived scrutiny from others and anxiety disorders.[4] Hence, the researcher felt the need to investigate the occurrence of social phobia and interaction anxiety among newly joined nursing students in selected nursing institute.

Objectives of the Study

- To estimate the prevalence of social phobia and interaction anxiety among newly joined nursing students.
- To evaluate the correlation between social phobia and interaction anxiety among newly joined nursing students.
- To find the association among social phobia and interaction anxiety with selected sociodemographic variables.

Hypothesis

H1: There will be significant correlation between social phobia and interaction anxiety among newly joined nursing students.

H2: There will be significant association among social phobia and interaction anxiety with selected sociodemographic variables.

Material and Methods

Study Design and Sample Size

A descriptive cross-sectional study was conducted on 84 newly joined undergraduate students at a government coeducational nursing college. Nonprobability sampling technique of total enumeration was used to enroll all BSc nursing first-year students who recently joined their educational course of nursing sciences.

Permission to Undertake the Study

Formal permission for execution of the study was granted from head of the department (principal cum professor) as well as dean of nursing sciences. Verbal and written informed consent were obtained from participants (nursing students). Anonymity and confidentiality of the subjects were maintained.

Tools and Techniques

Sociodemographic Profile

Data regarding sociodemographic characteristics was obtained through self-prepared structured questionnaire. Content validity of this tool was established from five experts from medical and nursing field.

Social Interaction Anxiety Scale

Data regarding interaction anxiety was assessed by social interaction anxiety scale (SIAS). It is a standardized tool with 20 items, which measures social interaction anxiety with a score range of 0 to 80, higher the score, higher is interaction anxiety. This tool is divided into three categories: score less than 34 represents no social anxiety, scores 34 to 43 represent interaction anxiety across specific situations only, and scores 44 to 80 represent interaction anxiety across numerous situations.

Social Phobia Inventory

Data regarding social phobia was obtained by social phobia inventory (SPIN). It is a standardized tool with 17 items, which measures social phobia with a score range of 0 to 68, higher the score, more severe is the social phobia. This tool is further divided into five categories. Score less than 20 represents no social phobia, scores 21 to 30 represent mild social phobia, scores 31 to 40 represent moderate social phobia, scores 41 to 50 represent severe social phobia, and scores more than 51 represent very severe social phobia. Permission to use these standardized tools was obtained from the authorized copyright sources.

Results

The mean age of the newly joined nursing students was found to be 19.8 years with a range from 17 to 26 years (►**Table 1**). This study was conducted in co-educational college in which 72.6% of the students were females. Findings also presented that 67.9% of students belonged to nuclear families and 69% of the students resided in urban population (►**Table 1**).

The mean and median scores of SIAS among newly joined undergraduate nursing students were found to be19.9 and 19, respectively, whereas mean and median scores of SPIN were observed to be 17.2 and 14.4, respectively (►**Fig 2**).

The frequency distribution of scores of SIAS among newly joined undergraduate nursing students is depicted in ►**Fig 1**. Data depicted that 81% of freshly admitted nursing students had no social interaction anxiety as their scores for SIAS were less than 34. Only 3.6% students had social fears across specific situations and none of the student reported scores more than 43.

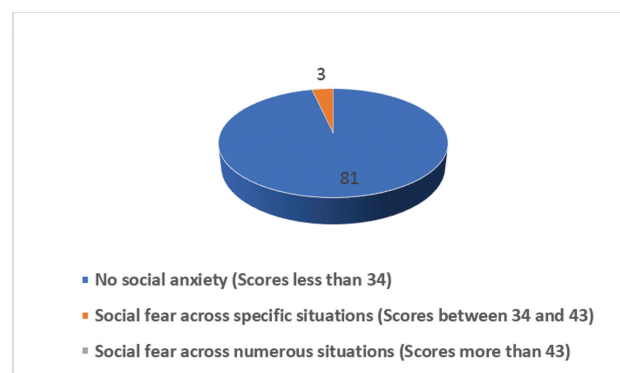Frequency distribution of scores of SPIN among participants has been shown in ►**Fig 2**. Data revealed that 22.6%

Fig. 1 Frequency distribution of scores of social interaction anxiety scale, $n = 84$.
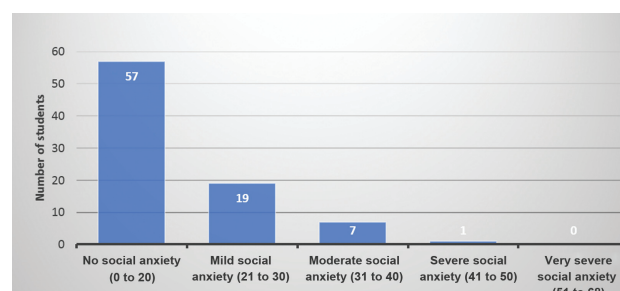

Fig. 2 Frequency distribution of scores of social phobia inventory scale, $n = 84$.

had mild social anxiety. A total of 8.3% and 1.2% had moderate and severe social anxiety, respectively. None of the student reported very severe social anxiety of score more than 51.

A moderate positive correlation was observed between SPIN and SIAS scores with $r = 0.579$ (►**Table 3** and ►**Fig 3**).

Table 1 The sociodemographic characteristics of participants ($n = 84$)

Sociodemographic characteristics		Mean ± SD	Minimum	Maximum
Age (in years)		19.8 ± 1.8	17	26
		Frequency	Percentage	
Gender	Male	23	27.4	
	Female	61	72.6	
Type of family	Nuclear	57	67.9	
	Joint	27	32.1	
Area of residence	Urban	58	69	
	Rural	26	31	

Abbreviation: SD, standard deviation.

Table 2 Mean and median scores of social interaction anxiety scale and social phobia inventory scale of participants ($n = 84$).

Variables	Mean ± SD	Median	Range (max–min)	Skewness
Social interaction anxiety scale scores	19.9 ± 7.6	19	34 (40–6)	0.29
Social phobia inventory scale scores	17.2 ± 9.3	14.4	43 (44–1)	0.87

Abbreviation: SD, standard deviation.

Table 3 Correlation of SIAS and SPIN scores

Selected variables	Coefficient of correlation	p-Value
SPIN score	0.579	0.0001[a]
SIAS score		

Abbreviations: SIAS, social interaction anxiety scale; SPIN, social phobia inventory scale.
Spearman's rho correlation.
[a]p-Value < 0.05.
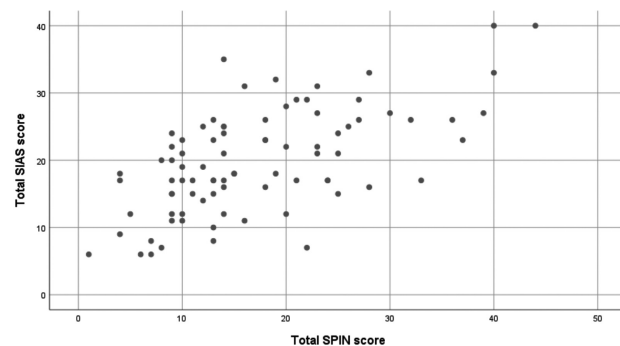
Fig. 3 Correlation of social interaction anxiety scale (SIAS) and social phobia inventory scale (SPIN) scores.

Table 4 Correlation of SPIN and SIAS scores with age

Selected variables		Age
SPIN score	r	−0.03
	p-Value	0.78
SIAS score	r	0.14
	p-Value	0.17

Abbreviations: SIAS, social interaction anxiety scale; SPIN, social phobia inventory scale.
Spearman's rho correlation.
p-Value < 0.05.

This correlation was found to be statistically significant with p-value of 0.0001. Hence, research hypothesis H1 was accepted.

The SPIN and SIAS scores were found to be not significantly corelated with age (►**Table 4**).

The nursing students who resided in rural areas were observed to be having more social interaction anxiety (23.0 ± 6.1) as compared with students from urban areas (18.5 ± 7.9). (►**Table 5**) This difference was statistically significant with a p-value of 0.003.

SPIN scores were found to be not significantly associated with any of the selected sociodemographic variables. (►**Table 6**) Hence, research hypothesis H2 was partially accepted.

Discussion

This study revealed that mean age of the newly joined nursing students was 19.8 years with a range from 17 to 26 years. Most of the students were females (72.6%). Similar kind of findings was observed by Kamel et al[5] who assessed social phobia among students of nursing college in Iraq and reported that most of the students were in the age group between 17 and 22 and majority of the students were females. Findings of current study represented that 67.9% of nursing students belonged to nuclear families and 69% resided in urban area. Kamel et al[5] found contrasting results with most of the students from rural background (59.8%).

Current study represented that 81% of newly admitted nursing students had no social interaction anxiety as their scores for SIAS were less than 34. Only 3.6% students had social fears across specific situations and none of the student reported scores more than 43. This study's data revealed that 22.6% had mild social anxiety. These findings are consistent with the results of the study done by Koteshwarama and Nair who reported that mild social phobia was present in 24.6% of nursing undergraduates.[3] However, researchers found contrasting results with regard to moderate and severe social phobia. Investigators reported a greater number of students with moderate (14.1%) and severe (5.6%) social phobia in comparison to 8.3 and 1.2% in this study, respectively. None of the student reported very severe social anxiety of score more than 51, whereas study findings by Koteshwaramma and Nair showed presence of very severe social phobia in 2.4% of students.[3] Reason for contrasting results could be vast sample size of 1006 in comparison to 84 in this study. Moreover, only first year undergraduate nursing students of one institute were included in this study in comparison to

Table 5 Association of SIAS scores with various selected sociodemographic variables

Variables		SIAS (Mean ± SD)	p-Value
Gender	Male (23)	20 ± 7.2	0.44
	Female (61)	19.5 ± 7.9	
Type of family	Nuclear (57)	19.9 ± 7.1	0.7
	Joint (27)	19.8 ± 8.8	
Area of residence	Urban (58)	18.5 ± 7.9	0.003[a]
	Rural (26)	23.0 ± 6.1	

Abbreviations: SD, standard deviation; SIAS, social interaction anxiety scale.
Mann–Whitney U test.
[a]p-Value < 0.05.

Table 6 Association of SPIN scores with various selected sociodemographic variables

Variables		SPIN (Mean ± SD)	p-Value
Gender	Male (23)	16.3 ± 7.0	0.97
	Female (61)	17.5 ± 10.1	
Type of family	Nuclear (57)	18.2 ± 8.2	0.09
	Joint (27)	15.0 ± 10.1	
Area of residence	Urban (58)	17.4 ± 9.4	0.76
	Rural (26)	16.7 ± 9.4	

Abbreviations: SD, standard deviation; SPIN, social phobia inventory scale.
Mann–Whitney U test.

all 4 years students of various states, respectively, in above mentioned study.

Social phobia and interaction anxiety scores were not found to be significantly associated with gender of nursing students. These findings were in line with the findings of Momeni et al[6] and Chan.[7] This finding is in contrast with the study results by Reghuram and Mathias,[4] which showed that there was significant association of gender with social anxiety (p-value = 0.007). This study did not find any significant association of social phobia with any of the sociodemographic variable. Current study's findings depicted that nursing students who reside in rural areas were having more social interaction anxiety (23.0± 6.1) as compared with students from urban areas (18.5 ± 7.9). This difference was statistically significant with a p-value of 0.003. This finding of this study is in contrast with the findings by Koteshwaramma and Nair,[3] which demonstrated no significant difference of interaction anxiety between nursing students who reside in urban or rural population. This study's results also showed that interaction anxiety and social phobia were not corelated with age of nursing students.

Nursing Implications

Nursing practice: Nurses encounter more opportunities of interactions, verbal and nonverbal communication with patients, their family members, and community people in comparison to other healthcare professionals. It becomes absolutely necessary that student nurses should be emotionally stable and well versed with standards of effective communication and this is a key to improve quality nursing care. Interventions can be executed to improve communication skills by eliminating factors such as social anxiety, hesitation, and shyness and empowering student nurses to cope effectively with barriers of successful interaction.

Nursing administration: Nursing administrators should make sincere efforts to recognize maladjustment and psychosocial distressing factors among budding nurses. Identification of exact causes and factors may assist in planning and execution of necessary remedies such as counselling by expert, mentorship, and guidance by senior students and teachers, helpdesk, secret complaint box, antiragging com-

mittees, health and personality development services, and orientation program.

Nursing education: A student nurse confident in effective communication is more likely to attain educational objectives such as establishing rapport with patient and caregivers, obtaining history and informed consent, performing procedure, and providing health education. Nursing curriculum should focus on personality and communication skills development along with elimination of language barriers. Nursing educators should take the responsibility of early identification of psychosocial issues among students and early referral to counselling services. Educators in nursing should also be made accountable for acquainting students with the course requirements, available services, ways, and time to assess these services.

Nursing research and future recommendations: This study highlighted the prevalence and correlation of interaction anxiety and social phobia among newly joined nursing students. Further studies can be conducted to explore associated factors and effectiveness of interventions such as guidance and counselling sessions, mentorship, and comprehensive student help services.

Conclusion

Social phobia and interaction anxiety act as an obstacle for inculcation of psychomotor skills of effective communication. These basic skills are learnt during early student period and it is mandatory to give attention to contributing factors that can act as barriers to obtain and demonstrate interaction skills among newly joined students pursuing education in nursing.

Conflict of Interest
None declared.

References

1 Social Anxiety Disorder. Accessed July 12, 2022. https://www.healthline.com/health/anxiety/social-phobia
2 Current Medical Diagnosis & Treatment in Psychiatry. Social Phobias. Accessed July 12, 2022 from URL: http://psychiatry.healthse.com/psy/ more/social phobias
3 Koteshwaramma D, Nair R. Prevalence of social phobia among nursing undergraduates. Nurs J India 2021;3:137–142

4 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. Nitte Univ J Health Sci 2014;4(02):64–69

5 Kamel S, Saber M, Al-Banna D. Assessment of Social Phobia among Students of Nursing College in Hawler Medical University at Erbil City-Iraq. Kufa Journal for Nursing Sciences 2016;6(02):200–207

6 Momeni M, Zeyghami R, Moradi M, Taherpour M, Sarichloo ME. Prevalence and factors associated with social phobia in nursing and midwifery students. Journal of Health and Care 2015;17(02): 137–145

7 Chan VW-Sh. Gender differences associated with social phobia: a developmental perspective. J Under-graduate Life Sci 2010;4(01): 82–85