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# Evaluation of in-person continuing education programs from the perspective of ward nurses

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## Abstract:

**BACKGROUND:** Assessing how programs are implemented from the perspective of the learners themselves is one of the most effective ways to improve the quality of continuing education. The aim was to evaluate the implementation of in-person continuing education programs from the perspective of nurses.

**METHODOLOGY:** Setting of the study was the selected hospital of Isfahan University of Medical Sciences (Al-zahra hospital). This study is a descriptive cross-sectional one. Using a researcher-made questionnaire, the implementation of continuing education programs in four areas of the aim, educational techniques, educational content, and educational field was evaluated. The sample consisted of 236 nurses working in these hospitals who participated in the study through convenience sampling. Data were analyzed by SPSS software version 19 using descriptive statistics.

**RESULTS:** Based on the results, “the need for new content learning” was mentioned as the first priority in continuing education programs. The majority of participants scored each of the following domains (aim, educational techniques, educational content, and education field) as well as all items related to the continuing education program evaluation as “moderate.”

**CONCLUSION:** Most nurses assessed the implementation of in-person continuing education programs implemented in Isfahan University of Medical Sciences in general and in each of the domains as “moderate.” Therefore, in order to improve the quality of programs, it is necessary to take steps to match the goals with the needs of learners, improve teaching techniques, improve the quality of program contents, and optimize the scope of the programs.

## Keywords:

Continuing education, evaluation, Iran, nurses

## Background

Continuing education of the medical community refers to educational activities that a member of the medical community uses in order to maintain, develop, or promote knowledge, skills, and professional and communicational performance in patient care, as well as giving services to the community or the profession.<sup>[1]</sup> The World Health Organization has recognized continuing education as an urgent necessity and emphasized its importance as an essential activity to

maintain the professional skills of graduates. Moreover, on the eve of the 21<sup>st</sup> century, United Nations Educational, Scientific and Cultural Organization has also emphasized on on-going learning through training programs.<sup>[2,3]</sup> In Iran, the law on continuing medical education was approved by the Islamic Consultative Assembly in 1990.<sup>[4]</sup>

Nurses, as a large part of the human resources in medical centers, need continuing education programs in order to maintain their professional and scientific skills, improve their performance, and adapt themselves to the rapid changes in knowledge as well as nursing care.<sup>[5-8]</sup>

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Participation in continuing education programs directly affects the performance of nurses and leads to increase in productivity, reduction in occupational hazards and medical errors, improvement in the organizational atmosphere, and rise in the satisfaction of nurses and even patients. Therefore, nurses' participation in the continuing education program is essential in order to increase the quality of care of nurses.<sup>[9]</sup>

If continuous education is properly planned, it can become a powerful tool for promoting training in health staff throughout their lives and being committed to staying in line with professional and occupational principles.<sup>[10]</sup>

Continuing nursing education should cover and evaluate all activities that individuals use to develop their knowledge and their function.<sup>[11]</sup> Assessing how to implement existing programs to optimize and eliminate possible deficiencies is one of the requirements for improving the quality of nursing education.<sup>[12-14]</sup> Therefore, one of the ways to improve the quality of continuing education is to review the views of educators.<sup>[3]</sup> In addition, examining the implementation of continuing education programs reveals the effectiveness of the programs and their impact on the promotion of nurses' professional development.<sup>[14]</sup> According to studies, participants in continuous education programs emphasized on the following: duration of the program (<3 days), the availability of continuing education programs, the relevance of the subject and content to the duties and tasks of the participants, being comprehensive, and having self-assessment.<sup>[15,16]</sup> Some studies believe that there is no need assessment in conducting courses. Continuous education without need assessment will waste resources; while if programs are designed based on nursing education needs, it will improve the quality of nursing care<sup>[17]</sup> and also continuing education programs.<sup>[14]</sup>

Because many scholars have emphasized on the implementation of continuing education programs based on the needs of learners,<sup>[18]</sup> and researches also feel that the evaluation of these programs is highly important in implementing an effective procedure, hence this study was designed to evaluate the implementation of in-person continuing education programs from the viewpoint of nurses working in selected medical-educational hospital of Isfahan. Obviously, knowing the participants' point of view and applying it in designing educational programs can provide a platform for improving the quality of programs and satisfaction of the attendants.

## Methodology

### Population and sampling

The present study was a descriptive cross-sectional study. The research environment was a medical-educational

hospital (Al-zahra) in Isfahan, and the research population was all nurses working in this hospital. Because Al-Zahra Hospital is the largest general hospital in Isfahan province with approximately 1000 nursing staff, this hospital was selected for sampling. The inclusion criteria were: having work experience at least 6 months in practical fields, participation in at least one continuous education programs, and having a degree in nursing including Bachelor or higher. Two hundred and fifty nurses were selected as the sample. In this study, sampling was done in convenience multistage cluster sampling in all three working shifts (morning, evening, and night). After obtaining permission from the Faculty of Nursing and Midwifery as well as the manager of hospital, the researchers referred to all wards of the selected hospital in person, introduced themselves, and provided a brief explanation of the study and its objectives. After putting emphasis on the anonymity of the obtained data, researchers obtained the written consent of the participants for participating in the study and completing the questionnaire. The completed questionnaires were collected at the appointed time by the nurses in each ward.

The Ethical Approval (IR.LUMS.REC.1399.024) for the study was obtained from the Institutional Ethical Committee of the Chancellor of Research of Lorestan University of Medical Sciences.

### Instrument

The research tool was a researcher-made questionnaire that was based on the available studies and review texts on educational evaluation. To obtain the validity, the devised questionnaire was given to 13 faculty members of Isfahan Nursing and Midwifery Faculty. After receiving their comments and applying the relevant recommendations, a final questionnaire was prepared. To determine the reliability of the questionnaire, Cronbach's alpha was used and the reliability was calculated to be 0.85. The questionnaire consisted of two parts: personal data including age, sex, marital status, employment status, work record; and the specialized headings for continuing education including 38 closed-ended questions and two open-ended questions with the content of criticisms and suggestions. The 38 closed-ended questions were categorized based on the educational evaluation textbooks in four areas of aim evaluation, teaching techniques, teaching content, and field of education. Aim evaluation area included a specific set of teaching materials which should be taught or learned and would examine the appropriateness of the objectives of the program with the professional goals and whether these goals are clearly and explicitly addressed at the beginning of training and are consistent with the content. The evaluation of educational techniques is an educational approach that

is emphasized by the educational instructor. The field of background assessment is an environment in which training is realized, including physical facilities, available educational resources, time and place of implementing continuing education programs, the cost of programs, their privilege, the management and implementation of these programs, the way of notifying participants, as well as the ability to motivate participants, the available facilities for learning, and ultimately the content evaluation which also refers to the set of materials presented.<sup>[19]</sup>

The close-ended questions were evaluated based on a 6-point Likert scale (very high, high, moderate, low, very low, and no comments) so that a score of 0 was allocated to the answer "I do not have any comment" and score of 5 to the answer "very high." In the end, the participants were requested to express their criticisms and suggestions on the implementation of continuous training programs in response to two open-ended questions.

### Results

A total of 250 questionnaires were provided to the participants. However, due to the nonreturn of some questionnaires (eight questionnaires) and the incompleteness of some others (six questionnaires), the total number of completed questionnaires was 236, which were analyzed using IBM SPSS Statistics version 16. The attrition rate in this research was only 5.6%.

The findings of the present study showed that the participants under study were in the age group of 20–49 years and the highest frequency (31%) belonged to the age group of 25–29 years. Ninety-five percent of the nurses had a Nursing bachelor's degree and 49.6% were working in the critical care units (intensive care unit, critical care unit, dialysis, neonatal intensive care unit, and emergency) [Table 1].

Table 2 shows the reason for participation in continuing education programs according to the priorities of the participants. "The need for new content learning" was mentioned as the first priority in continuing education programs and "earning points" and "the regulation of the organization" were in the second place of the most frequent priority.

The participants of this study had already attended continuing education programs between one and more than six times a year. Most of the participants (56.77%) participated in continuing education programs 1–3 times a year, and more than half (61.86%) were interested in participating in continuing education programs. The majority of samples (42.38%) tended to implement continuing education programs in practice, and almost

**Table 1: Demographic data of the samples**

Demographic characteristics	n (%)
Age (year)	
20-24	58 (25)
25-29	73 (31)
30-34	43 (18)
35-39	20 (8)
40-44	25 (11)
45-49	17 (7)
Marital status	
Married	149 (63)
Single	87 (37)
Degree	
Bachelor	224 (95)
Master science	12 (5)
Working place	
Critical care wards	118 (50)
General wards	118 (50)
Employment	
Employed	177 (75)
Nonemployed	59 (25)
Type of workshifts	
Rotational	189 (80)
Fixed	47 (20)
Job experience (years)	
Less than a year	45 (19)
1-4	99 (42)
5-9	35 (15)
10-14	28 (12)
15-19	24 (10)
20-25	5 (2)

**Table 2: Distribution of the samples regarding the reasons for participation in continuing education programs**

Items for priority assessment	3 <sup>rd</sup> priority, n (%)	2 <sup>nd</sup> priority, n (%)	1 <sup>st</sup> priority, n (%)
The regulation of the institution or organization	18 (17)	12 (11.1)	26 (17.6)
The request of the authorities	12 (11.3)	16 (14.8)	2 (14.9)
Earning points	38 (35.8)	32 (29.6)	26 (17.6)
Need to learn new content	20 (18.9)	18 (16.7)	58 (40.5)
Getting away from work	18 (17)	2 (1.9)	2 (1.4)
Providing proper care	0	28 (25.9)	12 (8.1)
Accompanying with other colleagues	0	0	0
Other issues	0	0	0

half of the samples (47.46%) had a moderate interest in conducting continuing education programs in an interprofessional manner. Table 3 shows the score obtained from the evaluation of the participants in different domains of the questionnaire as well as the whole questionnaire. The majority of participants allocated a "moderate" score to each of the domains as well as all items related to the evaluation of continuing education programs.

Furthermore, Table 4 shows the suggestions of the participants to increase the productivity of continuing education programs in different domains.

### Discussion

The results showed that the need to learn new content was the first reason for participation in continuing education

programs. Some studies introduced professional factors and the desire to learn as one of the effective factors in participating in continuing education programs.<sup>[8,20]</sup> However, Pashandi *et al.* introduced “obtaining a score” as the most important facilitator and “working problem” as the most important barrier to participation in continuing education programs.<sup>[21]</sup>

**Table 3: Distribution of the samples regarding the obtained scores in the assessed areas**

Domains	n (%)	Score
Goal	6 (2.5)	Low
	118 (50)	Average
	112 (47.5)	High
Training technique	10 (4)	Low
	148 (63)	Average
	78 (33)	High
Content	10 (4)	Low
	194 (82)	Average
	32 (14)	High
Context/background of the program	40 (17)	Low
	158 (64)	Average
	38 (16)	High
Whole questionnaire	16 (7)	Low
	184 (78)	Average
	36 (15)	High

In this study, the majority of samples (78%) scored a moderate point for items relating to evaluating continuing education programs. In the study conducted in Rafsanjan, the level of satisfaction in 69.4% of physicians was “moderate” regarding the quality of the presenting, teaching method, and the implementation of continuing education programs.<sup>[22]</sup> In addition, the assessment of the nurses’ continuing education process in Ardabil showed that 50.8% of them assessed the related items as “moderate.”<sup>[23]</sup> In a systematic review with the purpose of the pathology of the continuing education programs of the Iranian medical community, Ebadi *et al.* also suggested that despite the positive legal points in the implementation of the programs, their evaluation was “moderate.” Therefore, they suggested that continuous and periodical need assessment should be done while applying the rules and guidelines correctly in order to increase the effectiveness of such programs.<sup>[24]</sup> Based on

**Table 4: Suggestions proposed by individuals to increase the productivity of continuing education program**

Domains	Suggestions
Goal	Congruency of the program’s goals with the professional goals of the audience
	A clear statement of the objectives of the program at its beginning
	Coordination of the program’s goals with its content
Training technique	Establishing proper correspondence between instructors and the participants
	Instructors’ proper linguistic and rhetoric skills
	Teachers’ mastery of curriculum subjects
	Provision of appropriate feedback to participants
	Sufficient teachers’ experience and skills in teaching
	Allowing the audience to participate in discussion
	Use of clinical teachers
	Use educational materials to properly deliver content
Content	Providing new theories and perspectives by instructors
	Organizing and logical sequences of content
	The applicability of the provided content to the educational needs of the audience and the health needs of the community
	Holding classes mainly in a practical format
	Coordination between the content of the program and its duration
Background of the program	Choosing the appropriate time for holding the program (evening or morning, regular or compact)
	The proportion of the registration fee with the type of training program
	Free courses
	Establishing congruency between points of the programs with its duration
	Better notification of programs through the site and so on
	Raising the quality of the webpage for the continuing education program
	The suitability of the location of the program in terms of attendees’ access
	Creating better facilities for enrolling in classes
	Performing real attendance control for saving the participants’ right
	Calculating class hours as working hours
	proper management of holding continuing education sessions

different researches done in different parts of Iran, the quality of continuing education in most medical sciences universities is moderate, and it requires improvement in various aspects.

In terms of the “aim,” the majority of samples (50%) scored a “moderate” point, while 47.5% of them scored it as “high,” which suggests that the level of satisfaction from the “aim” domain among the samples was desirable. In the study of Safaei *et al.*, 71.7% of the participants were satisfied with the clarity of the continuing education curriculum aims.<sup>[25]</sup>

Regarding the assessment of “educational technology,” 62.7% of the participating nurses evaluated the effectiveness of this domain as “moderate.” In this regard, Mohammadi and Dadkhah’s research also indicated that 56.6% of the nurses considered the presentation of content as “moderate.”<sup>[24]</sup>

About 82% of the participants assessed the “content” domain as “moderate.” Hosseini *et al.* also reported the viewpoints of nurses working in affiliated hospitals in Kohkiluyeh and Boyer Ahmad province as relatively “moderate.”<sup>[26]</sup> On the other hand, Alavi and Shariati, in their study on satisfaction with e-learning programs in Tehran University of Medical Sciences, found that the least satisfaction of the samples was related to the content of the courses,<sup>[27]</sup> while in the research by Safaei *et al.* on satisfaction of the electronic continuous education programs presented in Semnan University of Medical Sciences, the highest (74.1%) satisfaction level of these programs was attributed to the content sequences.<sup>[25]</sup> Arash *et al.* believe that most participants in continuing education programs were satisfied with the content of the program in terms of new scientific content and their suitability to their job needs.<sup>[17]</sup> It is very important that continuing education programs are provided based on the nurses’ educational needs mainly because only with applying this approach, an increase in the participants’ satisfaction will be achieved.

In the area of the “background of the program,” 66.9% of the participants in the study also believed that the effectiveness of this area was “moderate.” In the open-ended questions, the suggestions were all in the four domains. The results of this domain of study were consistent with other studies.<sup>[20,27]</sup> Ebrahimi *et al.* also considered professional factors, the willingness to learn and enhancement of professional nursing knowledge, organizational-managerial factors, and adjustment of work shift as the most important reasons for participation in the programs.<sup>[20]</sup>

## Conclusion

Regarding the results of this study, the overall evaluation of nurses working in teaching hospitals in Isfahan of

the continuing education programs is “moderate.” At first glance, this may not be unusual, but a closer review of the implementation of continuing education programs reflects that “attention to the obtained points” is considerable. Teaching hospitals of Isfahan are the reference point for patients from neighboring cities and provinces, and many continuing education programs are held at these centers or ultimately in Isfahan city. Therefore, it can be said that this assessment is an evaluation of the level of desirability of the programs. Consequently, care should be paid to ensure that continuing education programs can be conducted at a higher level and lead to staff satisfaction. The interesting point about the answers is that most samples expressed their main intention for participation in the programs as “learning new materials” and expressed their keen interest in “providing specialized training.” Considering these key points can help officials in the better and more targeted implementation of the programs, as the study aimed to improve the delivery of continuing education programs. Therefore, it is suggested that officials can improve the quality of continuing education programs by removing the current barriers in different assessed areas, in order to meet the health system’s goals, which are community health as well as the satisfaction of the nursing staff as the forerunners of the health message. This research could have been done with more samples from Isfahan University of Medical Sciences Hospitals for achieving a better understanding and more valuable results. The results of this study can be used for effective planning and implementing continuous education programs in medical sciences universities, especially Isfahan.

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## Conflicts of interest

There are no conflicts of interest.

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