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Occupational Stress among Banking Employees at El Mansoura City

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ABSTRACT

Background: The International Labor Organization reported a number of worrying issues for workers in financial services; these included greater pressure on time, problems with ergonomics, conflicting roles, work demands, difficult relationships with customers, and a rising number of cases of stress and violence.

Aim of the study: To assess the prevalence of occupational job stress among banking employees, to find out risk factors of occupational job stress and to recommend interventions that could prevent occupational stress among banking employees.

Subject and methods: A study was conducted on 568 banking employees at El-Mansoura City. A cross sectional study using standardized questionnaire, and interventional study included application of stress management health education intervention program, were implemented. Evaluation was done six months after conduction of the intervention to measure the degree of success of the program.

Results: the total number of the employees was 568; the majority of age group were between 25-45 years representing 79.1%. Among the studied participant 50.2% of them were working in national banks and 49.8% were working in private banks. 22.4% were manager while 57% were banker A and 20.6 were banker B. About 22.8% of national banks employees showed high stress level, while only 12% of private banking employees showed high stress level.

Conclusions: this study showed statistical significance difference between national and private bank employees as regard the prevalence of health complaint. Age, gender, occupational degree and social relations at work among these study participants showed statistical significant difference between national and private banking employees.

Keywords: Occupational stress, Banking employees, Stress management. Health education interventional program.

INTRODUCTION

Stress is defined as any physical, chemical, or emotional factor that causes bodily or mental unrest, a feeling of emotional or physical tension [(1)].

Physical and chemical factors that can cause stress include trauma, infections, toxins, illnesses, pain after surgery, and injuries of any sort. Emotional causes of stress and tension are numerous and varied, and usually occur in situations that people consider difficult or challenging. Different people consider different situations to be stressful. Stress is not just psychological stress, but can be any force that impairs the stability and balance of bodily functions. Often, physical stress leads to emotional stress and emotional stress often appears as physical stress, e.g. stomach cramps, headaches, etc., [(2)].

Stress causes a variety of health problems on the individual, including physical, psychological and behavioral such as heart disease and stroke, gastrointestinal problems, respiratory disorders and emotional difficulties, family conflicts, sexual dysfunction, sleep disturbances, depression, and burnout, also drug and alcohol abuse, smoking, accident proneness, violence and appetite disorders [(3)].

Work place stressor include unclear requirement, role overload, high stress times with no down times, big consequences for small failures, lack of personal control, lack of recognition, poor leadership. Occupational stress spreads gradually and continuously over time, sending people into downward spiral from where it is hard to recover [(4)].

The best methods of stress management depend on both the organization and the individual. Some of the methods which can be used by individuals cope with stress are exercise programs, relaxation techniques, which often include deep breathing methods, meditation, all of them provides deep physiological and psychological rest[(3)]. Time management, realistic goal setting, redesigning work, developing greater employee participation, increasing feelings of personal accomplishment, and basically by learning to behave more effectively will aid in stress management [(5)].

The employees in some particular jobs feel that they are trapped, and treated more like machines than individuals. Among the 12 most stressful jobs are managers, administrators and supervisors, and among the 28 high stress jobs are bank tellers[(6)]. According to Central Bank of Egypt (CBE), the

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numbers of banks working in Egypt are 40 and its branches are 3690, with a total number of employees about 666.000 [7].

This numbers of employees motivated the researcher in conducting this study, since the banking industry in Egypt consists of large number of banks and attracts a large number of employees who are facing stress at their jobs.

AIM OF THE STUDY

To assess the prevalence of occupational job stress among banking employees, to find out risk factors of occupational job stress and to recommend interventions that could prevent occupational stress among banking employees.

SUBJECTS AND METHODS

The study dealt with occupational stress among banking employees at El-Mansoura City, from the beginning of November 2015 to the end of April 2019. A cross sectional study was conducted to investigate the current topic. All the employees were included in this study with total number (568), divided into (285) from national banks which include (Egypt Bank, Cairo Bank, Credit and Agricultural Development Bank, National Bank , Alexandria Bank) and (283) from private banks which include (United Bank, Faisal Bank, Arab Banking Company, Abu Dhabi Bank, CIB bank, Arab bank, Arab African bank, National bank for development, Audi bank, Barclays Bank, QNB bank, Suez Canal Bank, National United Bank, Gulf Egyptian Bank, Emirate Dubai Bank, Egyptian American Bank,)

Type of the Study: This study was divided into two phases:

- A cross-sectional analytical study was conducted among El-Mansoura City banking employees.
- Interventional study though health education program.

Sampling: The entire employee working at El-Mansoura city banks were recruited in our study.

Administrative considerations: After approval of the study protocol by Ethical Committee of Al-Azhar Faculty of Medicine; permission to implement the study were obtained from each banking manager to ensure maximum cooperation.

Ethical considerations: Formal consents were obtained from each chosen banking personnel, assuring confidentiality of the study results. **The study was approved by the Ethics Board of Al-Azhar University.**

Data collection: All participants were interviewed to fulfill a questionnaire through a structured interview. They were interviewed in their working rooms.

Research instruments and tools:

- A standardized questionnaire for occupational stress focusing on: risk factors of stress and stress related health problem.
- Checklist for job content focusing on: Monotonous work, emotionally demanding work, time pressure, lonely job, incorrect job organization, insufficient job support and information.
- Checklist for working can focusing on: High noise level, dangerous situation and bad ergonomics.
- Checklist for terms of employment focusing on: Insufficient carrier opportunities and training, unfair remuneration, bad planning of working and resting periods, overtime, piece wages [8, 9].
- Checklist for social relations at work: focusing on: Insufficient work consultation, bad psychological atmosphere, discrimination [9].

Definition of terms: The researcher and supervisors put criteria for scoring the stress level among employees, low stress level equal 0-50%, Moderate stress level equal 51-75% and high stress level equal ≥ 76 %.

Health education sessions: The employees attended a 1-hour training health education session in stress management in groups of 10 to 15 persons.

Interventional study: An stress management health education program was designed aiming to ensure that all employees were educated about occupational stress risk factors and methods for their prevention, how to integrate stress management strategies into their daily work duties, how to get effective training, changing attitude of the employees positively regarding safe work practices and occupational stress workplace problems. Repetition was done to strength health education to the above topics and to cover the missed cases.

The selected channel for health education program was done through consoling to address questions. Three main messages were introduced to the studied operators, message about health hazards already reported by some of them in the pretest, message about roots of occupational stress risk factors, message about the right way to manage their stress.

Post-test: Evaluation of the program was done after 6 months of the training by using the same pretest questionnaire.

Statistical Analysis: Collected data were subjected to statistical analysis using statistical package for social science (SPSS version 20) running on IBM compatible computer with Microsoft Windows 8 Operating System. Frequency, and percentage were used as descriptive statistics. For comparison between groups, Chi square test and t- test were used for qualitative and quantitative variables respectively. The differences were considered statistically significant when P value was ≤ 0.05.

RESULTS

Table (1) shows the personal characteristics of the participants.

Table (1) personal characteristics of studied subjects

Variable	Number Total (568)	Percentage %
• Age		
25-35	200	34.2
36-45	254	44.7
+ 45	114	20.1
• Gender		
Male	494	87.0
Female	74	13.0
• Occupational degree		
Manager	127	22.4
Banker A	324	57.0
Banker B	117	20.6
• Bank type		
National	285	50.2
Private	283	49.8
• Residence		
Rural	227	40.0
Urban	341	60.0
• Marital status		
Single	105	18.5
Married	430	75.7
Widow/Divorced	33	5.8
• Educational level		
Secondary education	68	12.0
University education	361	63.5
Post graduate	139	24.5

Table (2) shows statistical significance difference between national and private bank employees regarding health complaint.

Table (2): Prevalence of health complaint among studied employees according to their bank type.

Stress Level	Bank type				P
	National (285)		Private (283)		
	NO	%	NO	%	
Low″	128	44.9	172	60.8	0.001*
Moderate″	92	32.3	77	27.2	
High″	65	22.8	34	12	

***: P < 0.05**

Table (3) shows a statistical significant difference between studied employees according to their occupational degree.

Table (3): prevalence of occupational stress among studied employees in relation to their occupational degree difference.

Stress level	Occupational degree						P
	Manager (127)		Banker A (324)		Banker B (117)		
	NO	%	NO	%	NO	%	
Low	2	1.6	242	74.7	72	61.5	0.001*
Moderate	81	63.8	57	17.6	31	26.5	
Sever	44	34.6	25	7.7	14	12	

***: P < 0.05**

Table (4) shows a statistical significant difference between studied employees according to their age difference.

Table (4): Prevalence of occupational stress among studied employees according to their age.

Stress level	Age						P
	25-35 (200)		36-45 (254)		+45 (114)		
	NO	%	NO	%	NO	%	0.001*
Low	84	42	194	76.4	2	1.8	
Moderate	65	32.5	47	18.5	60	52.6	
High	51	25.5	13	5.1	52	45.6	

***: P < 0.05**

Table (**5**) shows a statistical significant difference between male and female in the appearance of health complaint.

Table (5): Prevalence of occupational stress among studied group in relation to their gender difference.

Stress level	Gender				P
	Male (494)		Female (47)		
	NO	%	NO	%	
Low	263	53.2	7	9.5	
Moderate	139	28.1	30	40.5	0.001*
High	92	18.6	37	50	

***: P < 0.05**

Table (6) shows a statistical significant difference between pre- and post-test in reduction of occupational stress symptoms among the studied employees.

Table (6): Comparison between pre- and post-test as regards health complaint score among studied groups

Stress level	Health complaint				P
	Pre test		Post test		
	NO	%	NO	%	
Low	300	52.8	502	88.4	0.001*
Moderate	169	29.8	63	11.1	
High	99	17.4	3	5	

***: P < 0.05**

Table (7) shows significant difference between national and private banks in the reception and other areas, e.g. file storage and reception, telephone operators departments.

Table (7): Comparison results of measurements of noise in different departments of the studied banks

Departments	Noise (dB)		P
	National banks (N=285) (Mean±SD)	Private banks (N=283) (Mean± SD)	
Reception department	77.3± 1.28	79± 1.1	**0.001***
Computer work stations	**78.5± 0.7**	**76.5± 1**	**0.001***
General offices	**76.3± 0.6**	**77.5± 1.7**	**0.001***
Other areas, e.g. file storage and reception, telephone operators	**70± 1**	**76.6± 1.4**	**0.001***

***: P < 0.05**

Table (8) shows that the only significant difference between national and private banks was in the general office departments.

Table (8): Comparison results of measurements of light in different departments of the studied banks.

	Lighting (Lux)		P
	National banks (N=285) (Mean±SD)	Private banks (N=283) (Mean±SD)	
Reception department	**334±15.2**	**336.3±11.9**	**0.04***
Computer work stations	**528±66.1**	**546.3±24.5**	**0.001***
General offices	**334±15.2**	**310±20**	**0.001***
Other areas, e.g. file storage and reception, telephone operators	**322±23.9**	**323.8±17.7**	**0.308**

***: P < 0.05**

Table (9) shows significant difference between national and private banks in the reception and other areas, e.g. file storage and reception, telephone operators departments.

Table (9): Comparison results of measurements of temperature in different departments of the studied banks

Departments	Temperature (°C)		T	P
	National banks (N=285) (Mean±SD)	Private banks (N=283) (Mean±SD)		
Reception department	23.2±0.8	24.4±0.5	**3.162**	**0.001***
Computer work stations	20.7±0.6	20.9±0.8	**0.240**	**0.001***
General offices	21.5±0.6	22±0.7	**1.139**	**0.001***
Other areas, e.g. file storage and reception, telephone operators	23±0.7	23.9±0.6	**2.306**	**0.001***

***: P < 0.05**

DISCUSSION

As regard demographic characteristics, this study included 568 employee, 79.1% of them were between 25-45 years. Male were more prevalent 87%, 50.2% of them were working in national banks and 49.8% were working in private banks. 22.4% were manager while 57%were banker A and 20.6 were banker B. 60% were from urban areas. Married employees represents 75.7. The most common educational level was the university education 63.5%. 76.6% of studied employees were physically inactive. The main working time in years were 12.77 years ±6.63. The main official working hours/day were 7.75 hour/day with ±0.39, while the mean actual working hours/day were 8.95 hours/day ±0.55.

Similarly **Amigo *et al.*** [(10)] investigated how prevalent employee burnout syndrome (BS) is. One aim of the study was to differentiate between commercial branch office staff who dealt with the general public, and central services employees. Participants in the study came from all the Spanish Savings Banks and totaled 1,341, of them 883 were men and 458 women. 1,130 worked in branch offices and had direct contact with the clients; the number of central services workers was 211. In this study there was statistical significance difference between national and private bank

employees as regard the prevalence of health complaint. About 22.8% of national banks employees showed high stress level, while only 12% of private banking employees showed high stress level. This is in agreement with another study that showed a link between several undesirable mental and physical health outcomes and stress related to work place [11] Also, associations between occupational stress and job burnout were investigated [10, 12].

Li *et al.* [12] showed that occupational stress may play a part in job burnout but that it can be mediated by psychological capital, which **Luthans *et al.*** [13] defined as "a positive psychological state that an individual performs in the process of growth and development". Some researchers researched which work characteristics were most associated with stress. **Petarli *et al.*** [14] said that bank agency workers were more likely to belong to the "high distress" quadrant than workers in the administrative unit.

Preshita and Pramod [11] also found higher total organizational role stress scores in private sector employees. Possible causes lie in the strict deadlines and lack of job security in private sector banking. **Mutsvunguma and Gwandure** [15] examined how the psychological functioning of bank employees, who handled cash and those who did not, differed and found significant differences in work stress, emotional exhaustion, depersonalization and overall burnout. Social relations at work among this study participants showed statistical significant difference between national and private banking employees. High stress level was 39.3% in national banking employees while in private banks was 31.8%.

Most studies agreed that social support could provide protection against occupational stress and so important in reducing perceived stress levels. Social support was shown to tend to mitigate negative effect of stressors and to reduce the volume of stress reactions, and could be considered the best-established anti-occupational situational variable [16].

Social integration, confidence in peers and the support of colleagues and superiors when performing tasks, could protect workers' health against work-related stress and its effects, and it is interesting that cortisol, the hormone released during stress, was found in increased amounts in women whose social support was low. This result strengthened the evidence for the protective effect of social support. **Snorradóttir *et al.*** [1] presented contradictory findings, in that they found social support from friends and family to be a stress reducer for employees involved in organizational change, but found no such effect when the support was provided by coworkers or supervisors. This study did showed, though, a correlation between coworker and supervisor support and empowering leadership. In this study there was a statistical significant difference between studied employees according to their occupational degree. Bank manager showed the highest level of stress 34.6%, while the banker A showed the lowest level of stress about 74.7%.

On the other hand, **Petarli *et al.*** [14] evaluated effect of occupational stress on the demand-control model and showed that low education increased an employee's probability of being in the "passive" (intermediate risk of stress) quadrant. And, lastly, **Kan and Yu**[17] detected no significant difference in bankers' symptoms of depression stemming from the occupational degree. Regarding age, there was a statistical significant difference between the studied employees in this study according to their age difference, with the highest level of stress among age group +45 years; 45.6% and the lowest stress level among age group between 36-45 years about 76.4.

The current study found a statistical significant difference between male and female in the appearance of health complaint. Females showed high stress level, about 50% of the studied sample experience high stress level, while in male group only 18.6% of them showed high stress level.

In this study, there was a statistical significant difference between pre- and post-test in reduction of occupational stress symptoms among the studied employees. In pre-test about 17.4 % of the employees showed high stress level while in post-test only 5% of them showed high stress level. In the United States, most efforts to reduce the health impact of work stressors have focused solely on personal stress management. While stress management programs can have positive benefits, most have limited follow-up periods (only 23% > 6 months). Thus, it is not known whether or how long the benefits last. Benefits are also seen in control groups, and about one-third of participants failed to learn techniques, indicating that such approaches are not appropriate for everyone. If employees return to an unchanged work environment and to high levels of job stressors, the benefits that may have been gained from a stress management program are likely to be eroded, if not entirely un-done [18].

In national banks of this study, the mean levels of noise, light and temperature in different departments of the studied showed significant difference between national and private banks. **Makhbul *et al.*** [19] investigated which factor in the ergonomic workstation and environmental conditions variables in the Banking Supervision Department in ABC Bank in Malaysia had the most influence on stress levels. Thirty-one employees of department took part in this study. 47.2% of changes in workplace stress levels were shown to be due to alterations in posture and other environmental condition. Factors relating to ergonomic workstations included the effect of posture which correlated significantly with workplace stress levels. Health was shown on analysis to have a stronger relationship than any other factor with workplace stress due to the hours of input work demanded in the department.

LIMITATION OF THE STUDY

1. Few studies regarding this issue, present in Egypt.
2. The report of complaints may have been biased due to the fact that subjects had to report complaints that occurred which might have introduced recall bias.
3. The measurement of occupational stress risk factors was subjective and not based on actual measuring as degree/level on neck position.
4. In this study we have not investigated the individual conditions (body mass index, civil status, physical activity, breakfast habits, smoking, snuff use, alcohol consumption, current symptoms, duration and distribution of symptoms, depression, difficulties in falling asleep and stress) risk factors for reduced productivity among the employees with musculoskeletal disorders.
5. In this study we have not investigated the predictors of sickness absences (SA) among the employees due to stress related disorders.

CONCLUSION AND RECOMMENDATION

In this study there was statistical significance difference between national and private bank employees as regard the prevalence of health complaint. Age, gender, occupational degree and social relations at work among these study participants showed statistical significant difference between national and private banking employees. This study intervention was effective as there was a statistical significant difference between pre- and post-test in reduction of occupational stress symptoms among the studied employees. There is a need for further studies to provide a better analysis of the relationship between work-related stress and health in the banking sector. It would be particularly interesting to carry out longitudinal studies to identify changes in the level and incidence of health problems and to map variations in economic, organizational, and social conditions.

Future research should couple longitudinal designs with both objective and subjective measurements of stressors from a number of sources to increase understanding of organizational stress.

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