

## Prevalence of Anxiety Among College and School Students in Saudi Arabia: A systematic review

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### Abstract

**Background and objectives:** Anxiety is a widespread and common mental health issue globally. The causes and risk factors of anxiety must therefore be well understood. This review aims to provide an exhaustive summary of the prevalence of anxiety and its risk factors among students in Saudi Arabia.

**Methods:** PubMed and Embase were searched to identify studies published between 2007 and 2018. An electronic search was carried out from October 11-16, 2018 using relevant keywords to relevant articles focused on the epidemiology and burden of anxiety disorders in Saudi Arabia. Treatment studies and case reports were excluded.

**Results:** The review included 19 articles that showed a prevalence of anxiety among students ranged between 34.9% and 65%. Anxiety was more prevalent among female medical students than male medical students, while, anxiety was predominantly observed more among male dental students than female dental students.

**Conclusion:** A positive correlation exists between depression and anxiety symptom scores. These results help in detecting students who are at a higher risk of developing anxiety and depression, thereby facilitating early intervention to prevent anxiety disorder.

**Keywords:** Anxiety; Epidemiology; Prevalence; Risk; Saudi.

### 1. INTRODUCTION

The American Psychological Association (APA) defines anxiety as “an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure.” Moreover, other sources have used “anxiety” as a general term for several disorders that cause nervousness, fear, apprehension, and worries [1]. Anxiety disorders express the symptoms of stress. These symptoms are different from one patient to another. This variance stems from their severity, the type of anxiety disorder, and association with other psychiatric disorders [2]. The symptoms of stress include fear, headache, sweating, and an inability to relax. In addition, an anxiety disorder can be associated with sleep disturbance. Furthermore, a patient with anxiety disorder shows signs of palpitation, dyspnea, and muscle tension. These symptoms can be severe enough to prevent patients

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from engaging in their daily activities; in some cases, the symptoms might lead to suicide attempts [3]. Anxiety disorders are typically diagnosed in primary health care centers [2]. They are diagnosed after the exclusion of other diseases that cause similar symptoms. Clinicians usually use the Hamilton Anxiety Rating Scale (HAM.A) to diagnose anxiety disorders and assess the severity of symptoms [4].

With respect to anxiety's prevalence, many studies are available, but their results are inconsistent. This inconsistency might stem from the different methods used to measure anxiety, the different study settings, and the composition of age and sex in the sample [1]. The European Union (EU) reported anxiety as being the most prevalent psychiatric condition, affecting more than 60 million people [5]. The prevalence of anxiety in the United States and Switzerland was 23 and 28.7%, respectively [6]. In the North African and Middle Eastern region, the prevalence of anxiety disorders was reported to be 7.7% [7]. Some studies reported that anxiety is more prevalent in populations that undergo conflict as compared to non-conflict populations [8]. The WMHS (World Mental Health Survey) documented different findings, as the prevalence of anxiety was higher among non-conflict populations like the United States and New Zealand (10.1% and 8.3%, respectively). Conflict countries reported a prevalence of 5.4% (in Iraq) and 6.2% (in Lebanon) [9]. These lower percentages reported in conflict countries by the WMHS might be the result of the use of a national sample in comparison with studies that selected single regions [7]. Some studies reported that males are less likely to suffer from anxiety than are females [6].

Anxiety is the second leading cause of disability by 2020. It is a widespread disease, and its causes and risk factors must thoroughly be understood. The main risk factors involve trauma and disruption of life, low social status in society especially in people susceptible to develop anxiety, childhood stressful event and genetic susceptibility [10]. Being a female was considered as a risk factor for anxiety [11]. Another significant risk factor for anxiety was "been involved in civilian trauma" such as a chemical spill or dam collapse [12]. Likewise, adverse life events such as divorce, the death of a spouse, or unemployment were significant risk factors for anxiety.

Regarding prognosis, various symptoms of anxiety can be managed through regular checkups and adherence to a medication plan [13]. A patient who does not seek medical advice will face complications. Anxiety can affect a patient's social life and lead to a loss of work due to social isolation. Anxiety disorders have many other complications, as well, such as depression, irritable bowel syndrome, gastritis, and suicidal thoughts [14]. Anxiety has been associated with adverse prognosis in myocardial infarction (MI) patients with significant associations for somatic anxiety and total anxiety. Future research might focus to a greater extent on dimensions of anxiety and depression simultaneously in MI patients [8].

Not all anxiety disorders require treatment. However, treatment modality is necessary when a patient suffers from complications, such as secondary depression, alcohol abuse, or suicide attempts

[15]. The treatment plan should include psychotherapy and pharmacotherapy [13]. All individuals diagnosed with anxiety should seek attention and support from others [15].

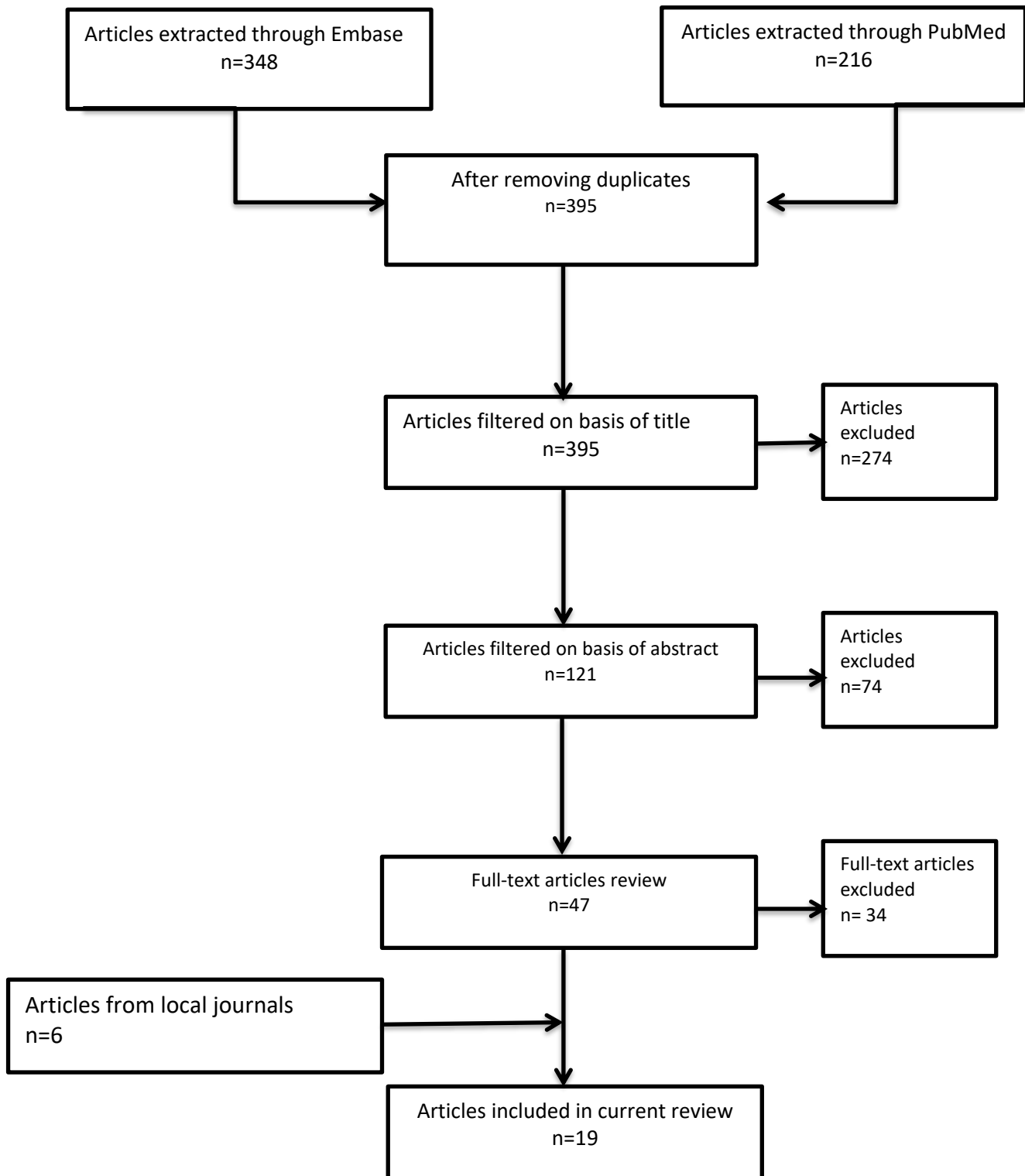
Several studies have been conducted in KSA about anxiety disorder. However, no recent comprehensive review has been offered to summarize evidence from these studies. Thus, this review aims to provide a complete, exhaustive summary of the epidemiology of anxiety and the associated risk factors among students—risk factors that affect not only their health but also their academic achievements.

## **2. METHODOLOGY**

An electronic search was conducted from October 11-16, 2018 using PubMed and Embase to identify studies published between 2007 and 2018 reporting on anxiety disorders among school and college students. The keywords used in the search strategy were (anxiety) and (epidemiology or prevalence or incidence or risk or burden) and (Saudi or Riyadh or Jeddah or Abha). The reviews focused on describing the epidemiology and burden of anxiety disorders among school and college students in Saudi Arabia. The review excluded treatment studies and case reports. Initially, 564 articles were identified. After the removal of duplicates, the total number of articles was 395. After a title review, 121 articles remained. After a review of the abstracts, 74 articles were excluded.

The full texts of 47 articles were reviewed to identify articles for this review. Saudi local journals were searched as well; from them, we included six articles. Ultimately, the review included 19 articles. A flow chart for the research strategy is shown in **Figure 1**.

**Figure 1.** Flow Chart of the Literature Review Search.



### 3. RESULTS

Nineteen articles were included in this review. The articles focused on the prevalence of anxiety among college and school students, as shown in the table below. Seven studies were carried out among Saudi medical students. One of them was undertaken by Inam [16] in the College of Medicine, Qassim University, Saudi Arabia. The prevalence of anxiety and depression among female students was around 66%, while the prevalence was around 44.4% among male students. The prevalence of anxiety and depression in the first year was 89.7% among females and 60% among males. Neither male nor female students reported suicidal thoughts. Anxiety and depression were 5.8 times more common in female first-year students than in male first-year students [16]. Another study was organized by Al Khalaf [17] at Abha University, Saudi Arabia. A significant negative correlation between positive affect and the TMAS in medical students ( $p$ -value less than 0.01), indicated that when positivity decreases, anxiety increases. In addition, Depression, Anxiety and Stress Scale -21 scores were higher in the age group 22-23. In a paper by Asiri et al. [18] at Najran University, Saudi Arabia, approximately 59.3% of students had depression, 71% had anxiety, and 60.7% had stress. Khoshhal et al.'s [19] conducted a study at the College of Medicine at Taibah University, Saudi Arabia, found that the prevalence of anxiety was 65% among female students, who were more anxious due to the extensive course load. The main factors contributing to anxiety over exams were studying all night before the exam and maintaining a heavy course load. Furthermore, a cohort study was done by Kulsoom et al. [20] at Al Faisal University in Riyadh, Saudi Arabia. The research used the Depression, Anxiety and Stress Scale questionnaire among a sample of 575 medical students. The prevalence of depression was 43%, the prevalence of anxiety was 63%, and the prevalence of stress was 41%. Another report, by Ibrahim et al. [21] at King Abdul Aziz University in Jeddah, Saudi Arabia, found a positive correlation between anxiety and depression scores. The prevalence of morbid anxiety and depression was 34.9% and 14.7%, respectively. Depression was the first predictor of morbid anxiety. Likewise, Alshammary's [22] study in the College of Medicine at Hail University, Saudi Arabia found that the prevalence of severe anxiety was 5.5%. Among male students, 37.9% had moderate anxiety, 11.42% had high anxiety, and 4.28% had a phobia. Meanwhile, 31.46% of female students had moderate anxiety, 10.11% had high anxiety, and 5.6% had a phobia.

Regarding dental colleges, a study was conducted by Basudan et al. [23] in the College of Dentistry, King Saud University, Riyadh, Saudi Arabia. The research found that 66.8% of students had anxiety, 55.9% had depression, and 54.7% had stress. The mean total score for anxiety was 12.35 ( $SD=9.48$ ). Severe scores for anxiety were reported among 34% of students. Another study was accomplished by Abo Alshamat et al. [24] at Umm Al-Qura University in Makah, Saudi Arabia. This work was carried out among both medical and dental students in their preclinical years. A sample of 422 students was chosen. The study reported high levels of depression (69.9%), anxiety (66.4%), and

stress (70.9%). Students in their second year and those with high family incomes had greater life satisfaction. Depression was the only psychological variable correlated with academic performance.

Hadi et al. [25] conducted a study at the College of Pharmacy at Umm Al-Qurra University in Saudi Arabia. A questionnaire was distributed to a sample of 25, fifth-year pharmacy students. The mean scores for Test Anxiety Inventory-E, Test Anxiety Inventory-W, and Test Anxiety Inventory-T were 20.1, 19.5, and 50.1, respectively. No statistical differences were found between females and males in terms of the Test Anxiety Inventory score.

Furthermore, two studies were conducted among students in different specialties. One study, by Taha et al. [26] at Taif University in Saudi Arabia, distributed a questionnaire among students from different specialties in the female section, with an age range from 18-29 years. A sample of 957 students was chosen. The prevalence of social anxiety disorders was 16.3%; 43.5% of students had moderate social anxiety while 2.5% of students had severe social anxiety. The other cross-sectional investigation was done by Hakmi [27] at Jazan University in Saudi Arabia. The researcher distributed a questionnaire among students from five faculties at Jazan University. A sample of 450 students was chosen. The female score was higher than the male score in terms of the somatization ( $p=0.002$ ) and anxiety subscale ( $p=0.006$ ). Psychological stress was higher among science students, at 36%.

Regarding school students, seven studies were carried out in different regions throughout Saudi Arabia. Ghazwani et al. [28] lead an inquiry in Abha secondary schools in Saudi Arabia. The prevalence of social anxiety disorder among male students was 11.7%, 39.9% had a severe social anxiety disorder, 30.1% had a moderate social anxiety disorder, 22.7% had marked social anxiety disorder, and 11.3% had a more severe social anxiety disorder. Algelban [29] conducted a study in Abha, found that 59.4% of male students had at least one of the following disorders: depression, anxiety, or stress. The same paper found that 48.9% of students had anxiety. Anxiety, depression, and stress had a positive and significant correlation. In addition, Algelban et al. [30] performed a cross-sectional investigation in Abha, in the Aseer Region of Saudi Arabia, among 10 secondary schools. The prevalence of anxiety symptoms among female students was 66.2%, the prevalence of depressive symptoms was 41.5%, and the prevalence of stress symptoms was 52.5%. Ten percent of students had severe symptoms of stress and depression, while 25% of them had severe symptoms of anxiety. Seventy-five percent of students had at least one of the disorders (anxiety, depression, or stress).

Two studies were conducted in the Western region of Saudi Arabia. One study was done by Algahtani and Alharbi [31] in Al Madinah secondary schools in Saudi Arabia. The results showed that 64.6% of female students had symptoms of anxiety, 25.5% of students had high morbid anxiety, and 39.1% of students had high but not morbid anxiety. The second study was completed by Desouky et al. [32] in female secondary schools in Taif City, Saudi Arabia. Among the participants, 54.9% had anxiety symptoms, while 64.7% reported depression, anxiety, and obsessive-compulsive symptoms. Another review was achieved in the Western region of Saudi Arabia. It was a cross-sectional report done by Amr et al. [33] in secondary schools in Alhassa. The prevalence of anxiety disorders was

21.9%. Four percent of students had panic disorders, while 14% had generalized anxiety disorders. Among the participants, 1.1% reported having had suicidal thoughts in the past month. Additionally, a study was conducted in Saudi Arabia's central region by El Morshedy et al. [34] who focused on female schools in Riyadh. The researchers distributed a questionnaire among teenage Saudi female students. The prevalence of anxiety was 46%, while the occurrence of depression was 23.4%.

#### ANXIETY EPIDEMIOLOGY IN SAUDI ARABIA

**Table 1. Summary of epidemiology studies on anxiety disorder among students in Saudi Arabia.**

Author	Country	Study setting	Study design	Study tools	Population	Sample size	Main findings
Inam, 2007	Saudi Arabia	College of Medicine, Qassim University	Cross-sectional	Questionnaire	First-, second-, & third- year students of College of Medicine	288 male students and 105 female students	-66.6% was the prevalence of anxiety and depression among female students; 44.4% was the prevalence among male students.  -The prevalence of anxiety and depression in first-year students was 89.7% among females and 60% among males.  -No suicidal thoughts were reported among male and female students. -Anxiety and depression were 5.8 times more common in female first-year students than in male first-year students.
Ghazwani et al., 2016	Saudi Arabia	Abha, secondary schools	Cross-sectional	Questionnaire	Male students mean age 17.4 years	454 students	-11.7% was the prevalence of social anxiety disorders among students. -39.9% of them had severe SAD, 30.1% had moderate SAD, 22.7% had marked SAD, and 11.3% had more severe SAD.
Alqahtani & Alharbi, 2017	Saudi Arabia	Almadinah , secondary schools	Cross-sectional	Questionnaire	Female students of government secondary school	376 secondary schools  Including 16,843 students	-64.6% of students had symptoms of anxiety. -25.5% of students had high morbid anxiety. -39.1% of students had high but not morbid anxiety.
Hadi et al., 2018	Saudi Arabia	Faculty of Pharmacy, Umm-Al-Qura University	Cross-sectional	Questionnaire	Fifth-year pharmacy students	25 students	-The mean scores for TAI-E, TAI-W, & TAI-T were 20.1, 19.5, and 50.1.  -No statistical differences existed between males and females according to TAI score.

**Note.** SAD= Social Anxiety Disorders  
TAI= Test Anxiety Inventory

**Table 2.** Summary of epidemiology studies on anxiety disorder among students in Saudi Arabia.

Author	Country	Study setting	Study design	Study tools	Population	Sample size	Main findings
Khoshhal et al., 2017	Saudi Arabia	College of Medicine, Taibah University	Cross-sectional	Questionnaire	All final-year medical students	125 students	-Prevalence of anxiety: 65% of female students were found to be more anxious due to an extensive course load. -The main factors contributing to exam anxiety were studying all night before the exam and an extensive course load.
Kulsoom et al., 2015	Saudi Arabia	Alfaisal University, Riyadh	Cohort study	Questionnaire DASS-21	Medical students	575 students	-Prevalence of depression, anxiety, and stress was high (43%, 63%, and 41%, respectively). To some extent, this dropped (to 30%, 47%, and 30%, respectively) after examinations.
Aboalshamat et al., 2015	Saudi Arabia	Umm Al-Qura University, Makkah	Cross-sectional	Questionnaire	Medical and dental students who were in their preclinical years	422 students	-High levels of depression (69.9%), anxiety (66.4%), and stress (70.9%). -All females had higher self-efficacy than did males. Life satisfaction was higher among second-year students and those with high family incomes. -Depression was the only psychological variable correlated with academic performance.
Desouky et al., 2015	Saudi Arabia	Secondary school in Taif City	Cross-sectional	Cluster sampling methodology; three psychometric scales used for evaluation  a) Beck Depression Inventory Scale  b) Castello & Comery Anxiety Scale  c) Obsessive Compulsive Disorder Scale	Secondary schoolgirls	1,096 students	-54.9% of participants have anxiety symptoms. -64.7% reported depression, anxiety, and obsessive-compulsive symptoms.
Ibrahim et al., 2013	Saudi Arabia	King Abdulaziz University, Jeddah	Cross-sectional	Questionnaire	Medical Students	450 students	-There is a positive correlation between anxiety and depression scores. -Prevalence of morbid anxiety and depression was 34.9% and 14.7%, respectively. The first predictor of morbid anxiety was depression.

**Note.** DASS-21= Depression, Anxiety and Stress Scale.

**Table3. Summary of epidemiology studies on anxiety disorder among students in Saudi Arabia.**

Country	Study setting	Study design	Study tools	Population	Sample size	Main findings
Algelban, 2007	Saudi Arabia	Abha, Aseer Region, secondary schools	Cross-sectional	Questionnaire	Male secondary school students ranging in age from 15-19 years	1,723 students -59.4% of students had at least one of the disorders (depression, anxiety, or stress). - 48.9% of students had anxiety. - Anxiety, depression, and stress had a positive and significant correlation.
Alkhalaf, 2018	Saudi Arabia	Albaha University	Cross-sectional	Questionnaire	Medical students, males, age range from 19-25 years	185 students -Significant negative correlation between positive effect and the TMAS in medical students (p-value less than 0.01), which indicates that when positivity decreases, anxiety increases.
Algelban et al., 2009	Saudi Arabia	Abha, Aseer Region, 10 secondary schools	Cross-sectional	Questionnaire	Female students	545 students -The prevalence of anxiety symptoms among students was 66.2%. - The prevalence of depression symptoms was 41.5%. - The prevalence of stress symptoms was 52.5%. - 10% of students had severe symptoms of stress and depression while 25% of them had severe symptoms of anxiety. -75% of students had at least one of the disorders (anxiety, depression, or stress).
Alshiek et al., 2018	Saudi Arabia	Najran University	Cross-sectional	Questionnaire	Male medical students	136 students -DASS-21 scores were higher among the age group 22-23. -59.3% of students had depression, 71% had anxiety, and 60.7% had stress.
Basudan et al., 2017	Saudi Arabia	College of Dentistry, King Saud University, Riyadh	Cross-sectional	HADS	Undergraduate dental students	289 students -66.8% of students had anxiety, 55.9% had depression, and 54.7% had stress. -The mean total score for anxiety was 12.35 (SD=9.48). -Severe scores for anxiety were reported among 34% of students.

**Note.** TMAS= Taylor Manifest Anxiety Scale, DASS-21= Depression, Anxiety and Stress Scale

**Table 4. Summary of epidemiology studies on anxiety disorder among students in Saudi Arabia.**

Author	Country	Study setting	Study design	Study tools	Population	Sample size	Main findings
Amr et al., 2012 Conference	Saudi Arabia	High schools, Alhassa	Cross-sectional	Questionnaire	High school students	1,652 students	-The prevalence of anxiety disorders was 21.9%.  -4% of students had panic disorders and 14% had generalized anxiety disorders.  -1.1% of students had suicidal thoughts in the past month.
Alshammary, 2017	Saudi Arabia	University of Hail, College of Medicine	Cross-sectional	Questionnaire	Medical field students mean age of 21.62	159 students	-The prevalence of severe anxiety was 5.5%.  -37.9% of male students had moderate anxiety, 11.42% had high anxiety, and 4.28% had phobia. Meanwhile, 31.46% of female students had moderate anxiety, 10.11% had high anxiety, and 5.6% had phobia.
Taha et al., 2017	Saudi Arabia	Taif University	Cross-sectional	Questionnaire	Students from different specialties in the female section of Taif University, age ranged from 18-29 years	957 students	-The prevalence of social anxiety disorders was 16.3%.  -43.5% of students had moderate social anxiety.  -2.5% of students had severe social anxiety.
Elmorshedy et al., 2018	Saudi Arabia	Female schools in Riyadh	Cross-sectional	Questionnaire	Teenage Saudi female students	508 students	- The prevalence of anxiety among students was 46%. - The prevalence of depression among students was 23.4%.
Hakami, 2018	Saudi Arabia	Jazan University	Cross-sectional	Questionnaire	Students from five faculties at Jazan University	450 students	-Females scored higher than males on somatization, $p=0.002$ , and anxiety subscale, $p=0.006$ . -Psychological stress was higher among science students (36%).

#### 4. DISCUSSION

This systematic review found that the prevalence of anxiety among students ranged from 34.9% to 65%. A positive correlation was reported between depression and anxiety symptoms among students. Female medical students had a higher prevalence of anxiety than males [19,20]. Meanwhile, male dental students had a higher prevalence of anxiety than did female students [24].

Several methodological issues must be discussed. One limitation of the review is that most of the studies were conducted by college students. However, cross-referencing and searching in local Saudi journals were carried out. The articles were in English; we did not find any articles written in Arabic languages. As seen in the results tables, most of the studies were cross-sectional in nature, which does not prove a causal association. To the best of our knowledge, this is the first review to be conducted of the prevalence of anxiety among students in Saudi Arabia.

Regarding the studies of college students, the prevalence of anxiety among female medical students was higher than that of the others, ranging from 34.9% to 65% [19, 20]. A similar study was carried out at Bursa Medical School in Turkey during the 2010-2011 academic year [35]. The prevalence of depression was 8.5% and was found to be higher among female medical students with either moderate or poor performance and those from poor economic backgrounds. One inquiry compared the level of psychiatric distress among dental and medical students and found a prevalence of 66.4%. The prevalence was higher among female medical students than among male medical students [24]. A study by Desouki [32] focussed on female secondary students in Saudi Arabia. The Beck Depression Inventory was used for evaluation and found that 42.9%, 54.9%, and 23.1% had significant depression, anxiety, and obsessive-compulsive symptoms, respectively. No significant relation was found between anxiety and any variable in our study. A positive association was found between depression and anxiety and stress scores. There was also a high prevalence of depression, anxiety, and stress among male medical students—an issue that should be considered in the planning of educational programs for medical students. The prevalence of depression, anxiety, and stress were high. Stress was significantly associated with students' living status ( $P=0.028$ ). An analysis at Mental Health Hospital, in Saudi Arabia reported that the monthly prevalence of social phobia was 5.6% among outpatient attendees. Personality disorders and depressive disorders were higher among SAD patients than among the controls. Another study in Saudi Arabia reported that depression is common among Saudi patients with SAD, particularly those in the “severe” subtype. The onset age for SAD is between early and late adolescence, although reports suggest that it can begin at age 7 or 8 years. Saudi Arabia's population overgrow, and the nation has a large youth cohort, with 50% of the population being younger than 25 years. A previous study recorded a slightly higher prevalence of social phobia (16.4%). The reason for this finding could be that the participants were female, and it has been frequently documented that females are more likely to suffer from this disorder than are males.

The American Psychological Association (APA) characterizes anxiety and stress as anxious thoughts, tension, and physical changes. While anxiety is more related to skeletal muscle tension, autonomic arousal, and situational aspects, stress is more related to impatience, irritability, and difficulty in relaxing. A relationship exists between the prevalence of depression, anxiety, and stress (DAS) and male medical students' monthly income, academic levels, and performance [36]. Social anxiety disorder (SAD) is a common disorder characterized by excess scrutiny, fear, humiliation, and embarrassment in social/performance situations, leading to significant distress or impairment in functioning. Social anxiety is considered the third most common psychiatric disorder, after major depressive disorder and alcohol dependence. The prevalence of social anxiety disorder in the Western world ranges from 7% to 13% [28]. Adolescents with limited education and low socioeconomic status have a higher prevalence of social anxiety disorder. SAD is associated with low educational performance, unstable employment, and higher rates of work absenteeism. Studies have found that

lifetime co-morbidities for SAD are between 69% and 81%. This matches results obtained in an investigation of the general international population, which showed lifetime SAD prevalence estimates of 8% to 12% [37]. An Indian study found that 10.3% of students in the 14-18 age group had SAD, which is similar to the results of this review. Likewise, the prevalence of social phobias in a Brazilian community (11.8%) aligned with those found in the studies that we reviewed [38]. The prevalence of SAD in Abha, Saudi Arabia is comparable to SAD prevalence estimates in other countries, such as New Zealand (9.4%) and the United States (12.1%) [38]. However, Saudi Arabia's results are significantly higher than those reported in European countries (6.65%), China (0.5%), and Korea (0.2%). This variation could be related to the use of different measuring tools and methods to aggregate information from different sources [38].

The reported results emphasize the importance of increasing the number of public health programs that educate the population about anxiety disorder. Students have been found to experience anxiety before their exams because they lack time to study and because they do not get enough sleep. With that in mind, it is important to support students by encouraging them to work and prepare for their exams, as well as by not overwhelming them with assignments. The results of this systematic review estimate the prevalence of anxiety among students in Saudi Arabia. A positive correlation was reported between depression and anxiety symptoms. These results might help in the detection of students who are at a higher risk of developing anxiety and depression. This, in turn, can promote early intervention to prevent anxiety disorder.

#### **4.1 Recommendation**

Additional studies are needed to reveal variations according to gender and social class. Also, studies that address the stigma of mental illness in Saudi Arabia are necessary, as are intervention studies that help students cope with stresses associated with depression and anxiety. Focusing on the mental health of the college and school students in Saudi Arabia is a high priority. It is recommended that additional studies investigate students' knowledge of, and behavior toward, mental health. Furthermore, it is important to increase students' awareness of mental health issues, especially anxiety disorders.

#### **5. CONCLUSION**

The articles included in this systematic literature review confirm that depression and anxiety are highly prevalent among Saudi students. In addition, school achievement and rate of absence from school or college were associated with the prevalence of anxiety disorders among students. The prevalence of anxiety disorders among secondary school students in Abha is high and requires further assessment. To prevent further complications, various ministries in Saudi Arabia must focus more on anxiety disorders.

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