

PREVALENCE AND CORRELATES OF SOCIAL PHOBIA AND ITS IMPACT ON ACADEMIC PERFORMANCE AMONG UNIVERSITY STUDENTS AT A TERTIARY OF HOSPITAL IN NIGERIA

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Abstract

Background: Social phobia is a chronic distressing psychological disorder with a huge disease burden which has not been sufficiently addressed. The study aims to ascertain the prevalence and correlates of social phobia and its impact on academic performance among university students in an institution in Nigeria.

Methods: Two hundred and seventy two undergraduate students randomly selected were interviewed. A socio-demographic questionnaire, a questionnaire on the subjective assessment of academic performance, social phobia inventory (SPIN) and the general health questionnaire (GHQ version 12) were administered.

Results: The majority of the subjects across all the dimensions of social phobia were female and social phobia was significantly associated with gender ($X^2 = 19.811$, $df = 8$, $p < 0.05$). Prevalence of social phobia was 52.2% and the t-test result of SPI scores were significant ($t = 27.616$, $df = 730$, $p < 0.05$). 32.4% were not satisfied with their academic performance, 21% were motivated to turn it around, 6.2% increasingly finding their academics difficult. There was no significant association between subjective assessment of academic performance and SPI scores.

Conclusion: Social anxiety disorder can be a marker for other psychiatric disorders but there is limited evidence about its impact on academic performance. Nevertheless, it presents a huge significant burden which can have far reaching implications.

Introduction

Anxiety has been defined as an emotional state consisting of feeling of tension and apprehension, and its effect on the nervous system ⁽¹⁾.

Anxiety disorders are abnormal states in which the most prominent features are mental and physical symptoms of anxiety occurring in the absence of organic brain disease or another psychiatric disorder ⁽²⁾. Unlike in generalized anxiety disorders, phobic anxiety disorders are characterized by intermittent anxiety arising in particular circumstances ⁽²⁾.

Social phobia is one of the most chronic, prevalent and distressing psychological disorders with a huge disease burden which can hinder the sufferer from achieving set goals or maximize his potentials.

Giving its prevalence and impact, one wonders why this challenge has not received enough attention by citadels of learning from where leaders and minds that will shape society tomorrow are bred.

Social phobia is characterized by the intense fear of being embarrassed, laughed at, criticized or humiliated. This leads to patients limiting their contact with people in a bid to avoid evaluation by them.

The age of onset is usually between 14-24yrs but is often diagnosed late because the patient often presents later out of shame for their condition and for fear of being misunderstood⁽³⁾.

Varying prevalence estimates of social phobia ranging from 10-56% have been reported by different researchers for different parts of the world ^(4, 5, 6, 7). Higher rates have been seen in females ^(8, 9).

This sort of anxiety compels restraint and undermines the efforts of students to express themselves within groups; it can hinder academic achievement and may lead to other dangerous immature coping strategies including the misuse and dependence on psychoactive substances⁽³⁾, which is clearly maladaptive.

In spite of several studies done in the developed world on social phobia and academic performance of students, there is paucity of data on this malady in the developing world. The rising trend in the use of psychoactive substances among the youths, including students in the Niger Delta Region of Nigeria against a background of an established association between social phobia and use of psychoactive substances was the reason for this study.

Methodology

This cross-sectional descriptive study was carried out from October – December 2016 at the Madonna University Elele, Rivers State of Nigeria. Two hundred and seventy two undergraduate students were randomly selected from a pool of 5232 students.

Informed consent was obtained from those willing to participate in the research.

The following instruments were administered to the subjects;

- (a) A socio-demographic questionnaire
- (b) A questionnaire on the subjective assessment of academic performance in the past 2 years.
- (c) A Social Phobia Inventory (SPIN) questionnaire
- (d) A General Health Questionnaire (GHQ) (version 12).

The socio-demographic questionnaire was designed by the researchers to elicit information on socio-demographic characteristics of the respondents.

A questionnaire designed by the researchers to elicit how the subjects feel about their academic performance in the past 2 yrs was also administered.

The social phobia inventory (SPIN) developed by Jonathan Davidson et al is a 17 item self rating scale for social anxiety disorder (social phobia)⁽¹⁰⁾. The scale is rated over the past week and includes items assessing each of the symptom domains of social anxiety disorder (fear, avoidance and physiological arousal). Each item is rated from 0-4 with a total score ranging from 0-68. The SPIN total score can be used to distinguish between those with and without social anxiety disorder. Based on a score of 19, a diagnosis of social phobia can be predicted with 79% accuracy⁽¹⁰⁾. A SPIN score of 21-30 indicates mild social phobia, 31-40 (moderate), 41-50 (severe) and 51 (very severe)⁽¹⁰⁾. Researchers have demonstrated good test-retest reliability, internal consistency, convergent and divergent validity with SPIN^(10, 11).

The GHQ questionnaire developed by Goldberg and Williams to screen for psychiatric morbidity was also administered to the subjects⁽¹²⁾. It is a 12 item questionnaire which has been used by previous researchers in Nigeria^(12, 13).

Procedure

The questionnaires were administered to the subjects in their rooms to ensure confidentiality, after they had given informed verbal consent to participate in the study. Assistance in completing the questionnaires was provided for the respondents by the researchers where necessary.

Data Analysis

Statistical Package for Social Sciences (SPSS), version 15 was used for data analysis. This was carried out at 5% level of significance and 95% confidence interval. Chi Square test was used to test for association among categorical variables; the student t-test for continuous variables. Frequency distribution tables were used to display data. Pearson's correlation test was used to further assess for relationship between SPI and GHQ scores.

Results

The data of 272 subjects who participated in the study were analyzed. The subjects were aged between 14 and 35 years, with a mean age of 22.19 ± 3.183 years. Out of the 272 subjects, 10(3.7%) were in year 1, 24(8.7%) in year 2, 41(15.2%) in year 3, 92(33.8%) in year 4, 91(33.3%) in year 5 and 14(5.3%) in year 6.

The majority of the subjects across all the dimensions of social phobia were female and social phobia is significantly associated with gender ($X^2 = 19.811$, $df = 8$, $p < 0.05$).

Also the majority of the subjects were Christians, single and of Ibo ethnic group, but none of these socio-demographic variables is significantly associated with social phobia. (see table 1).

Table 2 shows the frequencies of the severity of social phobia among the study population. 142 (52.2%) subjects had social phobia, comprising 91(33.5%) with mild social phobia, 38(14.0%) with moderate social phobia, 12(4.4%) with severe social phobia and 1 (0.4%) with very severe social phobia.

The t-test result of the SPI scores was significant ($t = 27.616$, $df = 730$, $p < 0.05$) with a mean SPI score of 18.99 ± 10.452. (see table 2b).

Table 3 shows the frequencies of the subjective assessment of academic performance by the subjects in the past 2yrs. The results showed that 88(32.4%) were not satisfied with their academic performance, 57(21.0%) were motivated to turn it around and 17(6.2%) were finding their academics increasingly difficult and are anxious about it.

Table 4 shows that there is no significant relationship between subjective assessment of academic performance and SPI scores. $X^2 = 10.948$, $df = 16$, $p = 0.813$.

Pearson's correlation revealed that SPI scores were positive and significantly correlated with GHQ scores. (see table 5).

Table 1: Distribution of social phobia among the various socio demographic variables

| VARIABLE | SPI SCORE | | | | | TOTAL n (%) |
|---|----------------|------------------|----------------------|--------------------|-------------------------|----------------|
| | NO SP n (%) | MILD SP n (%) | MODERATE SP n (%) | SEVERE SP n (%) | VERY SEVERE n (%) | |
| GENDER | | | | | | |
| Male | 82 | 40 | 14 | 2 | 0 | 138 |
| Female | 48 | 51 | 24 | 10 | 1 | 134 |
| TOTAL | 130 | 91 | 38 | 12 | 1 | 272 |
| $X^2 = 19.811$, $df = 8$, $p = 0.011$ | | | | | | |
| RELIGION | | | | | | |
| Christian | 127 | 89 | 37 | 12 | 1 | 266 |
| Muslim | 1 | 1 | 0 | 0 | 0 | 2 |
| Female | 2 | 1 | 1 | 0 | 0 | 4 |
| TOTAL | 130 | 91 | 38 | 12 | 1 | 272 |
| $X^2 = 1.177$, $df = 8$, $p = 0.997$ | | | | | | |
| MARITAL STATUS | | | | | | |
| Single | 120 | 90 | 37 | 12 | 1 | 260 |
| Married | 10 | 0 | 1 | 0 | 0 | 11 |
| Divorced/ separated | 0 | 1 | 0 | 0 | 0 | 1 |
| TOTAL | 130 | 91 | 38 | 12 | 1 | 272 |
| $X^2 = 9.935$, $df = 8$, $p = 0.270$ | | | | | | |

| ETHNICITY | | | | | | |
|------------------------------------|-----|----|----|----|---|-----|
| Others | 28 | 18 | 9 | 2 | 0 | 57 |
| Hausa | 0 | 4 | 0 | 0 | 0 | 4 |
| Igbo | 77 | 60 | 21 | 6 | 1 | 165 |
| Yoruba | 16 | 5 | 4 | 4 | 0 | 29 |
| Ikwerre | 5 | 4 | 1 | 0 | 0 | 10 |
| Ogoni | 2 | 0 | 2 | 0 | 0 | 4 |
| Kalabari | 1 | 0 | 1 | 0 | 0 | 2 |
| Okrika | 1 | 0 | 0 | 0 | 0 | 1 |
| TOTAL | 130 | 91 | 38 | 12 | 1 | 272 |
| $X^2 = 27.809, df = 28, p = 0.475$ | | | | | | |

Table 2:

(a) Frequencies of severity of social phobia among the students

| | N | % |
|-------------------------|------------|--------------|
| No social phobia | 130 | 47.8% |
| Social phobia | 142 | 52.2% |
| Mild | 91 | 33.5 |
| Moderate | 38 | 14.0 |
| Severe | 12 | 4.4 |
| Very severe | 1 | 0.4 |
| Total | 272 | 100 |

(b) T-test of SPI scores

| | t | df | Sig | Mean | Std. dev. | Mean diff. | 95% confidence interval of difference |
|-----------|--------|-----|------|-------|-----------|------------|---------------------------------------|
| SPI score | 27.616 | 730 | .000 | 18.99 | 10.452 | 18.991 | 2.35 |

Table 3: Frequencies of the subjective assessment of academic performance in the past 2 years

| | n | % |
|---|-----|-------|
| Valid | | |
| No C/O – Fully satisfied with performance | 110 | 40.4 |
| No C/O – Not satisfied with performance | 88 | 32.4 |
| Few C/O – Motivated to turn it around | 57 | 21.0 |
| Increasing difficult performance – Anxious about it | 17 | 6.2 |
| Total | 272 | 100.0 |

Table 4: SPS score vs academic performance in the past 2yrs

| | ACADEMIC PERFORMANCE PAST 2 YRS | | | | |
|--|---|--|--|---|-------|
| | No complaints. Fully satisfied with performance | No complaints Not satisfied with performance | Few complaints Motivated to turn it around | Increasingly difficult performance. Anxious about | Total |

| | | | | it | |
|----------------------------------|-----|----|----|----|-----|
| SEVERITY OF SOCIAL PHOBIA | | | | | |
| No social phobia | 59 | 40 | 25 | 6 | 130 |
| Mild SP | 37 | 30 | 19 | 5 | 91 |
| Moderate SP | 11 | 15 | 9 | 3 | 38 |
| Severe SP | 3 | 3 | 4 | 2 | 12 |
| Very severe SP | 0 | 0 | 1 | 0 | 1 |
| Total | 110 | 88 | 57 | 17 | 272 |

$X^2 = 10.948$, $df = 16$, $p = .813$

Key: Sp= Social Phobia

Table 5: Correlation between SPI and GHQ scores

| | | SPI_Score | GHQ_Score |
|-----------|---------------------|-----------|-----------|
| SPI_Score | Pearson Correlation | 1 | .273 ** |
| | Sig. (2-tailed) | | .000 |
| | N | 272 | 272 |
| GHQ_Score | Pearson Correlation | .273 ** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 272 | 272 |

** . Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

Discussion

This study examined the prevalence and correlates of social phobia and its impact on the academic performance among University students at a tertiary hospital in Nigeria.

One hundred and forty two subjects (52.2%) had social phobia; but a greater proportion of this belongs to the mild category 91(33.5%). This is similar to finding by Al Nagar in his Malaysian study, where a prevalence rate of 55.85 was reported ⁽⁷⁾.

Nevertheless, other reports have reported varying estimates that range from 9.4% - 35% ^(4, 5, 6). The differences in rates may be attributed to methodological differences.

The prevalence of “severe” and “very severe” social phobia in this study was 4.4% and 0.4% respectively. Rizwan et al reported 15.6% prevalence of severe phobia while Chabra et al reported 1% ^(4, 14).

Social phobia was found to be significantly more prevalent among the females than males (31.6% & 20.6% respectively). This is in consonance with reports from other studies ^(4, 8, 9).

The majority of the subjects were of the Christian faith and belonged to the Ibo ethnic group.

The majority of the population from where the cohort was drawn professes Christianity; more so Madonna University where the research took place is a Catholic University. Furthermore, the Ibo ethnic group is the dominant ethnic group in the student population.

This study did not demonstrate any significant relationship between subjective assessment of academic performance and SPI scores. Some students suffering from anxiety disorder exhibit a passive attitude towards their studies which usually translates to poor academic performance. They attributed this to the students' high level of anxiety which causes reduced memory span, loss of concentration, lack of confidence and reduced reasoning capacity^(15, 16, 17). Yet others maintain that there is no relationship between test anxiety and students academic performance⁽¹⁸⁾. It is important to note that the academic performance examined in this study is the subjective type (the students' assessment of themselves which may be flawed).

It is possible that a study involving an objective academic performance may give a different result.

The Pearson's correlation revealed that SPI scores were positively correlated with the GHQ scores and this correlation is significant. This suggest that the higher the SPI scores which portends increased severity of social phobia, the higher the GHQ scores which mean increased tendency towards psychiatric morbidity. This is an important finding and confirms the reports by others, that social anxiety disorder is most often associated with other psychiatric disorders⁽¹⁹⁾.

The relationship between self reported anxiety symptoms and academic performance is complex: multiple factors including familial inherited coping patterns, socio-economic status and the individuals cognitive endowments interact to lay the foundation for psychopathology. School difficulty can be the cause or consequence of the affective symptoms that manifest in social phobia and this bidirectional relationship may institute a vicious cycle which may further entrench the disorder⁽²⁰⁾.

Conclusion

From the foregoing, it is obvious that social anxiety disorder can be a marker for other psychiatric disorders. Therefore clinicians should step up their search for the presence of other co-morbid conditions when a diagnosis of social phobia is made. But although this disorder is distressing and causes disengagement from learning, there is limited objective evidence about the impact of social anxiety on academic performance in higher education.

Limitation

The cross sectional nature of this study does not give room for inference on the direction of causality between socio demographic variables and social phobia. Secondly, the data was limited to self rated anxiety only. Longitudinal studies would be necessary for proper evaluation of anxiety symptoms and their consequences in the long term.

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