Empowering education: A new model for in-service training of nursing staff

MAHMUD CHAGHARI[1], MOHSEN SAFFARI[1], ABBAS EBADI[2]*, AHMAD AMERYOUN[3]

[1]Faculty of Health, Baqiyatallah University of Medical Sciences, Tehran, Iran; [2]Behavioral Sciences Research Center, Nursing faculty, Baqiyatallah University of Medical Sciences, Tehran, Iran; [3]Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

> **Abstract**

Introduction: In-service training of nurses plays an indispensable role in improving the quality of inpatient care. Need to enhance the effectiveness of in-service training of nurses is an inevitable requirement. This study attempted to design a new optimal model for in-service training of nurses.

Methods: This qualitative study was conducted in two stages during 2015-2016. In the first stage, the Grounded Theory was adopted to explore the process of training 35 participating nurses. The sampling was initially purposeful and then theoretically based on emerging concept. Data were collected through interview, observation and field notes. Moreover, the data were analyzed through Corbin-Strauss method and the data were coded through MAXQDA-10. In the second stage, the findings were employed through Walker and Avant's strategy for theory construction so as to design an optimal model for in-service training of nursing staff.

Results: In the first stage, there were five *major themes* including unsuccessful mandatory education, empowering education, organizational challenges of education, poor educational management, and educational-occupational resiliency. Empowering education was the core variable derived from the research, based on which a grounded theory was proposed. The new empowering education model was composed of self-directed learning and practical learning. There are several strategies to achieve empowering education, including the fostering of searching skills, clinical performance monitoring, motivational factors, participation in the design and implementation, and problem-solving approach.

Conclusion: Empowering education is a new model for in-service training of nurses, which matches the training programs with andragogical needs and desirability of learning among the staff. Owing to its practical nature, the empowering education can facilitate occupational tasks and achieving greater mastery of professional skills among the nurses.

Keywords: Grounded theory; Model; Nurse; Training

*Corresponding author:
Abbas Ebadi,
Behavioral Sciences Research Center,
Baqiyatallah University of Medical Sciences,
Tehran, Iran
Tel: +98 912 2149019
Email: ebadi1347@yahoo.com

Introduction

Education plays an important role in achieving organizational goals through a combination of organizational and the workforce interests. Nowadays, training is an essential factor contributing to greater efficiency of the staff and

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organizations. In fact, it is a vital investment that will lead to internal promotion, staff development and success of organizational plans. Training is an investment in achieving productivity and employee retention through providing career development and job satisfaction in the long run (1,2). Training programs are essential for the survival and viability of the organization in the competition arena (3). The literature review suggests that certain training programs do not demonstrate any efficacy in improving the quality of patient care (4). In order to expand the capacities and improve educational outputs, it is crucial to develop and adopt new models of clinical education for nurses (5). In addition to the theoretical knowledge, vocational training should enhance the technical capacity and quality of services, leading to innovation (6). Training programs must be organized in such a way that they enhance the beneficial capabilities of employees (7). In-service training includes a set of measures taken to promote empowerment and competency among employees for the better undertaking of their tasks, thus helping the organization to achieve its goals (8). One of the main features of in-service training is applicability. Previous research has shown that job characteristics and professional factors can contribute to the involvement of employees in in-service training (9). Nurses play an important role in improving health standards. Hence, they need to be updated about theoretical and practical knowledge in this field (10). In fact, in-service training serves to update the staff's occupational knowledge and professional skills and improve the best practices for fulfilling various tasks and responsibilities (8). Another important point concerning the in-service training of the nursing staff is their active participation in such programs. Active participation of nurses in in-service training can lead to effective learning and development in their field of work. One of the factors contributing to greater involvement of the staff in such programs is the utilization of adult learning principles. Adults are aware of learning objectives, guide their own learning, and they are self-assessor (11). Moreover, self-centered learning has been offered as a lifelong learning technique in medical education (12). The in-service training programs for the nursing staff have been implemented in various forms and methods in Iran, but have unfortunately left little impact on their occupational outcomes (13). Due to the limited knowledge, undefined concepts and undeveloped relationship between concepts, it's necessary to explore nursing in-service training components and design a streamlined model for nursing staff training. Grounded theory method is an effective method to identify these components. This study intended to provide a new model of in-service training for the nursing staff.

Methods

This study was conducted in two stages. In the first stage, the Grounded Theory was adopted to fully examine the training process of nursing staff. In the second stage, the findings were employed through Walker and Avant's strategy for theory construction (2005) (14) so as to design an optimal model for in-service training of the nursing staff. The study took place at Baqiyatallah University of Medical Sciences hospitals in Tehran. Obtaining the participants' confidence and real answers to the questions were limitations of the study. For collecting deeper and better data, the researcher found a part-time job in one of the hospitals

Data were collected from November 2013 to December 2015. The samples comprised a total of 35 nurses, nursing managers, training managers and senior managers working at the hospitals. The sampling was initially purposeful and then theoretically based on emerging concepts and continued until data saturation. The data were collected through semi-structured interviews, field notes and literature review. A total of 42 interviews were administered with an average duration of 60 minutes. Each interview was recorded by a digital device and then implemented on the same day after listening for several times. The researcher participated in 21 training programs and took field notes. Additionally, the documents including instructions and directives were reviewed and analyzed.

The data were analyzed through Corbin and Strauss method (2008) involving coding for concepts, analysis for contexts and processes, analysis for consequences, and finally integration of categories to build theoretical framework (15). The data were coded through MAXQDA-10. Analytical techniques included comparisons, asking questions, flip-flop technique, and waving-the-red-flag technique. The comparisons constantly evaluated the phenomena, concepts and events in terms of similarities and differences. The questions were continuously asked about the essence of the data, covering topics such as who, what, when, where, how and with what consequences. Waving-the-red-flag technique served to find out in what circumstances a phenomenon always occurs or usually does not occur. In this way, the Grounded Theory was formed. Having developed the descriptive theory, the Walker and Avant's Strategy for theory

construction (2005) was employed to generate a prescriptive theory. At first, a set of relevant core concepts were outlined to expand the model. The core concept was derived from the grounded theory and main concern of the participants so as to further expand the model. At the next stage, the paradigmatic and meta-paradigmatic concepts within the model were identified, followed by a review of related literature. Finally, the concepts and statements were extracted from the selected texts, which were then systematically organized into a model.

Data trustworthiness

The strategies presented by Guba and Lincoln were adopted to ensure the accuracy and reliability of the results (16). The researcher was continuously involved with the data, which were confirmed by the participants, the research team and two outsider experts (credibility). Moreover, two members of the research team coded the interviews independently and finally reached a consensus (dependability). In collecting and recording the data, sufficient time was allocated (18 months) and utmost accuracy was exercised (confirmability). The data were validated by two specialists (transferability).

Ethical consideration

This study was approved by the Ethics Committee of the Baqiyatallah University of Medical Sciences. Moreover, well-informed consent of the participants was obtained during data collection. Furthermore, the participants remained anonymous with the right to withdraw from the study at any stage. Certain parts of the interviews were not recorded upon request of the participants and none of the interviews were disclosed to maintain the confidentiality of private data.

Results

The participants included 20 nurses, 5 nursing managers, 6 education managers and 4 senior managers. There were 17 male and 18 female samples aged 27 to 51 years old with a mean age of 39.08. The education levels varied from Bachelor's to doctorate.

This study obtained 5 major themes, 10 main categories and 22 sub-categories (Table 1).

The core concepts included unsuccessful mandatory education, empowering education, organizational challenges of education, weakness in educational management, and educational-job resiliency. Unsuccessful training was the main concern of the participants, while the empowering education was the core concept extracted from the data. Hence, the grounded theory of *effort for empowering education* was developed. The ultimate objective of the research was achieved through analyzing the first-stage findings through Walker and Avant's method. Since the core category and grounded theory in the first stage involved effort for empowering education, the second stage adopted the empowering education model as the core concept. Moreover, the paradigmatic concepts of human, learning, nursing and environment were taken into account as the literature review revolved mainly around the new model, where the conceptual framework was composed of other concepts. The researcher extensively and systematically reviewed the entire available literature concerning the core concept and the relevant paradigmatic concepts, whose correlations and contributing factors were identified based on the results obtained from the grounded theory research. In this regard, English and Persian literature were searched for several key model concepts and elements as follows.

The nurses in this model adopt a holistic approach to learning. In this regard, the nurses pursue a type of education that can enhance knowledge and practical skills. In this model, the human is an entity in search of learning and acquisition through effective training. The environment is a set of elements and factors demanding practical learning. There are three theories resulting from comprehensive search:

Table 1: The major themes and main categories derived from the data

Major themes	Categories
Unsuccessful -mandatory education (Main concern)	Weak effectiveness
	Preventive factors
Empowering education (Core variable)	Self-directed learning
	Practical learning
Organizational challenges of education (Context)	Management limitations and conflicts
	Structural-functional incompatibility of education and medical care
Weakness in educational management (Context)	Insufficiency in personnel education stages
	Insufficiency in organizational education process
Educational-Job resiliency (Consequence)	Governance coincidence
	Work accommodation

1. Malcolm Knowles theory: He believes the main approaches for adults learning is the problem-solving and collaborative research.

2. Clinical monitoring performance model: Clinical supervision uses four key components of training, advocacy, facilitating and feedback.

3. The pattern of the Iranian Red Crescent Society staff training by PoorKarimi et al: This pattern contains resolution of problems related to organizational structure and attention to motivational mechanisms.

Empowering education obtained from the combination of grounded theory and results of comprehensive search. Empowering education entails characteristics including participatory training of the nursing staff in terms of planning and implementation, problem-solving approach, result-oriented content, training implementation practices, focus on motivational factors, fostering the searching skills, and clinical performance monitoring (Figure 1).

As illustrated in the Figure, the empowering education entails two main components of self-direction and practicality. Self-directed learning refers to self-centeredness and initiative in learning. Practicality is the effectiveness of training in job functions. There are five factors involved in achieving self-direction and practicality. The self-directed learning can be enhanced by searching skills. Employees through search in training categories and educational topics can lead to self-direction. Similarly, practicality can be enhanced by clinical supervision and clinical performance monitoring. There are three additional factors contributing to both self-directed learning and practicality, including motivation, employee participation in training design and educational implementation and problem-solving approach. Problem-solving approach refers to training the topics in which employees are having difficulty when doing their job duties. In addition to these topics, there are two underlying factors that can affect all the other factors, including tackling the organizational challenges and overcoming the inefficiencies of educational management. Organizational challenges refer to some of the organizational procedures that are in conflict with
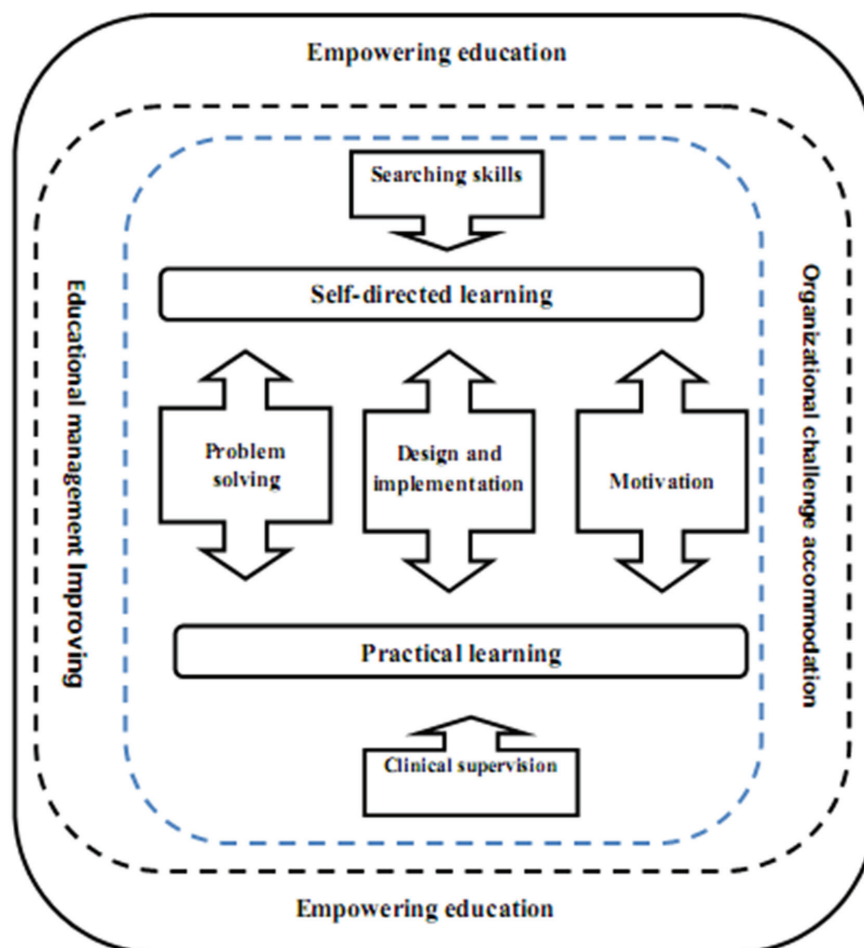

Figure 1: Empowering education model

the nature and goals of educational programs, for example, financial constraints and conflicts arisen by different management divisions against education. In the empowering education, such organizational challenges must be eliminated.

Discussion

The empowering education refers to self-direction and practicality. Self-directed learning represents self-centeredness and initiative in learning. Also, practicality is application of training in job functions. There have so far been numerous models designed for in-service training of staff. The basic models mainly focused on the procedures and functions of staff training (17, 18) For instance, Craig suggested that staff training process is composed of five stages: planning, analysis, design, implementation and development (19). Some experts in the design of educational models put more emphasis on teaching methods and materials (20). Others believe that the most important component of staff training is the teaching method and how pedagogical concepts are conveyed (21). This study rather emphasized the effectiveness of staff training through modifying its essence and goals. Moreover, self-direction and practicality are two main components of empowering education aligned with the effectiveness of nursing staff training. The empowering education adopted several pragmatic strategies such as fostering the searching skills, clinical performance monitoring, motivational factors, staff participation in the design and implementation of training, problem-solving approach, tackling organizational challenges, and overcoming the inefficiencies of educational management. Chen and Klimoski (2007) proposed a model that focuses mainly on "teaching method"and "providing the essential grounds for staff training (22)". The current study entails solutions beyond such themes. In fact, this study presented a new teaching method, where the nursing staff participate in the design and implementation of training programs. The participation of nursing staff in the design and implementation of the training programs can render the content materials desirably proportionate to the staff needs and wishes. Poorparimi et al. (2010) proposed a model for in-service training of staff at the Iranian Red Crescent Society (IRCS), where the educational effectiveness was achieved through a greater concentration on motivational factors (23). The same motivational factors have been incorporated into the model presented by the current study. In a research on in-service staff training at a rehabilitation center, Saunders

(2009) concluded that the staff will perform successfully and fruitfully when they feel the support, supervision and responsibility of the management (24). That was considered in the current research. Concerning how to tackle the organizational challenges, this research has suggested that the solution is to inform and guide the hospital administrators. Ammentorp et al. (2012) introduced and examined a new model which fosters the mutual understanding and resolution of the patients'' problems on the part of nursing staff. This model focused on communication techniques, attempting to find out how the staff listen to complaints, assist the patients to express their problems and how to correctly respond the patients' questions (25). In fact, the model concentrated on training practices. Similarly, the new model proposed in the current study concentrated on training practices. However, it incorporated an extensive teaching method based on self-directed learning, where the adoption of strategies and evaluation of its outcomes are assigned to the learners themselves (11). Self-directed learning is a process in which students are engaged in identifying the pedagogical needs, setting the learning objectives, identifying the resources for learning, selecting and implementing the educational strategies, and evaluating the learning outcomes (26). The self-directed learning mainly serves to foster the searching skills (27). Self-direction in medical education has been adopted as a lifelong learning strategy (12). Parsons and Rollyson J (2012) proposed a model proving effective and efficient in teaching the behavioral techniques and skills among the nursing staff, known as evidence-based education (28). This model will initially provide a method for the presentation of pedagogical materials. Second, it will match the behavioral skills as a practical model. In their study, Sajjadnia et al. (2013) demonstrated that in-service training can be far more effective when the pedagogical materials are relevant to the actual profession of nursing (9). Moreover, Udaya et al. (2011) found that task analysis could provide an ideal technique in outlining the content of pre-service and in-service training (29). In simple terms, the above studies suggested that nursing staff training content should be practical and proportionate to their job description. Similarly, the current study incorporated practicality of learning into the new model. This characteristic was implemented through clinical performance monitoring. Clinical monitoring is a modern, on-the-way-of-achieving-recognition approach within the nursing community. In fact, it is deemed a mechanism aiming to promote the

professional knowledge and skills of nurses (30). Emamzadeh Ghasemi et al. (2004) presented a model for nursing staff training, where the syllabus was devised based on the pedagogical needs of nurses as the lessons were delivered by the nursing staff themselves (31). This model entails two features. First, the pedagogical needs are identified based on individual opinions and direct supervision. Second, direct supervision plays an effective role in educational assessment and planning. Both features have been integrated into the empowering education model so as to eliminate the defects in educational management. A model proposed by Khademolhosseini (2012) involved "professional discipline and avoidance of negligence" (32) This model is different from the one in the current study from two perspectives. First, Khademolhosseini's model has been designed as a strategy to train nursing students in academic settings. Second, the specified classic model has been designed based on educational discipline, whereas the model presented in the current study focuses on the empowerment of the staff. Askarinejad (2013) provided a self-development model, involving the creation of informal learning opportunities, tangible support of the staff and providing time, information, resources and reward strategies aiming at achieving a developmental model (33). The strategies mentioned above have been proposed generally to overcome the organizational challenges throughout the training procedure.

Conclusion

Empowering education is a model devised for in-service training of nurses that can desirably match the training programs with andragogical needs for the nursing staff. Owing to its practical nature, the empowering education facilitates the occupational tasks and improves the competency and professional skills among nurses. In this regard, poor organizational settings might hinder the successful implementation of empowering education model, which can be promoted through participation of the senior managers.

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