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The prevalence of social anxiety disorder: A school related experience in Makkah city, Saudi Arabia

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ABSTRACT

Background: Fewer researches have been conducted on social phobia in the context of severe social inequality and poverty, as seen in most developing countries. In this study, we addressed the prevalence of Social Anxiety Disorder (SAD) among school students and teachers in Makkah city. *Methodology:* Using a standardized tool for investigating Social Phobia Inventory (SPIN), an online survey was distributed among schools during September 2022. After data collection, an appropriate statistical analysis was implemented. *Results:* A total of 396 participants were enrolled in this survey. This study showed a high prevalence of SAD, while students showed a high prevalence rate of SAD compared with teachers. Moreover, moderate levels of SAD represent the highest frequency among other SAD intensities. A significant variation was found between participants with a previous positive history of SAD and mild SAD (P-value, 0.002). Similarly, participants with no history of SAD show significant variation with both ''No SAD'' and ''Mild SAD'' (P-value, 0.002). *Conclusion:* This study reported a high prevalence of SAD compared to other studies. Accordingly, we recommend more studies in Saudi Arabia.

Keywords: anxiety, Students, Teachers, Makkah, Saudi Arabia.

1. INTRODUCTION

Social anxiety disorder (SAD) illustrates a common health problem characterised by an excessive fear of scrutiny, embarrassment, humiliation in social or performance situations, which causes significant distress or impaired functioning (Ghazwani et al., 2016; World Health Organization, 1993; Stein et al., 2001; American Psychiatric Association, 2000). There are different cognitive and physical anxiety symptoms, including, lushing, tremors,

increased sweating, and tachycardia, will occur in individuals (Al-Johani et al., 2022; American Psychiatric Association, 2013).

SAD is the most typical type of anxiety disorder and the third comments psychiatric condition comes after major depressive disorder and alcoholism (Ghazwani et al., 2016; Sareen et al., 2000). SAD affects between 7% and 13% of people within their lifetimes in western nations (Ghazwani et al., 2016; Furmark, 2002). Adolescents appear to have higher rates of SAD, which is also more common in women, those with little education, and those with lower socioeconomic status (Ghazwani et al., 2016; Hidalgo et al., 2001). Data on the SAD prevalence is generally lacking and the reported rates vary widely between studies, with much of the variability possibly being due to different instruments used to determine diagnosis. However, SAD is obviously one of the most common disorders of all anxiety disorders (Taha et al., 2017). For instance, SAD was Diagnosed as the most prevalent anxiety condition by Kesseler and colleagues after interviewing 9282 English-speaking participants aged 18 years and more with lifetime prevalence up to 12%15 and a 12-month prevalence of 6.8% (Kessler et al., 2005).

Regrettably, the issue is not well understood by the general public and is also under-recognized. Therefore, the majority of cases are untreated (Furmark, 2002; Taha et al., 2017; Schneier, 2006). Furthermore, only about half of people with the disease seek therapy, and even those who do only do so after experiencing symptoms for 15 to 20 years (Taha et al., 2017; Tyrer et al., 2008). Numerous models outline the risk factors for SAD, including socioeconomic and cultural impacts, genetic influences, parent-child interactions, and unfavorable environmental conditions (Taha et al., 2017; Muris, 2006). Additionally, SAD is linked to lower educational attainment, unstable employment, and a higher work absenteeism rate (Ghazwani et al., 2016). To our knowledge, there have been few previous studies investigating SAD prevalence in Makkah region of Saudi Arabia. Therefore, we aimed to estimate the current prevalence of SAD among school students and teachers in Makkah, Saudi Arabia.

2. SUBJECTS AND METHODS

Study design, inclusion, and exclusion criteria. A descriptive, observational cross-sectional survey-based investigation was distributed among males and females students and teachers of Makkah city schools during September 2022. The participants who willingly disagreed to participate in this survey and those in other Saudi' regions were excluded.

Sample size and techniques

A *convenience* sampling technique was undertaken to select samples. Then, we used Epi Info™ 7.1.5 (Center for Disease Control and Prevention; Atlanta, Georgia, USA) for sampling calculation, in which accuracy of ± 5% with a 95% confidence interval (CI) was set. According to the previous measure, the minimum sample to collect is 384. However, the final sample size was 396 was targeted during data collection.

Ethical consideration

The article was approved by UQU's research ethics committee with IRB No. (HAPO-02-K-012-2022-09-1164). All procedures involving the use of human subjects in this study will adhere to the ethical standards established by the biomedical ethics committee of Umm Al-Qura University and the 1964 Helsinki declaration and its subsequent revisions.

Questionnaire tool

We first collected the participants' demography (age, gender, nationality, and occupation), in addition to past medical and family history of SAD among participants. Then, the second part estimated SAD prevalence among students and teachers via a standardized tool Social Phobia Inventory (SPIN) (Connor et al., 2000).

Statistical analysis

First, a Microsoft Excel spreadsheet was used for data input, verifying the correctness and minimal typographic inaccuracies. Then, a Statistical Package for the Social Sciences (SPSS) (IBM, Armonk, NY) v.23 spreadsheet was used for analysis. Descriptive statistics were defined as percentages for categorical data, and for continuous data, mean, standard deviation, with a p-value of less than 5%, was considered statistically significant. Finally, categorical data comparisons were performed using the independent Chi-square test.

3. RESULTS

In this survey, we estimated the prevalence of SAD among school students and teachers in Makkah city, Saudi Arabia. Overall, 396 participants were enrolled in this survey with an age mean of 27.5 (SD=15.3), while most of their age was 18 years old or less (n=222,

56.1%). Most of participants were females (n=239, 60.4%), while students represent the majority of responses (n=247, 62.4%). Moreover, Saudis participants represented more than Non-Saudis (n=352, 88.9%) (Table 1). Most participants had heard about the SAD term (n=338, 85.4%). Furthermore, most participants had no history of SAD (n=264, 66.7%) compared with those with a previous history of SAD (n=132, 33.3%). Similarly, most participants had no family history of SAD (n=377, 95.2%) compared with participants with positive family history (n=19, 4.8%) (Table 1).

Table 1 Participants' demography (N.396)

Categories		N.	%
Age groups	18 years or less	222	56.1%
	More than 18	174	43.9%
Gender	Male	157	39.6%
	Female	239	60.4%
Occupation	Student	247	62.4%
	Teacher	149	37.6%
Nationality	Saudi	352	88.9%
	Non-Saudi	44	11.1%
Ever heard about Social Anxiety Disorder (SAD)	Yes	338	85.4%
	No	58	14.6%
Past history of SAD	Yes	132	33.3%
	No	264	66.7%
Family history of SAD	Yes	19	4.8%
	No	377	95.2%
Age (Mean)(Standard deviation)	(Mean=27.5), (SD=15.3)		

This study reveals that most participants show a high prevalence of SAD (76.26%), while only (23.74%) had negative SAD (Figure 1). Additionally, figure 2 describes this prevalence, in which most SAD participants had mild SAD 30.81%, followed by moderate, severe, and very severe SAD (22.73%, 13.89%, and 8.84%, respectively). While participants with no SAD represents 23.74% (Figure 2). Importantly, the prevalence of SAD is higher among student participants compared to teachers (49.24% and 27.02%, respectively) (Figure 3). Participants with a previous positive history of SAD corresponded significantly with mild SAD (n=47) (P-value, 0.002), while participants with no history of SAD corresponded significantly with both ''No SAD'' and ''Mild SAD'' equally (n=75) (P-value, 0.002). However, participants' age groups, gender, occupation, nationality, and family history of SAD show insignificant differences of SAD prevalence (P-value, 0.413, 0.715, 0.526, 0.956, and 0.907, respectively) (Table 2).

Table 2 The association between participants' demography and Intensity frequency of SAD (N.396)

Categories		Prevalence of SAD intensity					P-value
		None	Mild	Moderate	Severe	Very severe	
Age groups	18 years or less	46	69	51	36	20	0.413
	More than 18	48	53	39	19	15	
Gender	Male	42	43	37	21	14	0.715
	Female	52	79	53	34	21	
Occupation	Student	52	77	57	37	24	0.526
	Teacher	42	45	33	18	11	
Nationality	Saudi	83	107	80	50	32	0.956
	Non-Saudi	11	15	10	5	3	
Past history of SAD	Yes	19	47	37	23	6	0.002*
	No	75	75	53	32	29	
Family history of SAD	Yes	4	5	4	4	2	0.907
	No	90	117	86	51	33	

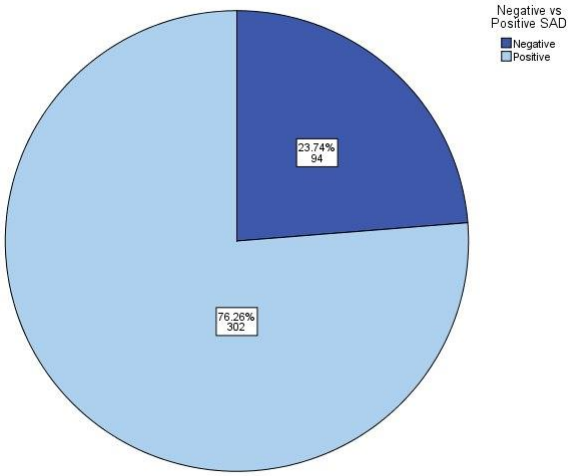

Figure 1 The overall prevalence of SAD (N.396)

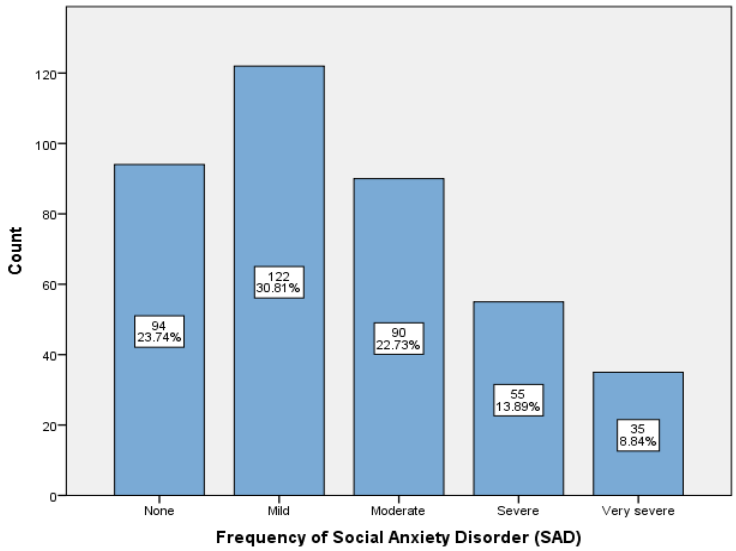

Figure 2 The frequency of SAD among participants (N. 396)

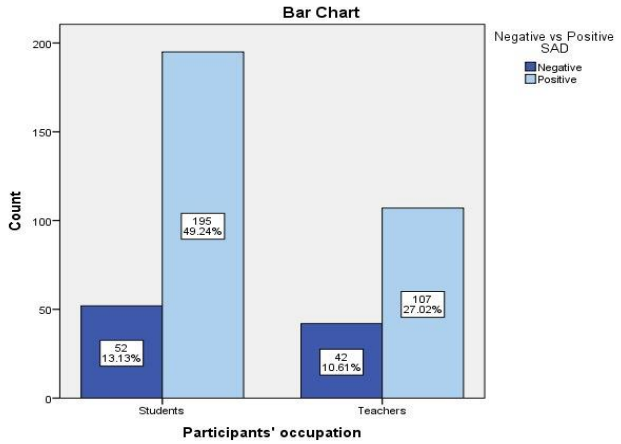

Figure 3 The prevalence of SAD among students and teachers (N. 396)

4. DISCUSSION

With excessive dread of scrutiny, shame, and embarrassment in social or performance circumstances, social anxiety disorder (SAD), commonly known as social phobia, is a prevalent disorder that can cause serious distress or hinder functioning. SAD is a common problem in Saudi Arabia, accounting for roughly 13% of all neurotic disorders treated in psychiatric clinics, particularly in adolescent patients (Ghazwani et al., 2016; World Health Organization, 1993; Steine et al., 2001; American Psychiatric Association, 2000). In our study, we aimed to approximate the current SAD prevalence among school students and teachers in Makkah city using a standardized tool.

Overall, the prevalence of SAD in our sample is 76.26%. This is far higher than the findings of research conducted on a general global population, which revealed lifelong estimates for SAD to be between 8 and 12% (Ghazwani et al., 2016; Katzman et al., 2014; Shields, 2004). In addition, this study's findings disagree with an Indian study that found that 10.3% of individuals in the 14–18 age range had SAD (Ghazwani et al., 2016; Chhabra et al., 2009). In Brazilian society, the impact of the lifelong prevalence of social phobias is comparable to the 11.8% identified in our study (Ghazwani et al., 2016; Vorcaro et al., 2004). This variance may be caused by the employment of various measuring devices and changes in the techniques used to compile data from multiple sources (Ghazwani et al., 2016). However, it has been discovered that high school teachers are more susceptible to anxiety issues than teachers at other educational levels (Alhazmi et al., 2022; Arias et al., 2019). Respectively, teachers have reported 27.02% of SAD in this study. This percentage needs further investigation among all Saudi Arabia regions.

Limitation and recommendation

This study carries some possible limitation. Due to the cross-sectional character of the research, our conclusions cannot be applied to the total population. Thus, we recommend further investigation among all Saudis schools. Given that an online questionnaire was used in this study, there is also the chance of selection bias, and this could be another limitation.

5. CONCLUSION

To develop better preventive strategies based on the employment environment, future studies should identify relevant elements to determine the extent of the exposure to anxiety between different types of teachers. Additionally, our study revealed a favorable correlation between social media exposure and anxiety compared to other information sources. Therefore, future studies should compare the material presented in various media resources and analyse how quickly it can alter teachers' perspectives.

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Conflicts of interest

The authors declare that there are no conflicts of interests.

Data and materials availability

All data associated with this study are present in the paper.

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