ASSESSMENT OF JOB STRESSORS, AND PREVALENCE OF DEPRESSION SYMPTOMS AMONG MIDDLE AGED PHYSICIANS IN A UNIVERSITY HOSPITAL

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Introduction

Job stress, also known as work-related stress, is defined as an imbalance between work demands and individual coping techniques that results in negative physical, mental, or behavioral consequences. Physicians have been facing many job stressors, especially since the beginning of the COVID-19 pandemic.

Risk factors for job stress include worker-related factors such as personality traits, coping skills, life experiences, and demographic characteristics, and work-related factors such as workload, work schedule, work environment, organizational role, and interpersonal relationships at work.

Job stress can lead to harmful physical and mental health effects along with behavioral effects. Examples include cardiovascular, metabolic, musculoskeletal, cancers, depression, anxiety, dissatisfaction and burnout. Behavioral effects include absenteeism, turnover, and suicide. Also, the organizational consequences could have dramatic economic burden on the country.

Working on both individual and organizational levels is the most successful plan of job stress management.

Aim of the work

The current study aimed at fulfilling the following objectives in the middle-aged physicians: to identify current job stressors, calculate the prevalence of depression symptoms and job satisfaction level, and detect factors associated with them.

Subjects and Methods

200 middle-aged physicians who have been working at Alexandria Main University Hospital for at least five years were included. Physicians were recruited from internal medicine, surgical, emergency, intensive care and anesthesia departments.

A cross-sectional descriptive design was adopted. The tool used was self-administered questionnaires that included socio-demographic, occupational data, and scales from the NIOSH generic job stress questionnaire. The scales used included role conflict, role ambiguity, intra-group conflict, intergroup conflict, quantitative workload, variance in workload, skill underutilization, lack of alternative job opportunities, mental demands, social support from sponsors, coworkers, and family, non-work activities, and self-esteem, in addition to job satisfaction and depressive symptoms scales. The midrange on the scale of job satisfaction was used as a cutoff point to differentiate between low and high levels of job satisfaction.

Regarding depressive symptoms, a cutoff point standardized by the Center for Epidemiologic Studies Depression (CES-D)of 16 points was used to identify individuals with depressive symptoms.

Results

Table 1: Sociodemographic characteristics of the studied physicians at AMUH, 2022-2023 (n = 200)

Characteristics		No. (%)	95% CI
Gender			
Male		113 (56.5)	50.0, 63.5
Female		87 (43.5)	36.5, 50.0
Marital status			
Married		156 (78.0)	72.0, 83.5
Not married^		44 (22.0)	18.0, 25.5
Highest educational degree attained			
Master		18 (9.0)	5.5, 13.0
PhD		182 (91.0)	87.0, 94.5
Smoking habit			
Never been smoker		172 (86.0)	81.0, 90.5
Current smoker		24 (12.0)	7.5, 17.0
Ex-smoker		4 (2.0)	0.5, 4.5
Smoking index#		13 (54.17)	33.3, 75.0
Light smoker (<200)		11 (45.83)	25.0, 66.7
Moderate smoker (200-400)			
Physical activity$			
Yes		84 (42.0)	35.5, 48.5
No		116 (58.0)	51.5, 64.5
Age (years)	Age groups (years)		
Min. – Max. : 35 – 59	35-40	138 (69.0)	62.5, 75.0
Mean ± SD : 39.7 ± 5	41-50	52 (26.0)	20.0, 32.5
Median ± IQR: 38 ± 6	51-59	10 (5.0)	2.0, 8.5

Abbreviations: AMUH, Alexandria Main University Hospital; Min., minimum; Max., maximum; SD, standard deviation; IQR, Interquartile range; CI, confidence interval.
^ Either single, divorced, or widowed
# Calculated among current smokers (n = 24) by multiplying the number of cigarettes smoked per day by number of smoking years.
$ According to the WHO recommendation of at least 150–300 minutes of moderate-intensity or 75–150 minutes of vigorous-intensity physical activity each week.

Table 2: Level of job satisfaction and depressive symptoms of the studied physicians at AMUH, 2022-2023 (n = 200)

Level of job satisfaction	No. (%)	95% CI
Low level	11 (5.5)	2.5, 9.0
High level	189 (94.5)	91.0 , 97.5
Having depressive symptoms		
No	74 (37.0)	30.5, 44.0
Yes	126 (63.0)	56.0, 69.5

Abbreviations: AMUH, Alexandria Main University Hospital; CI, confidence interval.

Conclusion

Middle-aged physicians who experience high level of job satisfaction represent 94.5%, while those having depressive symptoms represent 63%.Job satisfaction increases with increased self-esteem. Being married, and higher self-esteem decrease the depressive symptoms. Increased mental demands lowers job satisfaction and increases depressive symptoms.