

Job Burnout and Coping Strategies Regarding Nursing Personnel

*Nagwa Gouda Ahmed Abd-Elmoghith

Lecturer, Nursing Administration Department, Faculty of Nursing, Kafrelsheikh University

Abstract: Professionals of health according to their different specialty like as nurses, technical, and laboratories, they are subject to stimuli, considered nerve-damage. They have to daily cope with mortality, overloud of working, and patients with severe pain, while this factors help to increase job exhaustion, so, liable to job burnout. **Aim of study:** Identify burnout and coping strategies among nursing personnel at the Oncology Center Mansoura University. **Research Design:** A descriptive design was used to carry out this study. **Study sample:** All available nursing personnel working during data collection (n=212) at the Oncology Center of Mansoura University were recruited for the study sample. **Tools:** Two tools 1) Maslach Burnout Inventory, and 2) questionnaire of coping strategies were used. **Results:** there is statistically indirect significant relation between job burnout domains and coping strategies among nursing personnel ($p < 0.05$). The mean score of job burnout domains revealed high level of emotional exhaustion, within moderate level of coping strategies used, and there was relation between job burnout domains and nursing personnel workplace. **Recommendations:** The nursing personnel can be given weekly sessions of relaxation techniques to deal with job burnout in a positive way. Providing the stress counseling to cope with work and personal problems may be help them to perceive and solve stress problems to regulate their psychological results.

Keywords: Burnout, Coping, Stress and Nursing personnel

Date of Submission: 05-06-2019

Date of acceptance: 20-06-2019

I. Background:

Nobody has to tell you what ones feels like stress, but what if this stress become bigger? Nowadays, no one told us about what degree of emotional stress. Nursing personnel has a phenomenon that as like stressed, but for longer time, lead to fatigue and separation or burnout. The rigidity and density of work that causes to the nurses feel of burnout ^[1]. By the long period of job burnout the nursing personnel lose their capacity to push themselves for achievement. If they keep working, put off and illogical, the outcome it will be explosion ^[2].

Job stress can have a significant impact on nurses' personality behavior and abilities to achieve their activities in a specific ways as, inability to make decision, loss of concentration, apathy, loss of motivation and anxiety, and the above mentioned factors can directly lead to absenteeism, reduced efficacy, and finally nurses' burnout ^[3].

The Mayo Clinic ^[4] stated that, the job burnout can reported different factors, including:

- Control deficiency, resources reduction, and a disability to participate in decisions that effect on your work as "time schedule, workload assignment" this can lead to job burnout.
- Ambiguous job description. If the degree of authority or what expected from you that are unclear the one feel uncomfortable at work.
- Lack of functional work environment, this can contribute to job burnout
- Job monotony and disorganized environment
- You might feel more stressed if you have Inability build social relation in your work life and personal or you are isolated person.
- You might burn out quickly if you unable to balance between your job and your life.

Professionals of health according to their different specialty like as nurses, technical, and laboratories, are subjected to stimuli, considered nerve-damage ^[5]. So, the individuals more likely of job burnout syndrome are those of health care provider ^[6, 7]. They have to daily cope with mortality, overloud of working, and patients with severe pain, while this factors help to increase job exhaustion, so, liable to job burnout. The health and well-being of the health professionals that finally make complaints about the psychosomatic and physical level becomes a disturbing since the factors referred to can varied in negative way. In this condition, that may due to are under an emotional disturbance, and being under to a work load, miscommunication and a high pressure of psychological and affective factors which can lead to a state of exhaustion in professional nurses ^[8].

The prevention of burnout syndrome requires a revision of certain values and concepts as curative work for person, institutions and groups, social levels, however also needs an educational actions ^[9]. It is very

important that, just once of this signs appears, search for therapy help. Is essential to deal with exhaustion, through make a dynamic workplace and originate several strategies to fighting exertion^[10].

Coping strategies are perspectives and carrying on takeover to lessen the trouble experienced in a given circumstance, regardless of whether this trouble is interior or outside. Nonetheless, Utilizing adapting methodologies may help nursing personnel evade the fatigue and depersonalization that may appear because of exposure to stress^[11].

There is an evidence collection linking with coping strategies and burnout. For more, coping strategies was elaborate stable person characteristic, in any case, higher levels of stress could be associated with uncompromising coping strategies^[12]. According to the coping types Lazarus & Folkman.^[13] Cited by Batista^[14] mentioned that eight coping strategies: confrontation, withdrawal, self-control, social support, accepting responsibility, escape or avoidance, problem solving and positive reappraisal. Incidentally, it is noticed that individuals utilize various methodologies relying upon circumstances, albeit there is some constancy or favored modes for adapting to similar causes of stress after some time.

Coping emotionally has been observed as be harmful if include distancing, avoidance or denial according to condition but it is compelling technique if include positive reappraisal^[15,12]. So, when a person inability to cope with situations, appear imbalance, which is an insistent case, since psychological opposition isn't keep up consistent all through life and can change each day. Moreover, the perpetual stress gathering, prompts the creation of burnout^[11].

Until now, likely relations between job burnout and coping levels have not been analyzed. A superior knowing of the coping levels related to job burnout may advance the improvement of exceptional treatment and preventative programs for the score that may be progressively proficient and powerful^[15]. In this context, the study aims to identify burnout and coping strategies among nursing personnel.

Significance of the study:

Job burnout developed as a significant idea during the 1970s, and it captivate something basic about individuals' involvement with employment, some 40 years since, somewhere in the range of a long time since first experience with intellectual writing and to cultural tuition, burnout has been an idea that appears to seem to be valid to a typical encounter among individuals. It has roused scientists to think about it and endeavor to more readily comprehend, what it is and why it occurs. It has roused experts to make sense of approaches to adapt to it, avoid it, or battle it. Along these lines, from the earliest starting point, burnout has revealed in a joint acknowledgment from the two specialists and experts as a social issue deserving of consideration and improvement. As this acknowledgment has spread in number of different nations, it has turned into a phenomenon of eminent worldwide importance.

Research hypothesis:

1. There were a significant relation between job burnout and coping strategies.
2. Nursing personnel knowing the different coping strategies and use it.

II. Subject and Methods

Research Design:

A descriptive design was used to carry out this study.

Setting:

Data were collected from the Oncology Center, Mansoura University, affiliated to the Ministry of Higher Education, which has 282 beds capacity and consisted of eleven floors: the underground floor includes assistant services (as kitchen & laundry). The ground floor consists of Human relation department, and lab investigations. The first floor includes Blood Bank, Emergency Room, One Day Operation Room, and Surgical outpatients. The second floor contains medical and pediatric outpatients, X-ray, and Chemotherapy Room. The third floor includes administration departments. The fourth floor includes the Director and vice Director Offices of the Oncology Center. The fifth floor contains the laboratory department. The sixth floor includes operation rooms, medical and surgical intensive care units, and sterilization department. The seventh floor consists of pediatric department, and pediatric intensive care unit. The eighth floor includes surgical units (males & females). The ninth floor contains medical inpatient units (males & females). The tenth floor includes surgical inpatient unit (male) and hematology unit. The eleven floor contain Bone Marrow Transplant Unit.

Study sample:

The sample of the present study included all available nursing personnel working during data collection at the Oncology Center of Mansoura University (n=212).

Tools of data collection:

This study used two tools:

Tool (1): Maslach Burnout Inventory consists of two parts:

Part A: Personnel characteristics of staff nurses which include: name (optional), age, marital status, educational qualification, and years of experience.

Part B: Maslach burnout inventory (MBI), it was developed by Maslach^[16]. It consists of 22 items used to measure the frequency of burnout domains namely, emotional exhaustion, depersonalization and personal accomplishment

- Emotional exhaustion subscale includes 9 items that allows subjects to describe feeling of being emotionally over prolonged and tiring as: I feel emotionally drained from my work, and etc....
- Depersonalization subscale includes 5 items which describes atough and not have reaction towards beneficiaries of care as: I feel I treat some recipients as if they were impersonal 'objects.', and etc....
- Personal accomplishment subscale includes 8 statements which describe feeling of proficiency and successful achievement in one's action with people. Like as: I deal very effectively with the problems of my recipients.

Response to items was calculated on seven points rating scale ranging from zero ever to 6 daily were used.

Tool (2): Questionnaire of coping strategies. Developed by Folkman and Lazarus^[13]; it consists of 66 items were used to measure the extent to which one utilized a specific adapting methodology in a worrying circumstance. It is divided into eight empirically constructed scales. The scales were as follows^[13, 17]:

1. Confronting coping (7 items) describes risk taking and aggressive efforts some degree of hostility
2. Distancing (9 items) decrease the important of situation and separate oneself
3. Self-controlling (11 items) describes efforts to detect person own feelings.
4. Seeking social support (6 items) specify efforts to require informational support, perceptible support, and emotional support.
5. Accepting responsibility (8 items) trying to put things right and acknowledges one's role in the problem.
6. Escape avoidance (9 items) portray escape behavioral or avoid the problem.
7. Plan full problem solving (7 items) characterize efforts focused on problem solving with an analytical approach
8. Positive reappraisal (9 items) characterize efforts to inspire positive meaning through concentrate on personal growth and have a religious dimension.

Scoring system:

Mohamed, & Abed^[18] reported that, the final score related to burnout domains was divided into, "low, moderate and high". The scores were appraised as:

- Nurse who achieve high indicator in emotional and depersonalization domains, and have low indicator in accomplishment, tend the burnout within higher level
- Nurse who achieve moderate indicator in three burnout domains, tend to burnout within the higher indicators
- Nurse who achieve low indicator in emotional and depersonalization domains, and have high indicator in accomplishment, the burnout is in lower level

Scoring system for coping strategies^[19]:

- Low used 0 – 49% (0 – 98)
- Moderately used 50 - 75 % (99 – 148)
- Highly used > 75 % (149 – 198)

Ethical consideration:

- The researchers ensured that the right procedures were undertaken concerning informed consent, autonomy, anonymity and the maintenance of confidentiality.
- Privacy of study sample information was assured.

Methods of data collection:

1. An official consent was acquired from the Director of Oncology Center of Mansoura University for implementation.
2. Inform the participant to the aim of the study
3. Voluntary participation, each one of them can withdraw from the study at any time without giving any reason and any harm for staff nurses.

Tools Validity and Reliability:

- Tools were examined by 3 experts from nursing administration department.
- The reliability of the tools was done using Alpha Cronbach's test, which indicated that the burnout subscales; emotional exhaustion; depersonalization; personal accomplishment are 0.90, 0.91, and 0.89 respectively, and total scale of coping is 0.84

A pilot study:

A pilot study was carried out on 10% of the nurses to ensure relevancy of the tools. As well, the pilot study was performed to determine the applicability of the designed tools and to estimate the time needed for filling in the sheets. Some questions were revised, deleted and rearranged to be easily understood and simple related words were used. Based on the pilot study results necessary modifications were done. The pilot study also helped to test the suitability of the study setting. Nurses who shared in the pilot study were later excluded from the main study sample.

Fieldwork:

The staff personnel attendants recorded the appropriate responses within the sight of the researcher to find out that all inquiries were replied. The information was gathered over time of a quarter of a year began at the beginning of November 2018 and completed by end of January 2019. The time needed by staff nurses to complete the sheets was about 30 minutes.

Statistical analysis:

All statistical analyses were performed using the statistical package for social sciences (SPSS) for windows version 20.0 (SPSS, Chicago, IL). Data were tested for normality of distribution prior to any calculations. All continuous data were normally distributed and were expressed in mean \pm standard deviation (SD). Categorical data were expressed in number and percentage. The comparisons were determined using one-way ANOVA test for comparison among more than two variables with continuous data of normal distribution. Chi-square test was used for comparison of variables with categorical data. Correlation coefficient test was used for testing correlation between two variables. Statistical significance was set at $p < 0.05$.

III. Results

Table 1: Depicts characteristics reported at analytic baseline for nursing personnel participants. It reveals that, the highest percentage of nursing personnel (37.3%) was for the age group 25-<30 years. As for marital status slightly more than three fifth (61.3%) are married. Concerning qualification, more than one third (36.3%) have a diploma(3 years). As regards years of experience, slightly less than half of them (49.5%), had 1 < 5 years.

Table 2. Shows that 18.9 % of the studied nursing personnel were in surgical female unit while 14.2% of them were in pediatric unit, and small percentage (2.8 %) was in nursing office. The table reveals that most of the nursing personnel used moderate coping strategies.

Table (3) shows job burnout domains among the studied nursing personnel. This table shows that the emotional exhaustion achieved the highest score (64.6%) with a mean \pm SD of 35.4 \pm 13.1, while the highest percent in low level (43.9%) was for depersonalization with a mean \pm SD of 8.9 \pm 7.5.

Table 4. Displays the level of coping strategies used by the studied nursing personnel. This table indicates that lowest coping strategy used by less than fifth of studied nursing personnel is seeking social support (16.0%), followed by planful problem solving, then positive reappraisal, and self-controlling (17.5%, 19.8%, & 23.1% respectively), while moderately used coping strategies as confronting, escape avoidance, positive reappraisal, and self-controlling (53.8%, 56.6%, 57.5% and 58.5% respectively). Regarding total coping strategies, 19.3% of studied nursing personnel used coping strategies in low level, while 72.2% of studied nursing personnel used coping strategies in moderate level, and 8.5% were having high coping strategies used. The mean score of coping strategies is (117.1 \pm 23.5), which indicate moderate coping strategies used by nursing personnel.

Table (5). Shows that, there were statistically significant relations between emotional exhaustion with all coping strategies except self-controlling, seeking social support, and planful problem solving with p -value < 0.05 . Regarding depersonalization, there were statistically significant relations with escape avoidance and positive reappraisal. However, there were statistically significant relations between personal accomplishment with distancing, self-controlling, seeking social support, accepting responsibility and highly statistically significant relations with planful problem solving and positive reappraisal. The table reflects also that there was a significant relation between total coping strategies with emotional exhaustion and personal accomplishment burnout domains (p -value $< 0.05^*$).

Table (6) presents the mean scores \pm SD of job burnout of the studied nursing personnel in relation to their work place. The table shows that there were statistically significant relations between emotional exhaustion, and personal accomplishment in relation to work place, where p -value $< 0.001^*$.

Table 1. Distribution of Nursing Personnel According to their Personal Characteristics (n=212)

Personal characteristics	No.	%
Age		
<20	6	2.8
20 - <25	73	34.4
25 - <30	79	37.3
30 - <35	43	20.3
35 - <40	8	3.8
+40	3	1.4
Marital status		
Single	72	34.0
Married	130	61.3
Divorced	9	4.2
Widow	1	0.5
Qualification		
Diploma 3years	77	36.3
Diploma5years	71	33.5
Bachelor	62	29.2
Other	2	0.9
Experience		
1 - <5	105	49.5
5 - <10	36	17.0
10 - < 15	64	30.2
+15	7	3.3

Table 2. Nurse Personnel Distribution and Coping Used in relation to their Work Place (n=212).

Work Place	No.	%	Mean ± SD
Hematological			
Chemotherapy	19	9.0	112.2 ±10.6
Hematology	19	9.0	110.7 ±30.4
Medical			
Medical female	17	8.0	125.0 ±28.2
Medical ICU	20	9.4	108.5 ±17.8
Medical male	19	9.0	126.0 ±20.5
Nursing office	6	2.8	142.8 ±35.5
Pediatric			
Pediatric unit	30	14.2	113.8 ±19.4
PICU	13	6.1	120.5 ±21.8
Surgical			
Surgical female	40	18.9	117.0 ±27.0
Surgical ICU	14	6.6	116.1 ±11.0
Surgical male	15	7.0	117.6 ±25.0

Table 3. Distribution of the Job Burnout Domains among Nursing Personnel

Burnout domains	Low		Moderate		High		Mean ±SD
	No.	%	No.	%	No.	%	
Emotional exhaustion	23	10.8	52	24.5	137	64.6	35.4 ±13.1
Depersonalization	93	43.9	44	20.8	75	35.4	8.9 ±7.5
Personal accomplishment	54	25.5	32	15.1	126	59.4	30.5 ±11.1

Table 4. Levels of Coping Strategies Used by the Studied Nursing Personnel (n = 212)

Coping strategies	Low		Moderate		High		Mean ±SD
	No.	%	No.	%	No.	%	
Confronting	63	29.7	114	53.8	35	16.5	12.3 ±3.3
Distancing	54	25.5	135	63.7	23	10.8	16.0 ±4.2
Self-controlling	49	23.1	124	58.5	39	18.4	20.2 ±5.0
Seeking social support	34	16.0	139	65.6	39	18.4	11.0 ±2.7
Accepting responsibility	57	26.9	136	64.2	19	9.0	13.5 ±3.7
Escape avoidance	85	40.1	120	56.6	7	3.3	13.8 ±4.3
Planful problem solving	37	17.5	168	79.2	7	3.3	13.6 ±3.7
Positive reappraisal	42	19.8	122	57.5	48	22.6	16.9 ±4.0
Total coping strategies	41	19.3	153	72.2	18	8.5	117.1 ±23.5

Table 5. Correlation Between Job Burnout Domains and level of Coping Strategies Used by the Studied Nursing Personnel (n = 212)

Levels of coping strategies used	Job burnout domains					
	Emotional exhaustion		Depersonalization		Personal accomplishment	
	r	p	r	p	r	p
Confronting	-0.147	0.033	0.086	0.212	-0.006	0.926
Distancing	-0.131	0.056	0.041	0.557	0.155	0.024
Self-controlling	0.048	0.488	-0.114	0.098	0.134	0.052

Seeking social support	0.000	0.999	-0.107	0.121	0.205	0.003
Accepting responsibility	-0.200	0.003	0.043	0.530	0.174	0.011
Escape avoidance	0.259	<0.001	-0.286	<0.001	-0.002	0.973
Planful problem solving	-0.015	0.831	-0.079	0.253	0.366	<0.001
Positive reappraisal	-0.182	0.008	-0.151	0.028	0.244	<0.001
Total coping strategies	-0.163	0.018	0.004	0.949	0.205	0.003

Table 6. Mean Scores of Experienced Burnout by the Studied Nursing Personnel in Relation to their Work Place

Work Place	No.	Burnout domains		
		Emotional exhaustion	Depersonalization	Personal accomplishment
Hematological				
Chemotherapy	19	30.7 ±8.9	8.6 ±7.6	30.7 ±11.9
Hematology	19	47.6 ±4.9	8.2 ±5.8	29.7 ±7.5
Medical				
Medical female	17	36.0 ±9.0	9.9 ±6.4	30.1 ±8.3
Medical ICU	20	32.4 ±15.1	11.0 ±8.2	28.8 ±10.7
Medical male	19	32.8 ±14.3	5.6 ±5.8	33.6 ±7.7
Nursing office	6	29.7 ±12.1	9.2 ±10.2	39.2 ±9.3
Pediatric				
Pediatric unit	30	35.0 ±12.1	7.4 ±6.8	25.3 ±12.8
PICU	13	39.5 ±10.2	12.6 ±11.1	40.1 ±6.9
Surgical				
Surgical female	40	36.6 ±13.6	10.1 ±7.3	28.8 ±11.3
Surgical ICU	14	35.9 ±13.6	6.8 ±5.4	27.4 ±14.0
Surgical male	15	27.6 ±17.4	8.3 ±9.8	36.2 ±9.7
ANOVA				
F		3.192	1.249	3.085
P		<0.001*	0.262	<0.001*

IV. Discussion

The current study report that, there is statistically indirect significant relation between job burnout domains and coping strategies among nursing personnel working at the Oncology Mansoura University Center, the mean score of job burnout domains revealed that high level of emotional exhaustion, within moderate level of coping strategies used, and there was relation between job burnout domains and their workplace.

Finding of this study showed the personal data of the study subjects revealed that slightly more than one third of nursing personnel age was between 25 to less than 30 years, while more than three fifth are married, and around one third of them have either diploma three years or diploma 5 years, and almost half of them had less than five years of experience.

The present study revealed that, the highest total score of coping strategies among nursing personnel at the Oncology Center of Mansoura University is in moderate level. This result may be due to the very stressful oncology environment for nursing personnel as they are always caring and connecting with deteriorated patients and watching them with severe pain. This finding is supported by Li and Lambert^[20], who conducted a study on work place stressors, coping and job satisfaction in Chinese intensive care nurses and found that nurses had moderate level of coping.

Job burnout is divided into three domains, emotional exhaustion, depersonalization and personal accomplishment as stated by Trindade & Lautert^[21]. Results of this study showed that slightly less than two third of nursing personnel have high level of emotional exhaustion, while may be attributed to the amount of time they spend in direct care contact with patients, and they become so familiar with them, adding to that the longer and more frequent shifts lead to emotional and physical exhaustion. However, a study done by Ahmed^[22], found that more than half of nursing staff experienced moderate emotional exhaustion.

In the same line, results of this study showed that less than half of nursing personnel are having low level of depersonalization. This results may be due to that the nursing personnel have excessive workload and dynamic environment. This results congruent with that of Delpasand et al.^[23], in a study done in Tehran, which found that nursing staff have low level of depersonalization. However, El-Demerdash et al.^[24], in their study entitled: the relationship between burnout and organizational commitment among nurses at Tanta University Hospital, they found that all staff nurses experienced high level of depersonalization.

On the other hand, this study result showed that, nursing personnel experience low level of personal accomplishment. This may be due to that the nursing personnel feeling dissatisfied due to having less degree of autonomy and repeated contact with death patients. This finding is supported by that of El-Demerdash et al.^[24], who found that 97.1% of nurses experienced low level of personal accomplishment. However, a study done by Akroyd and Adams^[25] on the cost of caring: A national study of burnout in radiation therapists, found higher level of personal accomplishment experienced.

The current research on coping strategies used by studied nursing personnel focused on total mean score degree of coping strategies used by nursing personnel which is in moderate level. This may be due to that the nursing personnel are working at a stressful environment by caring for the painful patients, which requires a lot of coping strategies from them. This result agrees with that of Kamat^[26] who studied stress and coping strategies among nurses working in ICU Karnataka, India found that the majority of nurses had moderate level of coping.

Moreover, the finding of the present study revealed that, less than fifth of studied nursing personnel achieved low level of coping strategies in seeking social support, followed by planful problem solving and positive reappraisal, while for self-controlling they represented almost one quarter. However, moderately used coping strategies were around half for avoidance, and for accepting responsibility, and distancing they accounted near two third, which may be due to that the length of service has a direct relationship with the escape, avoidance and positive reappraisal. When the nurses spent longer time in the same service they are more use the escape, avoidance and positive reappraisal as coping strategies. This finding is in disagreement with that of Mrayyan^[27] who concluded that the ICU nurses in her study in Jordan scored high in using social support strategies than other coping strategies. Whereas, this study results agree with that of Ahmed^[22] who reported that more than half of studied nursing staff used coping strategies of confronting, social support and accepting responsibility moderately, while distance, self-controlling, escape/avoidance, planful problem solving and positive reappraisal in low level.

Regarding correlations between job burnout domains and ways of coping strategies used by nursing personnel, the current study result revealed that, there are statistically significant relations between emotional exhaustion with all coping strategies except self-controlling, seeking social support, and planful problem solving. This finding means that more job burnout leads to more coping strategies will be used by nursing personnel studied because the Oncology Center has environment peculiarities as dealing with death, heavy work, and a lot of conflicts that all variables have positive effects on burnout syndrome among nursing personnel, these effects need adequate sense of dealing with coping strategies. This study findings are consistent with those of Mohamed and Abed^[18] who mentioned that burnout and coping strategies there were statistically significant differences between them.

The current research finding showed that there was a statistically significant relationship between emotional exhaustion, and personal accomplishment in relation to work place, this finding may be due to that the nursing personnel have excessive expectations as change in work environment and quality of work life and satisfaction in the future, however these cannot be reached. This finding in parallel, to that of Ahmed^[22] who reported that, there was a statistically significant relation between work place, and emotional exhaustion and personal accomplishment only.

Finally, nurses must concern is not just about eliminate pain, or just of physical rest, it is significant that the nurse lives the present time without any stressful environment, while looking after his/her character, staying good relation with people for safe of her/his psychological wellness.

V. Conclusion

Depend on the study results, it can be concluded that, there is statistically indirect significant relations between job burnout domains and coping strategies among nursing personnel working at the Oncology Center in Mansoura University. The mean score of job burnout domains revealed that highly statistically significant level of emotional exhaustion, within moderate level of coping strategies used, and there was a relation between job burnout domains and nurses' workplace.

VI. Recommendations

Based on the study results' the following recommendations were suggested:

- Requiring for periodical evaluation and follow up programs to minimize burnout among nursing personnel.
- Providing coping strategies' programs to nursing personnel and patients to deal with their problems.
- Changing workplace environment as increasing lights, ventilation, capacity of bed, and decreasing workload.
- The nursing personnel can be given weekly sessions of relaxation techniques to deal with job burnout in a positive way.
- Providing the stress counseling to cope with work and personal problems may be help nursing personnel to perceive and solve stress problems to regulate their psychological results.

Acknowledgements

Author would like to thank her colleagues working at the Oncology Center in Mansoura University for their contribution in conducting the research.

References

- [1]. **Erickson, K. (2018).** Nursing burnout: Why it happens and how to avoid it? Available at: <https://www.rasmussen.edu/degrees/nursing/blog/nursing-burnout-why-it-happens-and-what-to-do-about-it/> Retrieved on 22/11/2018.
- [2]. **Schaufeli, W., Leiter, M., & Maslach, C. (2009):** Burnout: 35 years of research and practice. Career Development International, 14(3) 204-220 q Emerald Group Publishing Limited 1362-0436
- [3]. **Moustaka E., Constantinidis, T. C., (2010):** Sources and effects of work-related stress in nursing. Health Science Journal; 4(4):210–216. Retrieved from: hypatia.teiath.gr/xmlui/bitstream/handle/11400/1273/443.pdf
- [4]. **Mayo Clinic (2018):** Job burnout: How to spot it and take action. Retrieved on 9/ 3/ 2019. Available at: <https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/burnout/art-20046642>
- [5]. **Malagris, L.E.N., & Fiorito, A.C.C. (2015):** Stress level evaluation of technicians from the health area. Studies Psych, 23: 391-398.
- [6]. **Benjamin, S.J. (1990):** The stress. Ground Editora, France.
- [7]. **Rui, A., Esteves, Gomes, A. (2014):** Stress, cognitive assessment and adaptation to work in the class of nursing, 4: 27-35.
- [8]. **Michel, D. (2006):** Exhaust ventilation (burnout syndrome) Rita Rocha (1st ed). Portugal.
- [9]. **Trindade, L.L., & Lautert, L. (2010):** Syndrome of burnout among the workers of the strategy of health of the family. Rev Esc Enferm; 44: 274-279.
- [10]. **Bentacur, A., Guzmán, C., Lema, C., Perez, C., & Pizarro, M.C. (2012):** Burnout syndrome in health workers; Rev CES Salud Pública; 3(2): 184-192.
- [11]. **Martins, M. C., Chaves, C., & Campos, S. (2014):** Coping strategies of nurses in terminal ill. Procedia-Social and Behavioral Sciences, 113, 171-180. Available online at: <https://www.sciencedirect.com/science/article/pii/S1877042814000251>
- [12]. **Isaksson, K.E., Tyssen, R., Hoffart, A., Sexton, H., Aasland, O.G. (2013):** A three-year cohort study of the relationship between coping, job stress and burnout after a counselling intervention for help-seeking physicians. BMC Public Health; 10: 213.
- [13]. **Lazarus, L., & Folkman, S. (1985):** The revised ways of coping. San Francisco: University of California. Available at: <http://caps.ucsf.edu/uploads/tools/surveys/pdf/Waya%20of%20coping.pdf>. Retrieved on 22/11/2018.
- [14]. **Batista, P. (2008):** Stress e Coping nos Enfermeiros dos Cu dados Paliativos em Oncologia. Dissertação de Mestrado, Instituto de Folkman, S. & Lazarus, R. S. (1988). Manual for the ways of coping questionnaire (research edition). California: Consulting Psychologists Press.
- [15]. **Haberthür, A.K., Elkuch, F.M., Grosse, Holtforth, M., Hochstrasser, B., & Soyka, M. (2009):** Characterization of patients discharged from inpatient treatment for burnout: Use of psychological characteristics to identify after care needs. J Clin Psychol; 65: 1039–1055.
- [16]. **Maslach, C., Jackson, S., & Leiter, P. (1996):** Maslach Burnout Inventory. (3rd ed). California: Consulting Psychological Press. Inc.
- [17]. **Alo, R. (2008):** Burnout and coping strategies among nurse educators at Faculty of Nursing Unpublished Master Thesis, Faculty of Nursing, Alexandria University, pp: 9-15.
- [18]. **Mohamed, S. & Abed, F. (2017):** Job stressors, burnout levels and coping strategies among faculty members and assistants: A comparative study. IOSR Journal of Nursing and Health Science, 6(1), 22–36. Available at: <https://doi.org/10.9790/1959-0601032236>
- [19]. **Petrie, A., & Sabin, C. (2005):** Medical statistics at a glance. (2nd ed). Oxford: Blackwell Publishing Ltd. p. 9.
- [20]. **Li, J., & Lambert, V. (2008):** Workplace stressors, coping, demographics and job satisfaction in Chinese intensive care nurses, British Association of Critical Care Nurses. Nursing in Critical Care, 13(1): 12-24.
- [21]. **Trindade, L.L., & Lautert, L. (2010):** Syndrome of burnout among the workers of the strategy of health of the family. Rev Esc Enferm; 44: 274-279.
- [22]. **Ahmed, I. (2014):** Burnout and coping strategies among nursing staff in intensive care units at Mansoura University Hospitals. Unpublished Master Degree. Thesis.
- [23]. **Delpasand, M., Raeissi, P., Begdeli, F., & Shahabi, M. (2011):** The impact of job rotation on nurses' burnout in Ayatollah Kashani Hospital. Tehran: A case. Iran Occupational Health; 7(4), 76-8.
- [24]. **El-Demerdash, S., Basal, A., & Aldeeb, G. (2013):** The relationship between burnout and organizational commitment among nurses at Tanta University Hospital. IOSR Journal of Nursing and Health Science; 2(6): 20-28.
- [25]. **Akroyd, D., & Adams, R. (2000).** The cost of caring: A national study of burnout in radiation therapists. Journal of the Oncology Sciences; 9(2). 123-130.
- [26]. **Kamat, A. (2011):** Stress and coping strategies among the nurses working in intensive care unit at selected hospitals of Hassan Karnataka. Published Master Thesis, Rajeev Gandhi College of Nursing, Karnataka. pp 1-14.
- [27]. **Mrayyan, T. (2009):** Job stressors and social support behaviors: comparing intensive care unit to wards in Jordan. Contemporary Nurse; 31(2). 163-75. Retrieved on May 2019. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/19379118>.

Nagwa Gouda Ahmed Abd-Elmoghith " Job Burnout and Coping Strategies Regarding Nursing Personnel." IOSR Journal of Nursing and Health Science (IOSR-JNHS), vol. 8, no.03 , 2019, pp. 66-73.