



# Prevalence and determinants of stress and stress coping strategies among consultants in Saudi Arabia



Hossam S. Alawad<sup>1</sup>, Alwaleed S. Alotaibi<sup>1</sup>, Ayedh K. alamri<sup>1</sup>, Abdullah I. Saeed<sup>1</sup>,  
 Khalid A. Aljuaydi<sup>1</sup>, Khaled M. Alotaibi<sup>1</sup>, Fahad D. Alosaimi<sup>2</sup>  
 1: Medical students at King Saud university, College of Medicine.  
 2: Associate professor, King Saud University, collage of medicine and King Khalid.

Deanship of Scientific Research

## Introduction

Psychosocial pressure can affect performance and productivity of a worker on the job. One of the biggest influences of today's worker is job stress, this subsequently affects how a person would normally perceive and react to customer service problems, complaints, cruelty, conflict, and decisions on the job<sup>1</sup>. A substantial body of literature suggests that physicians' work environment are more stressful than many other environments<sup>2</sup>. Exposure to stressful working conditions in addition to inadequate stress-coping strategies may lead to burnout or depression<sup>3</sup>. Additionally, the negative effect of stress on work performance is mediated by the type of stress-coping strategies used and certain personality traits<sup>4,5</sup>. The use of some adaptive strategies correlate significantly with better psychological well-being (lower perceived stress, lower depression, anxiety symptoms and high life satisfaction). On the other hand, the use of maladaptive strategies (use of drugs/alcohol, behavioral disengagement and denial) correlate significantly with worse psychological well-being (higher perceived stress, depression, anxiety).

## Objectives

This study aimed to determine the prevalence of stress and its related risk factors and consequences and to determine stress-coping strategies among medical consultants in Saudi Arabia and their relation to the level of stress and their sociodemographic characteristics.

## Methods

A cross-sectional study of all medical consultants registered at the Saudi Commission for Health Specialties, conducted between November 2014 to March 2015. We used a self-administrated questionnaire that included socio-demographic characteristics, associated other risk factors, including personal and work-related stressors. In addition, the authors assessed the likelihood of stress with the perceived stress scale (PSS) and stress-coping strategies using the 28-item brief coping scale (BCS). Out of the 11621 members of the list, 623 started the web questionnaire of the study. Subsequently 31 participants who did not give consent and another 10 participants identified themselves as specialists were excluded. This left 582 participants included in the current analysis. SPSS (Version 22.0. Armonk, NY: IBM Corp) was used for all statistical analyses, and a p-value of <0.005 was considered significant.

## Results

A total of 582 consultants participated in the study. The participants have an average age of 46.9±7.9 years. They were approximately 71% males and 56% Saudi. Around 15% were smokers and 68% were sleeping ≤ 6 hours per day. The mean Stress score was 17.65±5.36. Out of the socio-demographic and clinical characteristics, the upper third of PSS score (which represents high stress level) was significantly associated with younger age, female gender and Saudi nationality. The majority (85%) considered job environment as stressful and around half of them attributed that to high work load and non-cooperative administration. Because of perceived stressful working environment, in the last year prior to our survey, around half of the participants have frequent contemplation and even started action toward changing their hospitals/medical institutes or even moving to work outside Saudi Arabia. Facing life stressors over the last year, considering job environment as stressful and having wishes to die over the last year were significantly associated with higher level of stress. In multivariate analysis, the following were independently associated with stress: female gender (OR=2.41, 95% CI 1.58-3.70) and perceived stressful working environment (OR=3.66, 95% CI 1.87-7.17). Most of the consultants have adaptive stress-coping strategies. Stress level was associated with the type of coping strategies either adaptive or maladaptive. The most frequent used adaptive stress-coping strategies were spiritual beliefs, praying or meditating, taking action to make the situation better, and accepting the reality. Less frequently used maladaptive strategies were the intake of alcohol or other narcotic drugs.

## Conclusions

Medical consultants in Saudi Arabia are at a risk of high perceived stress that is relatively comparable to the perceived stress reported by physicians worldwide. A significant association was found between the stress level and the female gender and the perceived stressful working environment. Further studies are required to assess doctor-based interventions and organization-directed approaches to manage stress among physicians. Consultants with the lowest stress level generally had the highest adaptive stress-coping scores whereas consultants with the highest stress level had the highest maladaptive stress-coping scores. Adaptive stress-coping strategies were highly used among the females, those who were satisfied with income, and those who received education or training in stress management. Overall maladaptive stress-coping strategies were highly used among the younger consultants, the females, the Saudi, non-married, those who had psychiatric illness, and those who sleep less than 6 hours per day.

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Characteristics	Total	p-value
<b>Overall</b>	<b>582</b> (100.0%)	
<b>Gender</b>		
Male	414 (71.1%)	<0.001
Female	168 (28.9%)	
<b>Age (years)</b>		
Mean age in years ±SD	46.9±7.9	0.001
<40	116 (20.0%)	0.053
40-49	247 (42.5%)	
≥50	218 (37.5%)	
<b>Nationality</b>		
Saudi	326 (56.0%)	<0.001
Non-Saudi	256 (44.0%)	
<b>Marital Status</b>		
Single	23 (4.0%)	0.191
Married	540 (92.8%)	
Others	14 (2.4%)	
	5 (0.9%)	
<b>Smoking</b>		
No	494 (84.9%)	0.313
Yes	88 (15.1%)	
<b>Sleep duration per day</b>		
Mean±SD	6.0±1.0	0.060
<6 hours	178 (30.6%)	0.171
6 hours	220 (37.9%)	
>6 hours	183 (31.5%)	
<b>Chronic medical illness</b>		
No	492 (84.5%)	0.621
Yes	90 (15.5%)	
<b>Chronic medical illness</b>		
Hypertension	36 (6.2%)	0.289
Diabetes	29 (5.0%)	0.164
Heart disease	13 (2.2%)	0.194
<b>Psychiatric illness</b>		
No	549 (94.7%)	0.127
Yes	31 (5.3%)	
<b>Psychiatric illness</b>		
Depression	22 (3.8%)	0.246
Anxiety	8 (1.4%)	0.117
Others	2 (0.3%)	0.770
<b>Received psychological help</b>		
No	537 (92.3%)	0.148
Yes	45 (7.7%)	

