

## **The Effect of an Educational Program on Head Nurses' Knowledge Regarding Work Stress and its Management**

Ghada Mosaad Mohamed El-Ghabbour, Fathyia AbdelRazek Afify, Magda Taha

Kamal El-Din Fahmy, Neamat Mohamed El-Sayed,

Assistant Lecturer of Nursing Administration, Faculty of Nursing, Port-Said University, Lecturer of Nursing Administration, Faculty of Nursing, Suez Canal University. Professor of Psychiatric Medicine, Suez Canal University, Faculty of Medicine, Professor of Nursing Administration, Faculty of Nursing, Damanhur University

---

### **ABSTRACT**

**Background:** Modern living has brought with it, not only innumerable means of comfort, but also a plethora of demands that tax human body and mind. Nowadays, everyone talks about stress. It is cutting across all socioeconomic groups of population and becoming the great leveler. Not only just high pressure executives are its key victims but it also includes labourers, slum dwellers, working women, businessmen, professionals and even children. Stress is an inevitable and unavoidable component of life due to increasing complexities and competitiveness in living standards. **Aim :** This study Aimed to investigate the impact of an educational program on head nurses' knowledge regarding work stress and its management. **Subjects and methods:** A quasi-experimental design was used to conduct this study, it was conducted in all units at four hospitals affiliated to The Ministry of Health, namely: Port- Said general hospital, Port-Fouad general hospital, El- Naser hospital, and El-Zohour hospital, study sample composed of 30 head nurses . Data were collected using a structured questionnaire consisting of two parts, the first part aimed to collect data related to personal and occupational characteristics of studied head nurses, the second part is the head nurses' knowledge test questionnaire aiming to assess the knowledge of head nurses regarding work stress and its management. **Results:** The results of the present study revealed a significant improvement of head nurses' knowledge, and practice related to work stress and its management in both immediate post & 3 months after training program compared with pre-intervention program phase. **Conclusion:** Based on the results of the present study, it can be concluded that, the head nurses working in all patient care units at four hospitals had inadequate knowledge regarding work stress and its management before implementation of the training program. After implementation of the educational program, there was significant improvement and positive impact on the head nurses' levels of knowledge about work stress and its management. It was recommended to conduct continuous and regular in-service educational programs and other development activities such as conferences, seminars, and workshops to achieve the application of work stress management to improve the head nurses' competency level.

**Key Words:** work stress management, training program, head nurses .

## **INTRODUCTION**

The health care work environment as a source of overwork and stress has been implicated in the nursing shortage and conditions of the typical work environment characterized as a serious threat to patient safety (**Institute of Medicine [IOM], 2004**). Creating a healthy work environment for nursing practice represents a priority for promoting patient care quality and safety, in addition to maintaining an adequate nurse workforce. Head nurses play a pivotal role in creating this healthy work environment, and their actions are known to be essential precursors for building and sustaining safe workplaces (**IOM, 2004 & American Association of Critical-Care Nurses [AACN], 2005**).

Stress is defined as a recognized fact in contemporary lives causing disequilibrium and tension (**Chan, 2002; Timby, 2013**). It is a transaction or an exchange between the person and the environment that is appraised by the person as taxing his or her resources and endangering his or her well-being (**Johnson, 1997**).

Work stress is also defined as the harmful physical and emotional responses that occur when job requirements do not match the worker's capabilities, resources, and needs (**Park, 2007**). Stressed workers are also more likely to be unhealthy, poorly motivated, less productive and less safe at work, and their organizations are less likely to succeed in a competitive market and poor performance (**Palmer et al., 2004**).

Consequences of stress in the workplace impact both on the individual and the organization; an individual consequences such as accident proneness, aggression and violence, appetite disorders, sleeping too much or not enough, headaches, ulcers and intestinal disorders. Other results of stress have even more direct consequences for organizations; these include decline in work performance, withdrawal, and negative changes in attitudes (**Moorhead & Griffin, 2012**).

Stress arises from both personal and job factors. Hence, full efforts at stress management include actions at both levels. Personal stress management is especially important for people who hold jobs that are by nature highly stressful, such as the supervisor of nurses in a hospital's intensive care unit. A variety of techniques are available for personal stress management; time management, relaxation techniques, breathing exercise, problem solving skills, biofeedback, and meditation. Supervisors can use these techniques to improve their own stress levels and encourage their subordinates to use them (**Certo, 2003**).

In addition, many sources of stress may arise from the policies and practices of the organization and its management. Therefore, any serious effort at stress management must include organizational interventions. This intervention will help employees manage stress through certain means such as job redesign, environmental changes, and wellness programs (Certo, 2003).

Stress among the managers affects their concentration, decision making and initiative ability, logical thinking, controlling power causing them irritation, depression, isolation, negative thinking, restlessness, lack of attention in their job and wrong or delay in the decision making. These activities will reflect not only on their health and reduce their work efficiency but also affect the discipline and efficiency of the subordinates causing undue delay or mistakes in the patient care activities ending in dissatisfaction among the patients and their relatives on the service of the hospital (Rajan & Joseph, 2012). Hence, it is necessary to control and prevent the work stress for the nurse managers (Clegg, 2000; Robbins, 2003; Luthans, 2003). Consequently, the current study aimed to investigate the impact of an educational program on head nurses' knowledge regarding work stress and its management.

**AIM OF STUDY:**

Study was carried out to investigate the effect of an educational program on head nurses' knowledge regarding work stress and its management through research objectives:

1. To assess head nurses' knowledge regarding work stress and its management.
2. To develop a training program for head nurses regarding work stress and its management.
3. To implement the training program for head nurses.
4. To investigate the effect of the implemented training program on the knowledge for head nurses

Regarding work stress and its management.

**SUBJECT AND METHOUD:**

The current study was a quasi-experimental research design, it was conducted at four hospitals affiliated to the Ministry of Health (Port-Said general hospital, Port-Fouad general hospital, El-Zohoor hospital, and El-Naser hospital). The subjects of this study included all head nurses working in the aforementioned settings. The total number was 30 head nurses (HN) distributed as follows: 11 H.N working in Port-said general hospital, 10 in Port-Fouad general hospital, 4 in El-Naser hospital, and 5 in El-Zohoor

hospital. Inclusion criterion for head nurses was one year experience at least in the study setting as a head nurse. Data of this study was collected through using one tool. Work stress knowledge questionnaire consists of two parts, Part I: includes personal and occupational characteristics of studied head nurses. Part II: The Work stress knowledge questionnaire was developed by the researcher based on related literature such as; **Asker (2000); Athman (2001); Yuosef (2004); Sullivan and Decker (2009); Marquis and Huston (2012); and Moorhead and Griffin (2012)**. This questionnaire aims to assess the knowledge of head nurses regarding work stress and its management. It includes 40 questions that reflect the participants' knowledge regarding work stress such as definition, types, phases, manifestations, source of work stress, consequence of work stress, and management strategy.

**Scoring system and interpretation:**

The total score for knowledge test was “75” score. Each correct question took one point, and zero for incorrect, except listing question which took 2 points. The scores were summed up and converted into percentage. High knowledge scores (75-  $\geq 85$ ), Moderate knowledge (60-  $< 75$ ), and Low ( $< 60\%$ ). High and moderate scoring means head nurses have adequate knowledge, and low scoring means they have inadequate knowledge. Then the scores were converted to qualitative variables through categorization based on a cutoff point of 60 % or more means head nurses have “adequate knowledge”, and less than 60 % means they have inadequate knowledge (**El-Shear, 2009; Abd El-Rahman, 2010**).

**Methods and Field work of study:**

The tools of the study were revised by a jury composed of eleven specialists in the field of nursing administration, psychiatric and mental health nursing for testing content validity. Besides, a pilot study was carried out after the development of the tools on seven of the head nurses working in El-Tadamen hospital who were excluded from the entire sample of research study. It was conducted to assure stability of tools, applicability and estimate the time needed to fulfill the study tools. The necessary modification was done based on the results of the pilot study.

Reliability of the study tool was tested using the results of the pilot study and the results of giving

The tool to the same head nurses to be answered after two weeks. Test re-test reliability was computed by measuring Cronbach's alpha reliability coefficient used to measure the internal consistency of the items, and determine if items in a scale are interrelated. Cronbach's alpha has a range of 0 to 1 and a score of 0.65 or higher is

sufficient evidence of reliability (**Crosby et al., 2006**); the reliability test of head nurses' knowledge test was (0.88).

Following this pilot study, the process of data collection and the actual study was conducted through five phases: **I- Pre-test phase:** During this phase, needs assessment and the data was collected from the head nurses using the tools designed in the previous phase about level of knowledge of work stress and its management using the third, fourth, fifth, and sixth tools. Interview scheduled was individualized with the head nurse in the working unit who filled the questionnaires.

**II- Educational program development phase:** The training program was designed by the researcher based on the identified needs and demands of head nurses gathered in phase I- pretest phase, in the light of the most recent pertinent literature and based on the review of related literature such as; **Asker (2000); Athman (2001); Yuosef (2004); Aamodt (2007); Sullivan and Decker (2009); Marquis and Huston (2012); & Moorhead and Griffin (2012).** This phase was constructed within 24 weeks and it included the following; **A-Formulation of objectives:** - The aim of the program was to improve head nurses' knowledge regarding work stress and its management through: define the stress concepts, identify types of stress, identify stages and responses of stress, classify sources of work stress, classify manifestations of stress, explain the effect of stress, identify the relation between stress and job performance, explain management strategies for work stress **B- Contents:** covered all areas about work stress and its management include: definitions, types, stages, sources and causes, effect of stress, management strategies for work stress.

**III-Program Implementation Phase:** The program was implemented to 30 head nurses after they were divided into five groups, the number in each group determined according to their work setting (6 - 7 H.N). The time of the program was amounted to 240 hours, 48 hours for each group of head nurses, and divided into ten theoretical sessions and 14 practical sessions. Each theoretical and practical session took about two hours per day for each group according to their available time and place for attendance which are commonly in the morning between 9.00 Am until 2.00 Pm. The program was repeated five times to cover the five groups.

Additionally, the training program was presented in clear and concise form, and focused on the point of learning, using different teaching methods including lecture-discussion, brain storming, and group-discussion, role playing demonstration and work in small group. In addition, teaching aids used in the program were simply such

as booklet, brochure, posters, pamphlet and video, as well as facilitating directions during demonstration of practice.

**IV-Post-test (immediate post-test) Phase:** Evaluation of the training program was carried out after implementation of work stress management training program for head nurses, by knowledge questionnaire tool implemented immediately to assess the head nurses knowledge and practice regarding work stress management training program and to assess the head nurses knowledge in the same manner like pretest phase.

**VI-Follow-Up Phase:** Follow- up phase after three months of completion of the program implementation in addition to application of the study tools to assess the impact of work stress management program on head nurses knowledge.

**Ethical Considerations:**

An official permission was obtained from the hospitals directors, matron, and head nurses of the specific hospitals through an official formal letters from the dean of the faculty of Nursing Port Said University besides explanation of the study aim. The head nurses were assured about confidentiality of the information gathered and its use only for the purpose of the study. An informed consent was obtained from each head nurse in the study after explaining its purpose and importance.

**RESULTS:**

**Table (1):** shows the personal characteristics of head nurses in the study setting. It was found that the highest percentage of studied head nurses' age ranged between 30 years to less than 40 years at three hospitals Port-Fouad (PFH), El-Zohoor (EZH), and El-Naser (ENH) (40%, 40%, & 75% respectively), whereas in Port-Said hospital (PSH) the highest percentages of head nurses age was under 30 years (45.5%). In addition, the highest percentage (81.8%, 90%, 60%, and 75%) of head nurses in all hospitals (PSH, PFH, ENH, and EZH respectively) were married. Regarding educational level, the highest percentage (90%) of head nurses who had secondary nursing school diploma were found in PFH compared to bachelor of science in nursing in EZH (80%), followed by 45.5% in PSH had secondary nursing school diploma whereas all educational degrees were distributed equally in ENH.

**Table (2):** shows the occupational characteristics of head nurses in the study setting. It was found that, the highest percentage of head nurses in PSH (27.2%) were working in emergency and accident units followed by 30.0% of them in PFH were working in medical unit, whereas in EZH (40.0%) and ENH (50.0%) of them were working in critical care unit. Concerning level of experience in nursing field, the highest

percentages of head nurses in PSH and ENH were ranging from five years to less than 15 years (45.5% and 100% respectively), whereas the highest percentages (40.0%) in PFH had experience ranging from 25 years to less than 35 years and in EZH (60.0%) it was under five years of experience in nursing field. Besides, the highest percentage of head nurses (66.7%) in all hospitals mentioned that the level of experience in the current position was less than 10 years of experience.

**Table (3):** reveals the knowledge of head nurses' regarding work stress and its management in pre, post, and follow- up of implementation of the training program. The marked improvement of head nurses' knowledge of work stress management is obviously increased in post-test and follow-up phases to 93.3% and 86.7% respectively compared with result 20.0% in pre-test phase. On the other hand, the highest percentage (80%) of head nurses who had inadequate knowledge in pre-test phase decreased to 6.7% and 13.3% in both post and follow-up phases.

**Table (4):** reveals the comparison between pre, post, and follow-up scores regarding head nurses' knowledge of work stress and its management. It is obvious that the improvement had occurred related to total scores of knowledge regarding work stress and its management with statistically significant differences between the three phases : pre-program in relation to immediate post-program and follow-up program ( $X^2= 40.00$ ,  $p\text{-value}= 0.000$ , and  $X^2= 26.79$ ,  $p\text{-value}= 0.000$ ). In addition, a significant difference was found between immediate post-program in relation to follow-up program ( $X^2= 4.29$ ,  $p\text{-value}= 0.038$ ).

Table (1): Personal characteristics of head nurses in the study setting (n=30).

Personal characteristics		Hospitals Name									
		Port-Said (PSH) n=11		Port-Foaud (PFH) n=10		El-Zohor (EZH) n=5		El-Naser (ENH) n=4		Total n=30	
		N	%	N	%	N	%	N	%	N	%
<b>Age (years)</b>	<30	5	45.5	0	0.0	2	40.0	1	25.0	8	26.7
	30-	3	27.3	4	40.0	2	40.0	3	75.0	12	40.0
	40 -	2	18.2	2	20.0	0	0.0	0	0.0	4	13.3
	50+	1	9.1	4	40.0	1	20.0	0	0.0	6	20.0
Min – max		26-56		28-50		27-50		29-38		26-56	
Mean ± SD		43.82±11.13		34.75±6.97		33.60±9.40		32.25±4.03		37.63±9.85	
<b>Marital status</b>	Single	2	18.2	0	0.0	2	40.0	1	25.0	5	16.7
	Married	9	81.8	9	90.0	3	60.0	3	75.0	24	80.0
	Widower	0	0.0	1	10.0	0	0.0	0	0.0	1	3.3
<b>Level of Education</b>	SNS Diploma•	5	45.5	9	90.0	1	20.0	1	25.0	16	53.3
	THI Diploma••	1	9.1	0	0.0	0	0.0	1	25.0	2	6.7
	BSc Nursing•••	5	45.5	1	10.0	4	80.0	1	25.0	11	36.7
	M.Sc. Nursing••••	0	0.0	0	0.0	0	0.0	1	25.0	1	3.3

•SNS Diploma: Secondary Nursing School Diploma. ••THI Diploma: Technical Health Institute Diploma. •••BSc Nursing: Bachelor of Science in Nursing. ••••M.Sc. Master Degree in nursing.

**Table (2): Occupational characteristics of head nurses in the study setting (n=30).**

Occupational characteristics		Hospitals Name								Total n=30	
		PSH n=11		PFH n=10		EZH n=5		ENH n=4			
		NO	%	NO	%	NO	%	NO	%		
<b>Units Name</b>	<b>Medicine</b>	2	18.2	3	30.0	1	20.0	0	0.0	6	20.0
	<b>Surgery</b>	2	18.2	2	20.0	1	20.0	0	0.0	5	16.7
	<b>Critical care</b>	2	18.2	2	20.0	2	40.0	2	50.0	8	26.7
	<b>Emergency &amp; accident</b>	3	27.2	1	10.0	1	20.0	1	25.0	6	20.0
	<b>Obs &amp; Gyne</b>	2	18.2	1	10.0	0	0.0	0	0.0	3	10.0
	<b>Pediatric</b>	0	0.0	1	10.0	0	0.0	1	25.0	2	6.7
<b>Level of experience in the nursing field (years)</b>	<b>&lt;5 y</b>	2	18.2	0	0.0	3	60.0	0	0.0	5	16.7
	<b>5 - y</b>	5	45.5	2	20.0	1	20.0	4	100	12	40.0
	<b>15- y</b>	3	27.3	2	20.0	0	0.0	0	0.0	5	16.7
	<b>25- y</b>	1	9.1	4	40.0	1	20.0	0	0.0	6	20.0
	<b>35+ y</b>	0	0.0	2	20.0	0	0.0	0	0.0	2	6.7
<b>Min – max</b>		8-36		3-30		2-32		6-10		2-36	
<b>Mean ± SD</b>		24.18±10.26		15.10±11.48		10.20±12.58		7.50±1.73		16.60±11.85	
<b>Level of experience in current position (years)</b>	<b>&lt;10 y</b>	8	72.7	4	40.0	5	100	3	75.0	20	66.7
	<b>10 - y</b>	2	18.2	2	20.0	0	0.0	1	25.0	5	16.7
	<b>20 + y</b>	1	9.1	4	40.0	0	0.0	0	0.0	5	16.7
<b>Min – max</b>		3-34		3-38		2-3		6-10		2-34	
<b>Mean ± SD</b>		14.55±9.47		11.80±10.59		2.60±0.55		7.50±1.73		10.70±9.21	

**Table (3): Knowledge of head nurses' regarding work stress and its management in pre, post, and follow up of implementation of the training program. (N=30)**

Sub-dimensions of knowledge regarding work stress	Level of knowledge					
	Pre-test		Post-test		Follow up	
	Adequate ≥60 NO (%)	Inadequate <60 NO (%)	Adequate ≥60 NO (%)	Inadequate <60 NO (%)	Adequate ≥60 NO (%)	Inadequate <60 NO (%)
Concepts and definitions	4 (13.3)	26 (86.7)	30 (100)	0.0 (0.0)	28 (93.3)	2 (6.6)
Phases	3 (10.0)	27 (90.0)	30 (100)	0.0 (0.0)	26 (86.7)	4 (13.3)
Types	6 (20.0)	24 (80.0)	30 (100)	0.0 (0.0)	30 (100)	0.0 (0.0)
Sources/ causes	10 (33.3)	20 (66.7)	30 (100)	0.0 (0.0)	30 (100)	0.0 (0.0)
<b>Manifestation:</b>						
• Cognitive signs	6 (20.0)	24 (80.0)	28 (93.3)	2 (6.6)	26 (86.7)	4 (13.3)
• Behavioral signs	5 (16.6)	25 (83.3)	26 (86.7)	4 (13.3)	28 (93.3)	2 (6.6)
• Emotional signs	7 (23.3)	23 (76.6)	25 (83.3)	5 (16.6)	26 (86.7)	4 (13.3)
• Physical signs	10 (33.3)	20 (66.7)	28 (93.3)	2 (6.6)	30 (100)	0.0 (0.0)
• <b>Total signs</b>	10 (33.3)	20 (66.7)	28 (93.3)	2 (6.6)	28 (93.3)	2 (6.6)
<b>Consequences</b>	6 (20.0)	24 (80.0)	28 (93.3)	2 (6.6)	28 (93.3)	2 (6.6)
<b>Management strategies:</b>						
• Problem-solving technique	4 (13.3)	26 (86.7)	28 (93.3)	2 (6.6)	26 (86.7)	4 (13.3)
• Deep breathing techniques	2 (6.6)	28 (93.3)	26 (86.7)	4 (13.3)	28 (93.3)	2 (6.6)
• Progressive muscle relaxation	0 (0.0)	30 (100)	27 (90.0)	3 (10.0)	27 (90.0)	3 (10.0)
• Other	4 (13.3)	26 (86.7)	26 (86.7)	4 (13.3)	26 (86.7)	4 (13.3)
• <b>Total strategies</b>	4 (13.3)	26 (86.7)	28 (93.3)	2 (6.6)	28 (93.3)	2 (6.6)
<b>Total mean scores of Knowledge regarding work stress and its management:</b>						
Adequate knowledge (≥ 60%)	6 (20.0)		28 (93.3)		26 (86.7)	
Inadequate knowledge (<60%)	24 (80.0)		2 (6.7)		4 (13.3)	

**Table (4): Comparison between pre, post, and follow-up of implementation the training program regarding head nurses' knowledge of work stress and its management (n=30).**

Total mean scores of Knowledge regarding work stress management	Pre-test		Post-test		Follow-up		Pre-Post X <sup>2</sup> test p-value	Pre-FU X <sup>2</sup> test p-value	Post-FU X <sup>2</sup> test p-value
	NO	%	NO	%	NO	%			
<b>Total scores:</b>									
Adequate knowledge (≥ 60%)	6	20.0	28	93.3	26	86.7	0.000**	0.000**	0.038*
Inadequate knowledge (<60%)	24	80.0	2	6.7	4	13.3			

(\*) X<sup>2</sup> ≥ 3.84 at P<0.05 level of significant denotes a significant difference

(\*\*) X<sup>2</sup> ≥ 6.93 at P<0.01 level of highly significant denotes a significant difference

**DISCUSSION::**

Work stress has consequences on both the individual and the organization. This affects the level of performance and success of interventions of health workers. Besides nurse managers who cannot cope with stress over an extended period of time may experience burnout that make them feel drained, lose interest, and hence perform their jobs ineffectively (**Huber, 2006**). So, stress management training program was needed for head nurses to develop and update knowledge and practice about work stress and its management to enhance job performance. Therefore, the current study was aimed to investigate the impact of an educational program on head nurses' knowledge regarding work stress and its management.

Regarding the assessment of the head nurses' knowledge about work stress and its strategies for managing stress at workplace in pre-program phases, the current study revealed that most head nurses had inadequate total score of knowledge. This finding, from the researcher opinion, might be attributed to that most of head nurses did not attend previous training program on work stress, as well as, lack of pre-service training program offered by the hospital authorities to these head nurses, and the curriculum as a diploma of nursing school hadn't included this issue. These findings are supported by **El-Shaer (2009)** who mentioned that the assessment of the head nurses' knowledge pre-program was low in terms an acceptable level of knowledge about occupational stress and its strategies for dealing with nurses stress. Also, this finding is consistent with **Mackenzie (1998)** who highlighted on that an educational preparation of head nurses for their roles would have great impact on their abilities to survive and function effectively. Furthermore, **Christian and Norman (1998)** added that an academic credibility is important and the leaders should be qualified beyond diploma level and should undergo further educational development. While, **Abd El-Megeed (1999)** recommended that there must be a matching between each nurses' educational level and job requirements.

The current study indicated an obvious increase in head nurses' knowledge regarding work stress and its strategies for dealing with stress immediate post-program. This finding is consistent with **Dean (2003) and Abd El-Fatah (2008)** who found that after implementation of the specific educational program the overall efficiency of head nurses was significantly moved from the unacceptable to acceptable levels. Also, this result is expected to be found as a positive effect, and a high improvement of the program on subject's knowledge was expected after its implementation (**Wassef, 1998**). Also, the findings showed that the all the head nurses had adequate total score

of knowledge in immediate post-program phase, with statistically significant differences between pre-program phase and immediate post-phase of the training program. This is consistent with **El-Shaer (2009)** who mentioned that there was highly statistically significant improvement after implementing the program on head nurses knowledge. Meanwhile, **Roussel et al (2006) and El-Demerdash (2006)** concluded that the educational program help head nurses in keeping up to date with new concepts, increasing knowledge and competence, modifying their attitudes, developing their abilities to deal with problems and work with others, and enable them to face managerial challenges.

Concerning the assessment of head nurses' knowledge after three months of program implementation, the present study findings revealed that, the head nurses' total score of knowledge were higher during follow-up period as compared to pre-program, with highly statistically significant differences. In addition, there was a slight decline of head nurses' knowledge during follow-up phase as compared to immediate post-phase of the training program with statistically significant difference. This finding goes in the same line with **El-Sayed (2004)** who indicated that, during follow-up period, a statistically significant difference among head nurses in relation to their knowledge. Also, the decline in head nurses' knowledge is supported by **Laualle (2004)** who assumed that, the level of knowledge normally declines with time, sessions in stress management, and ongoing education are important for all head nurses to reinforce learning and keep learned knowledge and skills current.

Furthermore, stress management training program maximized head nurses' knowledge with statistically significant differences between all program phases, as well as, with statistically significant differences between strategies to deal with stress because it was planned and implemented according to their pre-assessed needs between all program phases. Furthermore, simplification of well-presented information by suitable educational aids increased their interest and desire to acquire knowledge and practice. Besides, the availability of using combined methods of teaching helped head nurses to reach adequate level of knowledge and practice. This finding goes in the same line with **El-Demerdash (2006)** who asserted that using combined teaching methods provided opportunities for participants to learn according to their own style.

## **CONCLUSION:**

**Based on the results of the present study, it can be concluded that,:**

the head nurses working in all patient care units at the four hospitals had inadequate knowledge regarding work stress and its management before implementation of the

training program. After implementation of the educational program there was significant improvement and positive impact on the head nurses' levels of knowledge about work stress and its management.

## **RECOMMENDATIONS:**

**Based on the results of this study, the following recommendations are suggested:**

1. Upgrading nurses' knowledge about work stress and its management through:
  - Encouraging head nurses to attend national and international congresses, seminars, and workshops regularly about work stress and its management.
  - Conducting continuous and regular in-service educational programs and other development activities such as conferences, seminars, and workshops regarding the application of work stress management and other managerial skill to improve the head nurses' competency level.
  - Developing a system of periodical evaluation for head nurses to determine strategies of upgrading their knowledge and enhancing their practice.
2. Nursing school curriculum must include all items about work stress and its management.
3. Studying the impact of educational programs on work stress and its management continuously using a wide probability sample in different areas to monitor improvement in head nurses' performance and points of weakness for developing more educational program to head nurses dealing with work stress to improve head nurse's performance.
4. Hospital administrator might initiate stress management program inside the hospital for all employees, in order to limit the stressful situations, overcome crisis and improve nursing staff performance.

## **REFERENCES:**

*Aamodt, M., (2007).* Industrial / organizational psychology: An applied approach. 5<sup>th</sup> ed., United States: Thomson wands worth. Co., 227-229, 512-513, 529.

*Abd EL-Fatah, R., (2008).* Risk management of common errors in administration of medication. Unpublished doctorate thesis in nursing administration, Tanta University, Fac. Ng. Egypt.

*Abd El-Mageed, M., (1999).* Nurse leader behaviors as a determinant factor for increasing the effectiveness of staff performance. Review article, HIN, Cairo University.

**Abd El-Rahman, I.A., (2010).** Nursing educational program for management of violent patients in Port Said psychiatric hospital. Unpublished doctorate thesis in psychiatric nursing & mental health, Port-Said University, Fac. Ng. Egypt.

**American Association of Critical-Care Nurses. (2005).** Standards for establishing and sustaining healthy work environments: A journey to excellence. Retrieved February 5, 2005 from <http://www.aacn.org/hwe>.

**Certo, S.C., (2003).** Supervision: Concepts and skill building. 4<sup>th</sup> ed., Avenue of the Americas: New York, McGraw-Hill/Irwin co., 67-73, 282-283, 354-367.

**Chan, D., (2002).** Stress, self-efficacy, social support, and psychological distress among perspective Chinese teachers in Hong Kong. Educational psychology: International Journal Experimental Educational Psychology, 22 (5), 557 – 569.

**Christian, S.L.; Norman, I.J., (1998).** Clinical leadership in nursing development units. Journal of Advanced Nursing, 27, 108-116.

**Clegg, B., (2000).** Instant stress management. Dictionary of Education-A Practical Approach. New Delhi: Kanishka Publishers, 92-96.

**Crosby, R.A.; DiClemente, R.J.; Salazar, L.F., (2006).** Research methods in health promotion. San Francisco: John Wiley & Sons, Inc., 22-29.

**Dean, S., (2003).** The effectiveness of training program for emergency department nurses in managing violent situations. Australian Journal of Advanced Nursing; 211 (4): 14-22.

**EL-Demerdash, S., (2006).** Developing caring competencies and perception among nursing managers. Unpublished doctorate thesis in nursing administration, Tanta University, Fac. Ng. Egypt.

**EL-Sayed, N., (2004).** Impact of an educational program on nurses' knowledge, attitude and skills to cope with violence of patients in psychiatric setting. Unpublished doctorate thesis in psychiatric nursing, Assuit University, Fac. Ng. Egypt.

**El-Shaer, A., (2009).** Organizational structure features influence on occupational stress for intensive care nurses and strategies for dealing with stress. Unpublished doctoral thesis in nursing administration. Mansoura University. Fac. Ng. Egypt.

**Huber, D., (2006).** Leadership and Nursing care management. 3<sup>rd</sup> ed., Philadelphia WB Saunders Co., 242.

**Institute of Medicine (IOM). (2004).** Keeping patients safe: Transforming the work environment of nurses. Washington, DC: The National Academies Press.

**Johnson, B.S., (1997).** Adaptation and growth: psychiatric mental health nursing. 4<sup>th</sup> ed. Philadelphia: Lippincott-Raven publishers. Co., 8, 926-932.

**Laualle, K., (2004).** Process of knowledge retention and recall. Journal of Psychiatric Bulletin; 45 (3): 198-207.

**Luthans, F., (2003).** Organizational Behavior. 7<sup>th</sup> ed., New York: McGraw Hills, 1-10, 301.

**Mackenzie, J., (1998).**

Ward management in practice. Churchill Livingstone, Edinburgh, 16-19.

**Marquis, B.L.; Huston, C.J. (2012).** Leadership roles and management functions in nursing: Theory and application, 7<sup>th</sup> ed. Philadelphia, New York: Walters Kluwer health: Lippincott Williams & Wilkins, 546-560.

**Moorhead, G.; Griffin, R.W., (2012).** Managing organizational behavior, 10<sup>th</sup> ed., United States: South-Western, Cengage Learning, 192-199.

**Palmer, A.; Stephen, C.; CaryCooper, J.; Katethomes, S., (2004).** A model of work stress: Counselling at work. Winter, 5.

**Park, J., (2007).** Work stress and job performance. Perspectives, Statistics Canada-Catalogue publication no. 75-001-XIE, 5-17.

**Robbins, S. P., (2003).** Organizational Behavior. 9<sup>th</sup> ed., New York: Prentice Hall.

**Roussel, L.; Swansburg, R.C.; Swansburg, R.J., (2006).** Management and leadership for nurses' administrators. 4<sup>th</sup> ed., United States: Jones and Barlett publishers' Co., 29, 45-51.

**Sullivan, E.; Decker, P., (2009).** Effective leadership & management in nursing. 7<sup>th</sup> ed., United States: New Jersey co., Pearson Prentice Hall, 244-256.

**Timby, B.K., (2013).** Fundamental nursing skills and concepts. 10<sup>th</sup> ed., Wolters Kluwer-health, Lippincott Williams & Wilkins, Philadelphia, 60, 64-68.

**Wassef, A.K., (1998).** The effect of leadership training program on the head nurses work performance. Unpublished doctorate thesis in nursing administration, Ain Shams University. Fac. Ng. Egypt.

## تأثير البرنامج التعليمي على معلومات رئيسات وحدات التمريض الخاصة بضغط العمل وإدارتها

م.م غادة مسعد محمد الغيور/ د فتحية عبد الرازق عفيفي / أ.د ماجدة طه كمال الدين فهمي

أ.د نعمات محمد السيد

مدرس مساعد إدارة التمريض -كلية التمريض-جامعة بورسعيد -مدرس إدارة التمريض-كلية التمريض-جامعة قناة السويس - أستاذ الطب النفسي-كلية الطب-جامعة قناة السويس -أستاذ إدارة التمريض-كلية التمريض-جامعة دمنهور

### الخلاصة

لقد جلبت الحياة العصرية ليس فقط وسائل لا حصر لها من الراحة ولكن أيضا عدد كبير من المطالب التي ترهق جسم الإنسان وعقله. في الوقت الحالي الجميع يتحدث عن الضغط النفسي الذي ينتشر بين جميع الفئات الاجتماعية والاقتصادية للسكان على السواء. ليس فقط المسؤولين ذوي المهام التنفيذية الجسيمة هم ضحايا الضغط النفسي ولكن أيضا يشمل العمال وسكان الأحياء الفقيرة، المرأة العاملة ورجال الأعمال والمهنيين وحتى الأطفال الضغط النفسي أصبح مكون حتمي من مكونات الحياة ولا مفر منه نتيجة زيادة التعقيدات والتنافس على مستويات المعيشة. لذلك أجريت هذه الدراسة بأربع مستشفيات تابعة لوزارة الصحة وهما كالاتي مستشفى بورسعيد العام ، بورفؤاد العام، النصر، الزهور لتحديد تأثير البرنامج التعليمي على معلومات رئيسات وحدات التمريض الخاصة بضغط العمل وإدارتها، من أجل إيفاء هذا الهدف اشتملت عينة البحث على 30 رئيسة لوحدات التمريض، وقد تم تجميع البيانات الخاصة بالدراسة باستخدام استمارة استبيان لمعرفة معلومات رئيسات وحدات التمريض عن ضغوط العمل وإدارتها وتتكون من جزئيين، الجزء الأول يشتمل على استبيان للمقابلة الشخصية: الخصائص الشخصية والوظيفية لرئيسات وحدات التمريض، الجزء الثاني يشتمل على استمارة استبيان لتقييم معلومات رئيسات وحدات التمريض عن ضغوط العمل وكيفية التعامل معها.. تم إعداد البرنامج التعليمي بعد مراجعة المواد العلمية وتم تقسيم البرنامج إلى عشرة جلسات نظري و14 جلسة عملي، كل جلسة استغرقت ساعتين يوميا. وتم تقييم نتائج البرنامج ومدى التغيير في معلومات وممارسات رئيسات وحدات التمريض قبل وبعد تنفيذ البرنامج مباشرة ثم بعد ثلاثة أشهر من انتهاء البرنامج، وأظهرت النتائج تحسنا ملحوظا في مستوى معلومات وممارسات رئيسات وحدات التمريض تجاه ضغوط العمل واستراتيجيات التعامل معها بعد تنفيذ البرنامج مباشرة ثم بعد ثلاثة أشهر من انتهاء البرنامج. وبناءا على تلك النتائج فقد أوصت الرسالة على تقديم المشورة، ومجموعات دعم لرئيسات وحدات التمريض إلى مواجهة المستويات الغير مرغوب فيها من الضغط النفسي وتعزيز الأداء الجيد. الى جانب ذلك، مديري المستشفيات عليهم بدء تنفيذ مشروع إدارة الضغوط داخل المستشفى لجميع الموظفين، وينبغي أن تدرج رئيسات وحدات التمريض، وذلك للحد من حالات التوتر، والسلوكيات غير المرغوب فيها، والتغلب على إدارة الأزمات وتحسين أداء التمريض.

**الكلمات الإرشادية:** ادارة ضغوط العمل، برنامج تعليمي، رئيسات وحدات التمريض