Health Management & Policy Section

Effect of Communication Skills Training on the Burnout of Nurses: A Cross-Sectional Study

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ABSTRACT

Introduction: One of the factors influencing the burnout of nurses is their difficult and complicated relations with patients and other members of the medical team. Therefore, it is necessary that nurses to be trained on communication skills.

Aim: The present research aims to study the effect of communication skills training on the burnout of nurses.

Materials and Methods: The present research was an experimental study using pretest-posttest method. The subjects included 60 nurses working in Khatamolanbia Hospital in Iranshahr, Sistan and Baluchestan Province, Iran. The subjects were randomly divided into two groups. The required data and information were collected using Jackson and Maslach Burnout Inventory which was filled out by subjects in three steps including before the intervention, at the end of the second session, and one month after the intervention. The intervention included training on communication skills which was carried out for the intervention group as a 2-day workshop for 8 hours within a week.

Results: The findings showed that the mean score of frequency and intensity of burnout in the intervention group before the intervention, at the end of the intervention, and one month after the intervention was 39.3±6.2 and 61.1±8.0, 37.5±4.6 and 58.8±7.6, and 34.2±4.4 and 54.6±7.0, respectively. These changes suggest a significant decreasing trend (p=0.01). On the other hand, mean scores of burnout in the control group showed no significant difference in three steps (p<0.05).

Conclusion: Since communication skills training is an effective and inexpensive way for reducing the burnout among nurses, it is recommended that this approach to be taken into account by managers in order to reduce the burnout among nurses and improve the quality of healthcare services provided by them.

Keywords: Iran, Nursing profession, Psychological syndrome

INTRODUCTION

Job burnout is a common problem in health systems, particularly in the nursing profession [1]. Job burnout costs to the US organizations are 50-70 million dollars per year [2]. Jackson and Maslach consider it as a psychological syndrome consisting of three components namely emotional exhaustion, depersonalization, and reduced personal accomplishment [3]. In all hospital parts, we encounter nurses that were self-disciplined and interested when started taking the nursing role, but after facing with problems such as heavy workload, low number of nursing staff, and poor interpersonal communications, they became exhausted and even tended to quit [4,5]. The rate of job burnout has been reported as 22.7% to 96.4% [4,6-8]. This fluctuation is due to the difference in working conditions, support systems, ward type, and personality characteristics of nurses. Job burnout reduces the quality and quantity of nursing cares, leads to psychosomatic problems, increases workplace accidents, and impairs inter-personal and -organizational relationships [9]. Therefore, job burnout prevention has a significant role in promotion of mental health and quality of provided services. Several factors lead to job burnout among nurses. T Shimomitsu et al., regard the complex and difficult relationships of nurses with patients and their families, and medical team members as a major cause of job burnout among nurses [10]. The basic communication skills of nurses are usually disturbed and forgotten under heavy workload [9]. The more defective is one's communication system, the greater will be his stresses and sense of job burnout. Capability in making proper communication has frequently been emphasized as a main factor in nursing cares [11]. Some experts consider the capability of making connection with patients as the heart of all nursing cares [12]. These skills are such important that any failure can be associated with the sense of loneliness, anxiety, depression, low self-esteem, occupational failure, and service dissatisfaction [13]. Unfortunately, research findings imply nurses' weakness in having communication with patients and medical team members [14]. In addition, inefficient communication skills are still known as a strong barrier to provision of healthcare service [15]. Communication skills are mainly acquired and learned, and thus clinical experiences have a small role in their development. In other words, they can and should be taught [16]. X Liu et al., in a study observed that teaching communication skills to nurses improves such skills in them and increases patients' satisfaction under critical situations [17]. In recent years, teaching communication skills has become a part of nurse training programs in advanced countries [18]; whereas, it is neglected in nursing curriculum in Iran, and no frequent in-service classes or workshops are held, which lowers communication skills of nurses below the ideal level. Therefore, regarding the important effect of job burnout reduction on the quality and quality of caring services, and the significance of communication skills training to nurses, the researcher intended to discover whether teaching communication skills affects job burnout among nurses.

MATERIALS AND METHODS

This empirical study was conducted with pre-test and post-test design on two groups of nurses which working in Khatamolanbia Hospital in Iranshahr, Iran in 2013. The inclusion criteria were tendency to participate, having associated or bachelor degree in nursing, and/or diploma in paramedicine, working in Khatamolanbia Hospital at least since 6 months ago, and not-taking psychiatric medications. Exclusion criteria were unwillingness to participate, missing more than 10% of educational workshop sessions, participation in other workshops on communication skills, leave of absence, transferring to another hospital. After co-ordination with the educational supervisor for implementing the interventions, advertisements for the communication skills workshop enrollment were displayed in different sectors of the hospital. Among hospital staff, 62 eligible subjects who voluntarily enrolled to participate in this study were included. The subjects were randomly assigned to

two equal groups in size, namely test and control, by flipping a coin. Finally, due to the subject loss, the remaining 60 participants (30 in test and 30 in control groups) undertook the study. The research instruments included a demographic questionnaire, as well as Jackson and Maslach Job Burnout inventories [3]. The demographic questionnaire, designed according to the research objectives and most recent literature, consists of 13 items on personal and job specifications. The job burnout inventory includes 22 items that measure the frequency and intensity of this phenomenon from three dimensions, namely emotional exhaustion, depersonalization, and sense of personal accomplishment. To score each scale for each item, two scores are considered for each person: frequency and intensity scores. In each item, the subjects select an option between 0"never" to 6"everyday" and 0"never" to 7"very much" to determine the frequency and intensity, respectively. A subject with high emotional exhaustion or depersonalization, and low personal accomplishment is diagnosed with job burnout. Jackson and Maslach (1981) calculated the validity of this questionnaire, using correlation coefficient (R=57%). The validity of this questionnaire in Iran was obtained using correlation coefficient (R=43%). In this study, the validity of the questionnaire was examined by 10 lecturers in Iranshahr and Mashhad Universities of Medical Sciences (CVR=0.85 and CVI=0.87). Jackson and Maslach reported the reliability of the three-fold scales through Cronbach's alpha as follows: frequency/intensity of 89/86, 74/74, and 77/72 percentages for emotional analysis, personal accomplishment, and depersonalization, respectively [3]. Reliability of this questionnaire in Iran was measured by Rasolian et al., and Khaghanizadeh et al., [19,20]. In this study, the internal consistency was used to measure the reliability of the questionnaire, in which the Cronbach's alpha values for the frequency/intensity of emotional exhaustion, personal accomplishment, and depersonalization were obtained as 0.82/0.81, 0.80/0.79, and 0.81/0.83, respectively. After gaining the approval of the Research Council and Ethics Committee in 2013, data collection was performed in both groups and in three phases: pre-intervention, immediately after intervention, and one month after intervention (as follow-up). While the control group did not receive any intervention, the intervention group received the first phase of intervention two weeks after the completion of questionnaires. After ensuring the required coordination, the intervention was made according to interpersonal communication skills training schedule in two 4-hour-long workshops, held with one-week interval.

The workshops were held in Khatamolanbia Hospital in form of lectures, question and answer, group discussion, film screening, and practical tasks (including practical implementation of educational contents presented in the workshop and feedback provision to the participants). The educational resources included communication skills booklets and a workbook prepared for nurses to perform the given techniques. At the end of the second session, the questionnaires were completed by the participants for the second time. In the post-intervention stage, the research units undertook the follow-up. This one-month period allowed the subjects to perform in real life what they had learned. Meanwhile, the researcher made telephone contacts with intervention group every two weeks as follow-up to encourage them to observe the educational program.

STATISTICAL ANALYSIS

For data analysis, SPSS 11.5 was used. Results from Kolmogorov-Smirnov and the Shapiro-Wilk tests indicated the normal distribution of quantitative variables of the study. In addition, the mean and standard deviation were calculated for the quantitative variables. The intergroup (control and intervention) comparisons of burnout scores were done in the pre- and post-intervention, using repeated-measure ANOVA. To make a between-group comparison of burnout scores, the independent t-test was

administered. A 05/0 to determine the effect of demographic and occupational specifications on the amount of job burnout, two-way ANOVA was used. In the conducted tests, the degree of confidence and significance level of 95% and a=0.05 were considered. In the conducted tests, the degree of confidence and significance level os 95% and a=0.05 were considered.

RESULTS

The majority of research units in both groups were male (50.0% in intervention and 73.3% in control groups) with mean age of 36 years. A total of 96.7% of subjects had bachelor degree, and the majority (33.3%) of them did day shift. The subjects had 11.8 years clinical experience, on average. There was no significant difference between the two groups in terms of background variables [Table/Fig-1].

Background Variables		Groups		p
		Case	Control	
		N(%)	N(%)	
Gender	Male	15(50)	22(73.3)	0.063
	Female	15(50)	8(26.7)	
Age (M±SD)		65/7±5/36	45/6 ± 4/35	0.567
Clinical experience		12/4±5/6	65/4 ±8/5	0.712
Shift	Morning	10(34.5)	10(33.4)	0.574
	Night	2(6.9)	1(3.3)	
	Morning and Night	5(17.2)	4(13.3)	
	Circulation	6(20.7)	6(10)	
	Evening and Night	6(20.7)	12(40)	

[Table/Fig-1]: Comparison of background variables in communication skills and control groups.

The changes in frequency and intensity of job burnout in the control group in pre-intervention, post-intervention and follow-up stages were not significant (p>0.05). Results from independent t-test showed that the between-group difference in the mean frequency score of job burnout in pre-intervention and post-intervention stages was not significant (0.450); whereas, this difference in the follow-up stage was significant (p=0.01), showing a descending trend in the intervention group. In addition, the mean scores of job burnout frequency and intensity in the pre-intervention, post-intervention, and follow-up stages in the intervention group (intergroup comparison) were calculated through repeated-measure ANOVA, showing a significant difference between them (p=0.01). This test suggested that the difference between pre- and post-intervention, pre-intervention and follow-up, and post-intervention and follow-up stages had a descending trend (p<0.05). The repeated-measure ANOVA in control group (intergroup comparison) also showed that the mean job burnout frequency and intensity scores were not statistically different in pre-intervention, post-intervention, and follow-up stages (p=0.355) [Table/Fig-2,3].

Stages	Group				T-test
	Control		Communication skills		
	(M±SD)	N	(M±SD)	N	
Before intervention	39.2±6.3	30	39.3±6.2	30	021/0=t 948/0=p
After intervention	39.1±6.2	30	6/4±5/37	30	199/1-=t 235/0=p
After one month	2/6±0/39	30	4/4±2/34	30	543/3-=t 001/0=p
Result of test	p=0.21		p=0.00		

[Table/Fig-2]: Comparison between the mean scores of job burnout frequency in communication skills training and control groups in pre-intervention, post-intervention, and follow-up stages.

Stages	Group				T-test
	Control		Communication skills		
	(M±SD)	N	(M±SD)	N	
Before intervention	60.8±7.8	30	61.1±8.0	30	049/0=t 961/0=p
After intervention	60.9±7.9	30	58.8±7.6	30	080/1-=t 235/0=p
After one month	61.0±8.0	30	54.6±7.0	30	542/3-=t 001/0=p
Result of test	p=0.24		p=0.00		

[Table/Fig-3]: Comparison between the mean scores of job burnout intensity in communication skills training and control groups in pre-intervention, post-intervention, and follow-up stages.

Results from repeated-measure ANOVA showed that these changes in frequency and intensity of the lack of personal accomplishment and emotional exhaustion were significant from pre-intervention to follow-up stages, and also from post-intervention to follow-up stages. With respect to the frequency and intensity of depersonalization, these changes were significant in pre-intervention and post-intervention, pre-intervention and follow-up, and also post-intervention and follow-up stages (p=0.000) [Table/Fig-4].

Comparison different stages by statistical tests	Stages			Groups (n=30)	Variables
	follow-up (M±SD)	post-test (M±SD)	pre-test (M±SD)		
b,c	10.1±2.6	11.2±2.6	13.1±3.0	Communication skills	Intensity of Depersonalization
	13.2±3.2	13.1±3.3	13.3±3.1	Control	
c	21.6±3.1	23.1±4.0	23.4±3.6	Communication skills	Intensity of emotional exhaustion
	23.2±3.4	23.4±3.6	23.3±3.5	Control	
c	22.9±2.8	24.5±2.5	24.6±3.0	Communication skills	Intensity of personal accomplishment
	24.5±2.9	24±2.9	24.5±2.7	Control	
b,c	6.2±1.4	6.8±1.5	8.2±2.2	Communication skills	Frequency of Depersonalization
	8.3±2.2	8.2±2.4	8.1±2.3	Control	
-	12.6±2.6	13.5±3.3	13.8±3.5	Communication skills	Frequency of emotional exhaustion
	13.7±3.4	13.8±3.5	13.6±3.3	Control	
c	15.3±2.6	17.0±2.5	17.3±2.4	Communication skills	Frequency personal accomplishment
	17.1±2.4	17.2±2.5	17.4±2.3	Control	

[Table/Fig-4]: The mean scores of frequency and intensity of job burnout dimensions in pre-test, post-test, and follow-up stages in intervention and control group. a.p<0.05, in pre-test stage b. p<0.05, in post-test stage   c. p<0.05, in follow-up stage

In the control group, the mean scores of changes in the frequency and intensity of the lack of personal accomplishment, emotional exhaustion, and depersonalization were not significant from the pre-intervention to the post-intervention to follow-up stages (p<0.05). With respect to the emotional exhaustion, the between-group difference in intensity was significant in the follow-up stage [Table/Fig-4]. Results from the two-way ANOVA showed no statistically significant between-group difference in job burnout scores in the pre-test and follow-up stages based on the investigated background variables (p<0.05).

DISCUSSION

Research findings suggested that the mean score of job burnout in the intervention group significantly decreased in the follow-up stage. This reveals the positive impact of communication skills training on job burnout among nurses. T Shimizu et al., performed a study into the relationship of job burnout with assertiveness skills training among Japanese hospital nurses. The research units of this quasi-experimental study included 45 nurses. The intervention group received the basic and advanced skills training with a five month interval; whereas, the control group received those training at the same time. Findings of this study showed that the mean score of personal accomplishment significantly increased by 2.6 units in the intervention group, which is consistent with our findings. This is due to the increased self-confidence, and improved interpersonal relationships and communication skills induced by using this method. In Shimizu's study, the mean scores of depersonalization and emotional exhaustion in the intervention group increased by 0.9 and 0.1, respectively [21]. This finding is inconsistent with the findings of our study. The marginal effect of the intervention on emotional exhaustion and depersonalization may be due to the fact that the majority of Japanese people misconstrued assertiveness as a selfish and aggressive behaviour.

The other causes of this difference may be due to the difference in the intervention type. In our study, the research units received such skills training as active listening, non-verbal communication, emotional management, and assertiveness; whereas, Shimizu merely provided the subjects with assertiveness skill training. In addition, in our study the researcher made telephone contact with the intervention group every two weeks as follow-up and encourage them to observe educational program; whereas, Shimizu did not make any connection with the participants after the intervention, during the follow-up stage. In addition, Shimizu performed a longer follow-up. Findings of Ahmadi et al., also suggested a significant inverse correlation between communication skills and sense of personal accomplishment in nurses [22], which is consistent with our findings. However, they did not find any significant correlation between depersonalization and emotional exhaustion, which is inconsistent with our study. This may be due to the difference in study type, in that no intervention was carried out by Ahmadi et al., whereas, we provided the research units with communication skills training workshops, which improved depersonalization and emotional exhaustion in them. Emold et al., performed a study into the relationship of self-efficacy communication skills with job burnout among oncology nurses. Results showed a significant inverse correlation between the scores of job burnout and self-efficacy communication skills, which is consistent with the findings of our study [23].

Training nurses with communication skills improves their self-efficacy communication capability under critical conditions and has a direct impact on their mental health. It also increases their adaptability, as well as job productivity and success, constructively copes with emotional exhaustion and depersonalization, and improves the sense of personal accomplishment. Armstrong et al., in a study investigated the relationship between communication skills and job burnout among cancer physicians. Findings of their study showed that among the physicians who attended communication skills workshops in their first year of study, 69% had the sense of emotional exhaustion and depersonalization, and 60% had the sense of personal accomplishment [24]. Findings of this study agree ours maintaining an increased sense of personal accomplishment, but disagree ours regarding the increased emotional exhaustion and depersonalization. This difference may be due to the 3-8 years interval between the time of study and the time of communication skills training provided to the doctors in Armstrong's research, during which the basic communication skills of the doctors might be disturbed because of workload, complex communication system, and workplace stressors, especially the conditions of ecology ward. This could lead to increased emotional exhaustion and depersonalization. Bragard et al., also showed that the changes in emotional exhaustion, depersonalization, and

sense of personal accomplishment were not significant [25], which is inconsistent with our findings. This difference can be attributed to differences in intervention method and cultural norms. Bragard et al., measured job burnout among physicians two months after the intervention, but in contrast to our study they did not monitor the subjects in terms of practical implementation of the acquired communication skills. Moreover, findings of Rezae et al., showed that communication skills training reduced job stress in nurses [9]. Khani A et al., showed that Clinical supervision was significantly related to all burnout dimensions [26]. Since burnout is an important factor in job stress, it can be concluded that communication skills training indirectly reduces job burnout through moderating environmental stressors. This is in agreement with our study.

This study was associated with some limitations including:

1. Since all subjects were selected from a single hospital, the small sample size does not allow the generalization of the results to other environments.

2. Individual and familial differences of nurses affect their perception of job burnout and workshop influence on them. To eliminate this problem as much as possible, it was tried to homogenize the subjects in this regard by random assignment of them into the intervention and control groups.

3. The lack of full control over information exchange between the intervention and control groups. This problem was partially eliminated by homogenizing the subjects in terms of work shift and position. In addition, the intervention group was asked to avoid the release of information until the end of study. On the other hand, the control group was ensured about holding a stress-immunization workshop for them after the completion of the intervention. In this way, information exchange was partially controlled.

CONCLUSION

Considering the key role of nurses in patient care, reduction of job burnout in this group can improve the quality of cares provided to patients. According to the research findings, since communication skills training decreases job burnout in nurses, nursing managers are recommended to exploit this method as a practical and cost-efficient solution for the improvement of job burnout among nurses.

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