

Efficacy of purposeful educational workshop on nursing care

Mahin Aminoroaia, Mortaza Mashhadi¹, Mohammad Reza Maracy², Abbas Attari

Behavioral Sciences Research Center, ¹Farabi Medical Center, ²Department of Epidemiology and Biostatistics, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran

ABSTRACT

Background: This study aimed to define the efficacy of a nursing care educational workshop on nurses' knowledge and attitude until 3 months after holding the workshop in psychiatric wards of educational hospitals in Isfahan. **Materials and Methods:** This is a quasi-experimental study. The study population comprised all nurses working in psychiatric wards of Nour and Farabi hospitals in Isfahan in 2012. An educational workshop was held through educational sessions in the form of lectures and group discussion in the two above-mentioned hospitals. Nurses' level of knowledge and attitude were investigated by a researcher-made questionnaire before, immediately after, and 3 months after intervention. Data were analyzed by descriptive statistical tests of repeated measures ANOVA and Bonferroni. **Results:** A significant increase was observed in mean scores of nurses' knowledge immediately after and 3 months after education compared to before education. Nurses' knowledge mean scores increased from 59.2 ± 14.8 before education to 88.6 ± 8.4 immediately after and to 71 ± 9.8 3 months after ($P \leq 0.016$). There was no significant difference in mean scores of nurses' attitude in the three above-mentioned time points. **Conclusion:** Educational sessions notably affected the promotion of nurses' knowledge. With regard to nurses' satisfaction with the workshop that was held, designing and organizing educational workshops based on constant needs assessment is suggested for promotion of nursing cares.

Key words: Nursing care, psychiatry ward, workshop

INTRODUCTION

Nurses are the key members of health team. Nowadays, nursing is developed and evolved parallel to the advances of other sciences. Factors such as brilliant growth of professional knowledge, the desire toward occupational promotion, development of nursing procedures, clients' demands to

receive new standard services as well as rapid changes in health and treatment, and consequently, the changes in nurses' roles through which experienced nurses and graduates can play their role competently, all emphasize on the nurses' needs for their adaptation with necessary professional changes and designing educational programs to fulfill these learning needs.^[1,2] Improvement of human resources in nursing is one of the major roles of nursing managers and includes the activities done for promotion of nurses' competencies and increase of their knowledge and provision of nurses' skills to give better services. Continuing education is one of the methods to improve human resources and includes all occupational educations which are given to them for promotion of their function.^[3]

Continuing education helps nurses to update, promote, and coordinate their functions with rapid changes.^[4] Therefore, each nurse needs continuing education for his/her professional and scientific growth.^[5,6] Research shows that different types of human resources improvement program including

Address for correspondence: Prof. Abbas Attari, Ostandari S. NOOR Medical Center, Behavioral Sciences Research Center, 81465-993, Isfahan, Iran. E-mail: a_attari@med.mui.ac.ir

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continuing education fulfill the needs of nursing community to some extent and repetition of these workshops in regular time intervals, at most biannually, seems essential.^[7,8]

As nurses' continuing education programs have been conducted in different forms in various hospitals, the quality of nursing services is expected to have been promoted annually and has an ascending trend.

Meanwhile, despite long history of administration and application of nurses' continuing education, no positive effects on their promotion of professional function and nursing care have been observed.^[9,10] Designing an efficient pattern for nursing personnel's educational programs and provision of the possibility for their performance with regard to existing conditions in Iranian hospitals seems essential for fulfillment of nurses' educational needs. Promotion of nursing care quality to achieve this goal, application of appropriate methods in planning nurses' refreshing educational courses, and continuing education as well as consideration of their educational needs are among the essential and crucial issues to be considered in this regard. Numerous studies, conducted on the effect of continuing education on nurses' efficacy, self-confidence, knowledge and skills, all show positive effects. Frequent studies, conducted all over the world, show that continuing education is effective on promotion of cares quality.^[11] In fact, the purposeful education can increase efficacy as it is based on the conditions and nurses' educational needs.^[12] As the first step in education is educational needs assessment, and detection of systematic educational needs can act as a base for preparation of a specific educational content,^[13] nursing personnel's needs for education in all contexts and professional domains and various wards is an inevitable and important issue. Because of the sensitivity of psychiatric wards, education of the staff is of great importance. Research, conducted in some psychiatric wards in Isfahan, shows that several mental hospitals need changes as traditional and old methods should be replaced by new methods of care. To achieve success and to be efficient in treatment and care of mental patients, a change and variety are needed. Creation of an appropriate treatment atmosphere in mental hospitals requires its personnel's professional competency.^[14] One of the problems human faces is to preserve the obtained knowledge, and this problem is highlighted for the sciences whose vast range is rapidly changing including medical sciences. Continuing education in medical sciences acts as an essential element to preserve graduates' professional skill. Investigations show that nurses have an undeniable role in promotion of treatment and care through their upmost direct services to the patients.^[15] Health systems can satisfy their clients by promotion of their nurses' clinical competencies.^[16]

The researcher, in her previous research titled as educational needs assessment of nurses working in the psychiatric ward in Isfahan in 2011, determined these needs. The obtained results showed that the most important educational needs of these nurses in domain of nursing cares included the

way of aggressive patients' management, taking appropriate strategies to prevent suicide, and helping the patients to have better adaptation. As existence of aggressive patients in the ward can cause noise, mess, and loss of peace in the ward and can impose various damage and injuries to the personnel, other patients, and even other aggressive patients, it can be the reason for suggestion of this need for nurses. In contrast, the most important and major factors in domain of nurses' function in prevention of suicide are the commitment, sensitivity, knowledge, and respect to humanistic values. Therefore, with regard to above-mentioned issues and nurses' obtained educational priorities in context of mental patients care, this study aimed to define the efficacy of purposeful educational workshop of nursing cares based on needs assessments conducted immediately after and 3 months after the workshop in nurses working in psychiatric wards of educational hospitals in Isfahan.

MATERIALS AND METHODS

This is a quasi-experimental interventional study. Study population comprised all nurses working in psychiatric wards of educational hospitals affiliated to Isfahan University of Medical Sciences (Nour and Farabi) in 2012. Sixty-three nurses (as employees, staffs on a contract, and casual staffs) participated in the study. Inclusion criteria were the desire to attend the study and meeting all conditions of study population including at least having a BS degree in nursing and working in a psychiatric ward as an employee, on a contract or a casual staff, as well as all nurses who worked part time or did overtime in the ward. Data were collected by a researcher-made questionnaire which contained three sections of employment and personal characteristics, knowledge (including 15 four-point Likert's scale questions), and investigation of knowledge (containing 15 Likert's scale question on the manner of communication with the mental patient or patients with suicidal and aggressive behaviors) whose reliability and validity were confirmed before data collection. The validity of the questionnaire was made by consideration of scientific texts, and was confirmed by some academic members. Its reliability was calculated by calculation of Cronbach's alpha ($\alpha = 0.97$).

The educational method employed in this study was lecture, question and answer, and group work. It should be noted that the researchers conducted the study with regard to the results obtained from the needs assessment of nurses working in psychiatric wards of hospitals affiliated to Isfahan Medical Sciences University in 2012.^[12]

Educational protocol and related workshops were designed through formation of a scientific committee (including some of psychiatry professors and nursing educators of Isfahan University of Medical Sciences as well as nursing managers and educational supervisors) and discussion about obtained educational needs.

The outlines of the educational workshop contained "communication with the patients", "giving help to the

patients to have an adaptation", "control of aggressive patients and education of staffs' self-control in confrontation with patients' disrespectful behavior" and "the way to control the patients and prevent their suicide". Nurses' level of knowledge was investigated by the questionnaire before beginning of the workshop, at its end and 3 months after holding the educational workshop. To have the highest possible number of attendants in the workshop, the workshop was held by academic members of the related university in two different times and in two various hospitals (Nour and Farabi). At the end of workshop, the attendants were given workshop educational materials in the form of a CD and the credit of continuing education course. The central distribution index was used for descriptive statistics. Repeated measure ANOVA with a control of some baseline and confounding factors as well as Benferroni's test were used for data analysis.

RESULTS

Sixty-three nurses attended this study and of whom 31.7% were male and 68.3% were female. Most of the nurses were married (76.2%). The highest frequency of employment condition was for casual staff (71.4%) and permanent staff (17.5%). About 58.7% of nurses had ≥ 10 -year work experience. The results showed a significant increase in nurses' knowledge mean scores in relation with nursing care before, immediately after, and 3 months after education ($P < 0.016$) so that it increased from 59.2 ± 14.8 (before education) to 88.6 ± 8.4 (immediately after) and to 71 ± 9.8 (3 months after) [Table 1].

Meanwhile, mean scores of nurses' knowledge about nursing care showed no significant difference before, immediately after, and 3 months after education ($P < 0.32$) [Table 1].

Table 1: Mean scores of nurses' knowledge before, immediately after, and 3 months after intervention

Time	Mean \pm SD			P value
	Before	Immediately after	Three months after	
	Variable			
Knowledge	59.2 \pm 14.8	88.6 \pm 8.4	71 \pm 9.8	0.016
Attitude	61.1 \pm 12.5	62.8 \pm 14.7	61.1 \pm 14.7	0.32

SD = Standard deviation

Table 2: Comparison of nurses' knowledge mean scores concerning nursing cares before, immediately after, and 3 months after education

Time	Mean \pm SD	P
Before education	59.2 \pm 14.8	<0.001
Immediately after education	88.6 \pm 8.4	
Before education	59.2 \pm 14.8	<0.001
3 months after education	71 \pm 9.8	
Immediately after education	88.6 \pm 8.4	<0.001
3 months after education	71 \pm 9.8	

SD = Standard deviation

On the basis of Table 2, comparison of stages (before education and immediately after), (before education and 3 months after), and (immediately after education and 3 months after) showed a significant association.

The obtained results showed that 77.2% of nurse were either "much" or "very much" satisfied with the educational course held for them and believed existence of such a course led to their scientific information improvement.

On the basis of Tables 3 and 4, comparison of nurses' knowledge and attitude mean scores before, immediately after, and 3 months after education showed no significant association between gender and years of nursing personnel's work experience.

Obtained results showed that in the 15 domains of knowledge, nurses' knowledge significantly increased in domains of communicational treatment techniques, the manner of communication with paranoid patients, the manner to react toward patients' auditory hallucinations, the causes of patients' lack of adaptation, recognition of aggression in patients, evaluation of violence risk and the way to control invasion, and aggression in patients after education.

DISCUSSION

This study was conducted to make an educational intervention to promote the levels of nurses' knowledge and attitude concerning nursing cares in psychiatric wards. The obtained results showed the effect of a nursing care educational workshop on promotion of mean levels of knowledge among the nurses working in psychiatric wards

Table 3: Mean scores of nurses' knowledge in three-time intervals based on gender and work experience

Characteristics	Mean knowledge score		
	Before	After	2 months after
Gender			
Male	60 \pm 16.1	88.3 \pm 9.6	70 \pm 7.3
Female	58.9 \pm 14.3	88.6 \pm 7.9	71.4 \pm 10.8
Work experience (years)			
≤ 10	58.3 \pm 15.7	88.6 \pm 7.5	69.9 \pm 10.2
>10	60.5 \pm 13.7	88.4 \pm 9.7	72.5 \pm 9.1

Table 4: Mean scores of nurses' attitude in three-time intervals based on gender and work experience

Characteristics	Mean attitude score test		
	Bbefore	After	2 months after
Gender			
Male	58.3 \pm 13.6	61.3 \pm 15.4	54.9 \pm 12
Female	62.3 \pm 12	63.6 \pm 14.5	64 \pm 15
Work experience (years)			
≤ 10	58.2 \pm 12.9	61 \pm 14.9	57.6 \pm 14.7
>10	65 \pm 12.4	65.5 \pm 14.3	66.2 \pm 13.3

immediately after and 3 months after education, which is consistent with the study of Pasyar *et al.* (2009) concerning effect of educational sessions on promotion of nurses' level of knowledge in emergency wards of Shiraz University of Medical Sciences.^[17] This shows the high effect of education on increase of knowledge and attitude of treatment team personnel, and consequently, its effect on promotion of patients' health and qualitative improvement of services as well as nurses' job satisfaction. This method has also an impact on sustainability of information up to 3 months after intervention. Abbaszadeh *et al.* showed that continuing education programs resulted in an increase in nurses' knowledge, attitude, and practice.^[18] Huang *et al.* (2002) conducted a quasi-experimental study on evaluation of the effect of nursing educational programs among nurses in hospitals in China and reported an improvement in nurses' knowledge, practice, and behavior after education,^[19] which is consistent with this study.

In evaluation of the educational workshop effect on nurses' knowledge in nursing cares of psychiatric patients, the results showed that nurses' knowledge and awareness had notably increased in the context of communicational therapy techniques, the way to communicate with a paranoid patient, the way to react to patients' auditory hallucination, recognition of the causes for patients' aggression, evaluation of violence risk, and the way to manage invasion and aggression.^[12] On the basis of the needs assessment conducted before holding the workshop, the patients revealed their educational needs: How to manage an aggressive patient, appropriate strategies to prevent suicide and how to help the patient for a better adaptation, and the results showed that most of their needs were fulfilled. Karimi *et al.* showed that holding educational workshops had a high positive impact on nurses' communicational skills.^[20] In a study to help staff nurses in taking care of cancer patients and having an early diagnosis of depression and making necessary interventions, the results showed that nurses applied more strategies and evaluated their efficiency better after the workshop, compared to before workshop.^[21] The findings of this study revealed no effect for the variables of gender and work experience on increase of nurses' knowledge and attitude, which is consistent with the study of Pasyar *et al.*^[17] It seems that the continuing education nowadays conducted has not been able to adequately increase nurses' knowledge and attitude, possibly due to lack of purposeful educations, lack of needs assessment, and the way of holding workshops. The results of some studies showed if educational programs are based on nurses' needs assessment and are conducted purposefully in the form of workshops, the educations can notably affect nurses' knowledge, attitude, and skills.^[22] Another variable, investigated in this study, was nurses' attitude level. The obtained results showed that educational interventions had no effect on nurses' attitudes toward nursing cares, which is consistent with the study of Mehdiipur *et al.*^[23] In study of Zarei *et al.*, it was declared that nurses' mean levels of attitude toward communicational skills had a significant difference before and after an educational program,^[24] which is not in line with this study. The reasons

for the lack of the workshop effect on promotion and modification of nurses' attitude in this study can be named as a high number of participants in educational workshops, general topics of the workshops, low interactional active participation of the participants, and high load of materials in a short time. Numerous studies showed the weakness in nurses' knowledge in contexts of nursing cares as well as lack of fulfillment of determinant and important needs concerning administration of professional duties.^[9,10,25]

On the other hand, literature review of various studies reveals the effect of educational programs on nurses' knowledge, attitude, and practice as well as improvement of quality of cares.^[21,23] As education of nursing personnel, parallel to other medial professions, is speeding up toward professionalism and increase of competency of its professionals, the university education and obtaining an educational certificate cannot be a license for nurses to give nursing services lifelong any more. In fact, education of medical sciences does not end in a university, but should go no during professional activities.^[26] Potter and Perry believe that comprehensive educational programs which emphasize on personal learning needs reduce the caring costs, improve quality of care, and help the individuals obtain their independency.^[27] Brady and Hyde believes that giving nurses the knowledge and preparation for continuing education is essential.^[28] In this direction, detection of educational needs and provision of needed facilities is the first step to fix the defects and improve quality of education. Therefore, the role of continuing education as a basic need for nurses' adaptation with progressive and rapid scientific changes is essential.

Determination of educational priorities based on needs assessment should be considered as the most important step in educational planning.^[29] Working staff in health and treatment services should keep in touch with new advances and update their knowledge and science during their period of servicing. With regard to the results of this study, a positive background for nurses' participation in educational programs based on needs assessment should be prepared for their professional promotion.

CONCLUSION

With regard to the role and importance of professional factors such as patients' expectations from nurses, the desire to increase professional knowledge in nursing continuing education programs, nursing managers, and authorities of continuing education programs should provide the nurses with conducive conditions for their attendance in educational programs for professional promotion.

Limitations

The researchers faced some limitations while conducting this study. The most important limitation was in holding the sessions in two above-mentioned hospitals as well as the high number of participants in the program, which limited the participants' active participation and interaction.

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