

# Psychiatric morbidity among Saudi secondary schoolteachers

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## ABSTRACT

**الأهداف:** قياس معدل وشدة أمراض الإكتئاب، والقلق، والضغط النفسي بين معلمي المدارس الثانوية للبنين.

**الطريقة:** أجريت دراسة مقطعية خلال العام الدراسي 2004م وحتى 2005م، على 65 مدرسة ثانوية للبنين في منطقة أبها التعليمية - عسير - المملكة العربية السعودية. بطريقة عشوائية، تمت دراسة عينة تشمل 195 معلماً للمرحلة الثانوية. تم جمع المعلومات باستخدام النسخة العربية من إستمبان (مقياس الإكتئاب والقلق والضغط النفسي DASS-42).

**النتائج:** تم تحليل 189 إستمباناً من أصل 195. كان معدل الاستجابة: 96.9%، 25%، 43%، 31%، من المشاركين لديهم إكتئاب، قلق أو ضغط نفسي على التوالي. الأمراض الثلاثة كانت متلازمة بشكل إيجابي وقوي.

**خاتمة:** أظهرت هذه الدراسة أن معلمي المدارس الثانوية بمنطقة أبها التعليمية يواجهون نسبة عالية من الإكتئاب والقلق والضغط النفسي. هناك حاجة ماسة وعاجلة لإجراء مزيد من الدراسة لمعرفة مصادر هذه الأمراض كخطوة أولى للوقاية

**Objectives:** To measure the prevalence and severity of depression, anxiety, and stress among male secondary schoolteachers.

**Method:** A cross-sectional study was conducted during the academic session 2004/5, covering the teachers of 65 boys' secondary schools in Abha Educational Area, Aseer Region, Saudi Arabia. A study sample of 195 teachers was obtained using the random sampling technique. Data were collected using the Arabic version of the 42-item Depression, Anxiety, Stress Scale (DASS-42).

**Results:** Out of a total 195 teachers, 189 questionnaires were returned, yielding a response rate of 96.9%. Twenty-five percent had depression 43% had anxiety, and 31% of the participants had stress. Depression, anxiety, and stress were strongly, positively, and significantly correlated.

**Conclusion:** Male secondary schoolteachers in Abha educational area in Saudi Arabia experienced a high

prevalence of depression, anxiety, and stress. Additional studies are needed to find out the causes of this problem.

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Work related psychiatric problems are either caused initially, or aggravated by work.<sup>1</sup> They frequently go unrecognized, but accompanied by a significant social morbidity.<sup>1</sup> Schoolteachers spend roughly half of their working lives in work-related activities.<sup>2,3</sup> The teaching environment, and emotional problems negatively affect teachers' satisfaction, productivity, their mental and physical health and also the functions of their families.<sup>4,5</sup> Studies have reported that approximately 60-70% of teachers show stress symptoms, and 30% of them have burnout symptoms.<sup>6</sup> It has been reported that, 10% of the teachers' absence was due to "nervous conditions."<sup>7</sup> Teachers' work experience can have detrimental effects on their students.<sup>8</sup> A recent study conducted on male secondary school students in Aseer Region of Saudi Arabia, reported the prevalence of depression as 38%, anxiety as 48%, and stress as 36%.<sup>9</sup> The mental health of teachers is an area of increasing concern worldwide, however, very little information on the emotional problems of Saudi secondary schoolteachers is available. The purpose of this study was to measure the prevalence, and severity of depression, anxiety, and stress among male secondary schoolteachers.

**Methods.** A cross-sectional study was conducted during the academic year 2004/5, covering the teachers of all boys secondary schools of Abha Educational Area, Aseer Region, Southwest Saudi Arabia. Abha Educational Area includes Abha, Khamis Mushyt, and Ahad Rufaida towns, and has a total population of one million.

Subjects were recruited through Abha School Health Unit (ASHU) from all the 65 boy-secondary schools. In Saudi Arabia, each secondary school has 3 teaching levels; first, second and third representing the tenth, eleventh, and twelfth years of the general education. Boys-schools are segregated from those of girls, and it is difficult to approach the girls' schoolteachers by the male researchers, hence, only boys' schoolteachers were included in this study. Data were collected using the Arabic version of the 42-item Depression Anxiety Stress Scale (DASS-42),<sup>10</sup> which was already tested for validity and reliability. The DASS-42 is a 42-item, 4-point scale ranging from zero (did not apply to me at all) to 3 (applied to me most of the time) measuring depression, anxiety, and stress.<sup>11</sup> The instrument was tested in the schools by carrying out a pilot study on teachers. At each school, a teacher of one class from each level was selected using the random sampling technique. The purpose of the study was described to the participants, and they were assured of anonymity and confidentiality. Those teachers who were uncooperative or declined to participate, or did not complete the questionnaire were excluded from the study.

Statistical analysis was carried out using the SPSS version 12 for windows statistical package. Student t-test, and Chi-square-test were used as tests of significance to compare the psychiatric disorders studied, and the associated socio-demographic characteristics at 5% level of significance.

**Results.** Out of 195 teachers included in the study, 189 questionnaires were returned giving a response rate of 96.9%. The age of teachers ranged from 28-57 years (mean=36.7, SD±5.3), and had an average experience of 10.3 (SD±3.6) years in the teaching profession. Table 1 shows that most of the participants were married. All of them were university graduates. Around 2% of the teachers' wives were illiterate, 41% of them were university graduates and, around one third were employed. One fifth of the participants knew that they had physical problems while, 3% of them, knew that they had some sort of psychological problems. Table 2 displays the severity of depression, anxiety, and stress of the participants. The psychiatric disorders studied were not associated with any of the socio-demographic characteristics of the participants (age, experience, the education of wives, their wives employment, or their awareness to have physical or psychological problems) ( $p>5%$ ). Table 3 shows that depression, anxiety, and stress were strongly, positively, and significantly correlated.

**Discussion.** The present study aimed to determine the prevalence and severity of stress, anxiety, and depression among male secondary schoolteachers, and

**Table 1** - Characteristics of secondary schoolteachers, Abha, Saudi Arabia (N=189).

Characteristics	Teachers	
	n	(%)
<i>Place</i>		
Abha	77	(40.7)
Khamis Mushyt	80	(42.3)
Ahad Rufaida	32	(17.0)
<i>Qualification</i>		
University	189	(100)
Other	0	(0)
<i>Marital status</i>		
Married	162	(85.7)
Divorced	24	(12.7)
Widow	3	(1.6)
<i>Wife's education</i>		
Illiterate	3	(1.6)
Primary	24	(12.7)
Intermediate	17	(9.0)
Secondary	41	(21.7)
University	77	(40.7)
No wife	27	(14.3)
<i>Wife's employment</i>		
Employed	60	(31.7)
Housewife	102	(54.0)
No wife	27	(14.3)
<i>Physical problems</i>		
Yes	35	(18.5)
No	154	(81.5)
<i>Psychological Problems</i>		
Yes	6	(3.2)
No	183	(96.8)

**Table 2** - Severity of depression, anxiety, and stress among secondary schoolteachers, Abha, Saudi Arabia (n=189).

Psychiatric disorders	Severity			Total
	Mild	Moderate	Severe	
Depression	17 (9.0)	19 (10.1)	11 (5.8)	47 (25.0)
Anxiety	24 (12.7)	36 (19.1)	21 (11.1)	81 (42.9)
Stress	27 (14.3)	20 (10.6)	11 (5.8)	58 (30.7)

**Table 3** - Correlation matrix between severities of different studied psychiatric disorders among secondary schoolteachers, Abha, Saudi Arabia (N=189).

Psychiatric disorders	Depression		Anxiety		Stress	
	r	p-value	r	p-value	r	p-value
Depression	--	--	0.696	0.0005	0.697	0.0005
Anxiety	0.696	0.0005	--	--	0.726	0.0003
Stress	0.692	0.0006	0.730	0.0003	--	--

the results indicate that male secondary schoolteachers in Abha educational area in Saudi Arabia experience a high prevalence of these 3 psychiatric disorders. The findings of the present study are inconformity with the observations of other studies where it has been verified that teaching is one of the most stressful professions.<sup>6,8,12-14</sup> Allegrante et al<sup>6</sup> reported that 60% of teachers in their study had depression and 30% had burnout symptoms.<sup>6</sup> Randall et al<sup>8</sup> found that 10% of the absence of teachers from school was due to nervous conditions.<sup>8</sup>

The DASS-42 was used in this study keeping in view its validation, availability in Arabic language, consideration of culture and its ability to discriminate between the various psychiatric disorders.<sup>10</sup> However, this study had some limitations, it was restricted to male teachers, which led to an inability to determine gender-specific prevalence rate. Nevertheless, these findings have important clinical implications in school health planning and prevision. In this study, no interesting relationship was found between the schoolteacher's personal, and professional characteristics, and psychiatric morbidity. This might be secondary to an inadequate and small sample size. The high prevalence of these disorders may be attributed to underlying career frustration.<sup>15</sup> Teachers appear to work for longer hours, exerting themselves to meet the rising expectations. The burnout of secondary schoolteachers was compared with that of other professional groups (general practitioners, nurses, health inspectors, social workers, family medicine physicians, physiotherapists).<sup>13,14</sup> There is clear evidence to suggest that there is a high level of psychological pressure on teachers, high ratio of teacher/taught, slow progress of their pupils, increasing workload, disturbed relationships with colleagues, deteriorating working environment, low salary, poor resources, and lastly no timely professional recognition.<sup>6,8,12,16</sup> This high psychiatric morbidity could also affect the students. Al-Gelban reported that around 60% of secondary school boys in Aseer Region, Saudi Arabia had at least one of the 3 disorders; depression, anxiety, or stress.<sup>9</sup>

Interestingly the self-reported findings of the schoolteachers related to psychiatric problems do not match with the observations of the present study carried out by the questionnaire method, the reason could be, their lack of awareness of these disorders or the social stigma attached to the psychiatric problems. The 3 studied disorders were strongly, and positively correlated, which was in conformity with other studies.<sup>5,17</sup> This correlation is important as stress may represent as a predisposing factor for depression, or anxiety, and presence of the co-morbidity might alter management. This could be extended to correlate psychological (anxiety depression), physiological (headaches, tachycardia, hypertension), and behavioral disorders

(alcohol consumption, smoking, lifestyle, sleeping disturbance), which might lead to job dissatisfaction and intention to leave teaching.<sup>7,18</sup>

The prevalence of depression, anxiety, and stress is high among secondary schoolteachers. Further studies are needed to explore the sources of emotional problems and to prevent these in schoolteachers through well-developed and coordinated school health programs.

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