



Factors affecting the nurses' motivation for participating in the in-service training courses: A case study

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Received 1 Aug 2014; Accepted 27 Sep 2014

ABSTRACT

Introduction: Due to the vital role of nurses and the effects of scientific advances on nursing care, providing high quality nursing services is not possible without participating in the in-service training programs and becoming familiar with the new techniques. This study aimed to determine the motivational factors influencing the participation in the in-service training courses among nurses working in the teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013.

Method: This was an applied, cross-sectional and descriptive-analytical study. A sample of 216 nurses working in the teaching hospitals affiliated to Shiraz University of Medical Sciences was selected using stratified sampling proportional to size and simple random sampling methods. The required data were collected using a questionnaire determining the motivational factors influencing the nurses' participation in the in-service training courses, including personal factors, organizational factors, and those related to the profession and the training courses planning. SPSS 18.0 and some statistical tests including ANOVA, Independent-Samples T-Test, as well as Pearson Correlation Coefficient were used to analyze the collected data.

Results: The results showed that the mean score of nurses' motivation for participating in the in-service training programs was 3.41 ± 0.5 . Also, the highest and lowest means of motivational factors affecting the studied nurses' participation in the in-service courses were associated with the factors related to the profession (3.75 ± 0.71), and those related to the training courses planning (3.20 ± 0.59), respectively. In addition, there were significant associations between the personal factors ($p=0.037$) and factors related to the profession ($p=0.047$) and the studied nurses' positions, between the organizational factors and their employment status ($p=0.007$), and between the factors related to the training courses planning and the nurses' service unit ($p=0.014$). Furthermore, there was a significant and negative correlation between their nursing job experience and organizational factors ($r = -0.21$, $P = 0.004$).

Conclusion: According to the results and in order to increase the studied nurses' motivation for participating in the in-service training courses, the following suggestions can be offered: making a proper educational needs assessment, paying careful attention to the nurses' educational needs, determining the suitable time and place for providing training courses, and encouraging the nurses' participating in the in-service training courses, etc.

Keywords: Motivational factors, In-service training, Nurses

► Please cite this paper as:

Sajjadnia Z, Sadeghi A, Kavosi Z, Zamani M, Ravangard R. Factors affecting the nurses' motivation for participating in the in-service training courses: A case study. *J Health Man & Info.* 2015;2(1):21-26.

Introduction

In today's complex and dynamic world, learning is very important. Education is the base of learning and it is an important factor in improvement of human resources (1). Improvement of human resources in nursing is one of the most important responsibilities of nurse managers which include activities that increase the nurses' knowledge and skills to provide better clinical services (2). An effective and economical way to improve the nursing human resources, and the development and coordination of the nursing profession with the advances in technology, medical and social sciences is the in-service training (3).

In-service training consists of activities that maintain and increase the employees' ability and competence in performing the tasks assigned to them, thereby assisting the organizations in achieving their goals and objectives (4). In general, it can be said that the in-service training is a set of systematic and planned educational activities designed to improve the employees' performance in the workplace, thereby increasing the productivity and quality of services provided (5).

The results of several studies conducted within and outside of Iran have shown the positive effects of various human resources development programs, including in-service training, on the nurses' efficiency, self-

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confidence, knowledge and skills (6). Also, the results of a study showed that in-service training courses had resulted in reducing the organization costs, reducing the employees' resignations, turnover and absenteeism, as well as increasing the organizational efficiency, creating deeper insights, increasing the employees' abilities and skills and, in general, increasing the productivity (4).

In addition, nurses are considered as individuals who have a close relationships with the patients and other members of the health team and community and, due to the rapid progress of sciences and technologies, they should be aware of all the new skills and techniques of care. Therefore, considering the importance of increasing the nurses' knowledge, their training seems necessary. In other words, because of the vital role of nurses and the effects of scientific advances on nursing care, providing high quality nursing services is not possible without participating in the in-service training programs and becoming familiar with the new techniques, because the factor affecting the quality of nursing care is the amount of their knowledge and insight on the issues and problems. The lack of nurses' knowledge can reduce the quality of clinical care and cause the irreversible risks and, then, the continuity of learning scientific issues by participating in the in-service training courses is one of the main ways to improve the nursing profession (7).

Unfortunately, the researchers in their search found no exact statistics of the rate of nurses' participation in the in-service training programs in Iran and other countries. On the other hand, the impact of in-service training on the nurses' performance is a fact that has been proven in practice. Because great developments and improvements continuously occur in the modern nursing and medical activities, a nurse should also be familiar with new skills and techniques for performing his/her duties and roles in the best way. Providing professional training is the key to success in the wards and hospitals, and some outcomes such as reduced errors and accidents, nurses' better morality, gaining great achievements at the work, providing better nursing care, etc. are favorable outcomes of nurses' in-service training (8).

There are several reasons for nurses' participation in the continuing education programs, including their attitudes about, expectations of, and motivation for continuing education, as well as nurses' professional characteristics, job-related factors, organizational policies, etc. (9). Also, as previously mentioned, due to the increasing advances in technologies and unprecedented growth in the medical information, training and improving nursing human resources is necessary. It can be said that training employees and developing their talents, as well as helping and motivating them to improve their job skills is one of the most important responsibilities of organization managers (10).

Motivation is one of the factors affecting the employees' participation in training programs. Motivation has been defined as a process of stimulating, strengthening, continuing, and regulating the activities (11). The results of some studies indicate that factors such as complying with the heads and managers, acquisition of credentials,

professional knowledge (12), raising income levels (13), earning points and scores to improve job position (12, 14), becoming acquainted with the experiences of other researchers (14), improving self-esteem and self-confidence, increasing opportunities for job promotion (15), etc. are the most important motivational factors influencing the employees' participation in the continuing and in-service training courses. On the other hand, the results of some other studies also show that some of the main barriers to employees' participation in the in-service training programs are the lack of employers' support and encouragement; problems with achieving and keeping a balance between family, work and study life; staff shortages; lack of income, financial resources, and amenities; and welfare facilities, as well as insufficient promotions and publicity (15, 16), etc.

Despite the importance of nurses' in-service training, few nurses in practice have participated in these programs (17). Perhaps one reason for that is the lack of proper implementation of nurses' training programs. The results of Emamzadeh Ghasemi and colleagues' study (2004) showed that the quality of nurses' training programs has been poor and met only 18% of their training needs (18). This study aimed to determine the motivational factors influencing participation in the in-service training courses among nurses working in the teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013 in order to increase their motivation for participating in these training courses, thereby enhancing their job skills and improving the quality of nursing care delivered to the patients.

Methods

This was an applied, cross-sectional and descriptive-analytical study. The population of the study was all nurses working in the teaching hospitals affiliated to Shiraz University of Medical Sciences in 2013. A sample of 216 nurses was determined using the findings of the pilot study and the following formula, assuming $\alpha=0.05$, $d=0.1$ and $S=0.75$.

$$n = \left(\frac{z_{1-\frac{\alpha}{2}} \times s}{d} \right)^2 = 216$$

This sample was selected as follows: first, three hospitals were selected randomly and each of them was considered as a stratum. Then, the determined sample was selected in these three hospitals using stratified sampling proportional to the size and simple random sampling methods using random numbers table.

The required data were collected using a questionnaire consisting of two parts. The first part included questions about the studied nurses' demographic characteristics and the second part included 29 items to determine the motivational factors influencing the nurses' participation in the in-service training courses, including personal factors (8 items), organizational factors (10 items), factors related to the profession (4 items), and factors related to the training courses planning (7 items). A five-point

Likert scale was used to measure the nurses' motivational factors whereby 1 referred to strongly disagree and 5 as strongly agree. This questionnaire had been developed by Seydafkan (1995) and its validity and reliability had also been confirmed in his study ($r=0.95$) (16).

Informed consent was obtained from all nurses participating in this study and all of them were assured of the confidentiality of their responses. SPSS 18.0 and some statistical tests including ANOVA, Independent-Samples T-Test, as well as Pearson Correlation Coefficient were used to analyze the collected data. A $P<0.05$ was considered statistically significant.

Results

The results showed that most participants were female (93.1%), married (56%), nurses (91.2%), employed officially (30.6%), working in the surgery unit (26.9%), and had bachelor's and master's degrees (94%) (Table 1). The mean of the studied nurses' age and nursing job experience was 32.39 ± 7.60 and 8.18 ± 6.69 , respectively.

Furthermore, most of the studied nurses (62.5%) believed that the necessity and importance of the in-service training programs was high and a few of them (1.9%) believed that the in-service training programs were not necessary. Most of the participants in this study (45.4%) believed that participation in the training courses had changed their knowledge, understanding and functional skills, and only 3.8% of them believed that participating in in-service training courses had not had any effects and had not changed their knowledge, understanding and functional skills.

Moreover, the results showed that, in general, the mean score of the nurses' motivation for participating in in-service training programs was 3.41 ± 0.5 . Also, the highest and lowest means of motivational factors affecting the studied nurses' participation in the in-service courses were associated with the factors related to the profession (3.75 ± 0.71), and those related to the training courses planning (3.20 ± 0.59), respectively (Table 2).

Table 1. Demographic characteristics of the studied nurses

Variables		Frequency (%)	Variables		Frequency (%)
Sex	Male	15 (6.9)	Education Level	Lower than Bachelor's Degree	13 (6)
	Female	201 (93.1)		Bachelor or Higher Degrees	203 (94)
	Total	216 (100)		Total	216 (100)
Marital Status	Single	95 (44)	Position	Nurses	197 (91.2)
	Married	121 (56)		Matrons, Supervisors, Head Nurses	19 (8.8)
	Total	216 (100)		Total	216 (100)
Employment Status	Contract Nurses	64 (29.6)	Service Unit	Internal Medicine	43 (19.9)
	Treaty Nurses	37 (17.1)		Surgery	58 (26.9)
	Official Nurses	66 (30.6)		Children	35 (16.2)
	Temporary Employed Nurses	49 (22.7)		ICU and CCU	50 (23.1)
	Total	216 (100)		Others	30 (13.9)
				Total	216 (100)

Table 2. Mean and SD of the motivational factors affecting the studied nurses' participation in in-service training courses

Motivational Factors	Mean	SD
Factors related to the Profession	3.75	0.71
Personal Factors	3.53	0.64
Organizational Factors	3.38	0.64
Factors related to the Training Courses Planning	3.20	0.59
The Studied Nurses' Motivation	3.41	0.50

In addition, the results showed that there were significant associations between the personal factors ($p=0.037$) and those related to the profession ($p=0.047$) and the studied nurses' positions, between the organizational factors and their employment status ($p=0.007$), and between the factors related to the training courses planning and the nurses' service unit ($p=0.014$) (Table 3).

On the other hand, the results of the Pearson correlation coefficient showed that there were not any significant associations between the studied nurses' age and the motivational factors ($p > 0.05$). However, there was a significant and negative correlation between their nursing job experience and organizational factors ($r = -0.21$, $P = 0.004$).

Discussion

The results of the present study showed that among the factors affecting the nurses' motivation for participating in in-service training courses, the factors related to the profession and personal factors had the highest means. The results of Seydafkan (1995) and Ebadi and colleagues (2012) confirm the present study results (16, 19).

In the current study, 62.5% of nurses believed that providing job related in-service training courses had been effective and essential. In the Mohammadi and Dadkhah's study (2005), 25% of the participants had assessed the practical aspect of the continuous medical education programs at the low level and 56.5% had assessed them at the moderate level (10). Ebrahimi and colleagues (2012) in their study concluded that 48.8% of the studied nurses had considered the training courses provided as somewhat helpful in their job (20).

Table 3. The association between the studied nurses' demographic characteristics and the motivational factors

Motivational Factors		Personal Factors	Organizational Factors	Factors related to the Profession	Factors related to the Training Courses Planning	The Studied Nurses' Motivation
Nurses' Demographic Characteristics						
Sex	Male	3.50±0.74	3.32±0.51	3.67±0.75	3.24±0.51	3.37±0.37
	Female	3.54±0.64	3.38±0.65	3.76±0.71	3.20±0.60	3.42±0.51
	P-value	P-value=0.842	P-value=0.674	P-value=0.641	P-value=0.816	P-value=0.714
Marital Status	Married	3.49±0.61	3.33±0.67	3.73±0.70	3.19±0.57	3.38±0.48
	Single	3.58±0.68	3.45±0.60	3.78±0.74	3.22±0.62	3.46±0.52
	P-value	P-value=0.3	P-value=0.167	P-value=0.596	P-value=0.717	P-value=0.251
Education Level	Lower than Bachelor's Degree	3.26±0.45	3.53±0.58	3.83±0.72	3.19±0.75	3.41±0.41
	Bachelor and Higher Degrees	3.55±0.65	3.37±0.65	3.75±0.72	3.20±0.59	3.42±0.50
	P-value	P-value=0.113	P-value=0.387	P-value=0.690	P-value=0.917	P-value=0.963
Employment Status	Contract Nurses	3.41±0.76	3.42±0.70	3.66±0.93	3.14±0.68	3.36±0.62
	Official Nurses	3.56±0.57	3.21±0.65	3.75±0.57	3.18±0.56	3.37±0.41
	Treaty Nurses	3.62±0.49	3.30±0.49	3.89±0.70	3.26±0.53	3.43±0.36
	Temporary Employed Nurses	3.59±0.69	3.62±0.59	3.77±0.60	3.28±0.58	3.56±0.49
	P-value	P-value=0.336	P-value=0.007	P-value=0.521	P-value=0.576	P-value=0.145
Service Unit	Internal Medicine	3.59±0.59	3.56±0.69	3.81±0.72	3.20±0.54	3.51±0.41
	Surgery	3.46±0.64	3.37±0.62	3.66±0.78	3.09±0.59	3.35±0.49
	Children	3.43±0.63	3.16±0.52	3.75±0.67	3.15±0.60	3.28±0.40
	ICU and CCU	3.49±0.75	3.29±0.68	3.68±0.74	3.19±0.56	3.37±0.58
	Others	3.77±0.53	3.57±0.61	4.01±0.51	3.55±0.61	3.67±0.49
	P-value	P-value=0.193	P-value=0.057	P-value=0.223	P-value=0.014	P-value=0.058
Position	Nurses	3.51±0.66	3.40±0.62	3.72±0.73	3.19±0.59	3.41±0.51
	Matrons, Supervisors, Head Nurses	3.83±0.45	3.21±0.83	4.06±0.46	3.32±0.60	3.50±0.36
	P-value	P-value=0.039	P-value=0.246	P-value=0.047	P-value=0.367	P-value=0.479

In the present study, the majority of nurses believed that participation in in-service training courses had changed their knowledge, understanding and functional skills. The results of Nalle and colleagues' study (2010) showed that 83% of the studied nurses believed that the increase in their knowledge and skills was the benefit of participating in in-service programs (21), and also the results of some studies indicate that nurses usually tend to participate in those training programs that have more practical use and make major changes in their knowledge and functions (9). In a study conducted to determine the effects of applied in-service education model on nursing care, the researchers found that significant increases occurred in the nurses' performance through planning for and providing in-service training so that 70% to 75% of the participants in the training programs immediately, and 50% of them six months after the training programs had reported such changes (18). The results of Zarparvar and colleagues' study (2013) also showed that 75% of the studied nurses had reported that training courses improved their required skills (22). The findings of these studies are similar to the results of the present study.

According to the results of the present study, factors related to the training courses planning and organizational factors had the lowest means, indicating that they were not the important motivational factors from the studied nurses' perspective. This can be due to the fact that usually there is not any needs assessment of the required contents. Also, the nurses' viewpoints on the times and places of classes are not taken into account. In other words, the contents, times and places of these courses are determined and generally notified nurses without considering their problems and needs. The results of some studies show that factors related to the training courses planning and organizational factors, including making a needs assessment prior to providing the training course, are not considered carefully and these courses do not meet the nurses' job needs (10, 23) while Markowich (1994) believes that the educational needs assessment should be considered by training planners as one of the important strategies for motivating employees (24).

On the other hand, Anbari (2003) in a study concluded that some factors related to the training courses planning such as the time and place of providing training programs had great effects on the participants' motivation (25). Also, Hoseinpur and Heshmati Nabavi in their study (2013) found that lack of attention to the nurses' views about the time and method of providing continuing education was one of the main problems in continuing education programs (26).

In the current study, there were significant associations between the factors related to the profession and personal factors and the nurses' positions, so that matrons, supervisors and head nurses had participated in the in-service training courses more than other nurses because of these factors. It can be due to the fact that matrons, supervisors and head nurses, because of the responsibilities they have, should have adequate and updated knowledge about their own responsibilities, be aware of all rules that have changed, and be accountable to the system. On the

other hand, new and updated issues about the methods of providing clinical care, as well as the changes occurring in the rules and procedures are considered in these courses. As a result, they are more likely to feel the need to participate in these courses to update their information. The results of Ayyash and Aljeesh's study (2011) (27) confirm the results of the current study.

In addition, in the present study, there was a significant association between the factors related to the training courses planning and the nurses' service unit so that the lowest mean of these factors was related to the nurses working in the surgery unit. It can be said that overcrowding, shortage of nurses, and the large number of nurses' shifts in the surgery unit, compared with other units, had resulted in its nurses' lower motivation for participating in in-service training courses. However, Ebadi and colleagues (2012) (19) in their study did not find any significant association between the factors related to the training courses planning and the nurses' service unit. Furthermore, in the current study, there were significant associations between the organizational factors and nurses' employment status and their nursing job experience, so that nurses employed temporarily had participated in in-service training courses due to the organizational factors more than those nurses employed officially; also, by increasing the nursing job experience, the organizational factors had less effects on the nurses' motivation for participating in the in-service training courses. Perhaps one of the reasons for higher motivation in the nurses employed temporarily and those with less nursing job experience is that they are newcomers and have only recently started their jobs in the hospital and, therefore, they want to adapt themselves to the hospital environment, strengthen their position and ensure their future career, gain their managers and head nurses' satisfaction and earn higher salaries and benefits, obtain more information and improve their abilities and self-esteem and self-confidence, increase their opportunities for promotion, etc. Thus, they are more motivated to participate in the training programs. However, nurses employed officially and those with more nursing job experience usually have job security and feel that they have sufficient knowledge and experience; also, they assume that the contents of these training courses are repeated. Therefore, they have less incentive to participate in these in-service training programs. The results of Vali and colleagues (1988) (28) and O'Connor's (1979) (12) studies are consistent with those of the present study results. However, Ebadi and colleagues in their study (2012) (19) found no significant associations between organizational factors and studied nurses' employment status and job experience.

The present study had some limitations, including the use of a single method (i.e. a questionnaire) for data collection, as well as its cross-sectional design; because it is difficult to determine the causal relationships in a cross-sectional study.

Conclusion

The results of the current study showed that the highest and lowest means of motivational factors affecting the

studied nurses' participation in the in-service courses were associated with the factors related to the profession and the factors related to the training courses planning, respectively. In order to increase the studied nurses' motivation for participating in the in-service training courses, we suggest making a proper educational needs assessment and paying careful attention to the nurses' educational needs for determining the contents of in-service training courses, determining the suitable time and place for providing training courses, encouraging the nurses participating in the in-service training courses, providing careful and continuous managers' supervision over the employees to participate in these courses, and using a proper and continuous system for monitoring, and evaluating the quality of the in-service training courses provided for the nurses.

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