

Special Article

## Modern Lifelong Teaching Strategies in Nursing Education

**Kiriaki Tachtsoglou, RN, MSc**

General Hospital “G. Gennimatas” Thessaloniki, Greece

**Christos Iliadis, RN, MSc**

Private Therapeutic Center Thessaloniki, Greece

**Aikaterini Frantzana, RN, MSc**

General Hospital “Papanikolaou” Thessaloniki, Greece

**Ioanna V. Papathanasiou, PhD**

Associate Professor Department of Nursing University of Thessaly, Larissa, Greece

**Dimitrios Mantzaris**

Computational Intelligence and Health Informatics Lab, Faculty of Nursing, University of Thessaly, Volos, Greece

**Kourkouta Lambrini, PhD**

Professor of the Department of Nursing, International Hellenic University, Thessaloniki, Greece

**Correspondence:** Kourkouta Lambrini, Professor of the Department of Nursing DIPAE Thessaloniki, Greece laku1964@yahoo.gr

### Abstract

**Introduction:** Ongoing developments, combined with the requirement to provide adequate nursing staff in a working environment of often limited resources, require nurses to acquire an advanced level of knowledge, skills and competencies.

**Purpose:** This review describes the factors that contribute to the development of modern continuing education programs, the use of technology and free learning in achieving goals.

**Methodology:** The study material consisted of articles on the topic found in Greek and international online databases as Medline and the Hellenic Academic Libraries Association (HEAL-Link). The exclusion criterion for the articles was the language, except for Greek and English.

**Results:** Each nurse can seek participation in either self-education or organized educational programs, which can be offered not only from in-service resources but also from resources not related to the service. In the case of in-service education, it includes simple educational procedures such as orientation and training in the applied protocols of new employees, updating the knowledge of older employees in the changes of the applied protocols, as well as the various training programs, including lectures, courses, interactive Workshops or demonstrations in the workplace.

**Conclusions:** In the field of health, the growing knowledge base, rapid scientific developments and changes in the provision of health care make the urgent need for well-trained and qualified nurses.

**Keywords:** modern methods, lifelong learning, nursing, programs, technology.

### Introduction

The current environment of care and delivery, including academic, occupational, administrative and research settings, requires nurses to be constantly trained and educated as the world of healthcare continues evolving. (Tachtsoglou et al, 2019)

Nowadays there is an explosion of knowledge while cultural and technological changes are rapid. The needs of the present would soon be a thing of the past in many fields such as

technology, health and industry. (Pagge, 2005) Knowledge is devalued very quickly. Therefore, education must be treated as an ongoing lifelong process. (Arslanian et al., 2011) Ongoing developments, combined with the requirement to provide adequate nursing staff, in an environment of often-limited resources, require nurses to acquire a new level of knowledge, skills and competencies. Continuing education contributes to the ability of health executives to be in harmony with new developments in knowledge and the confirmation of skills and

abilities development in a continuous and evolutionary way. This contributes to the effectiveness of their action so that they can handle the new knowledge in a way that improves the quality of the services provided. (Adams, 2015)

Staff educational training refers to adults and this training is completely different from basic educational training as adults need a different approach and have specific characteristics and needs. (Karalis & Vergidis, 2004)

**This review** describes the factors that contribute to the development of modern continuing education programs, the use of technology and free learning in achieving goals

**The material of the study** consisted of articles on the topic found in Greek and international online databases as Medline and the Hellenic Academic Libraries Association (HEAL-Link). The exclusion criterion for the articles was the language, except for Greek and English.

**Planning and design of continuing nursing education programs:** Lack of staff for accurate educational planning and lack of learners' attitudes evaluation are among the educational challenges. Zargham - Boroujeni et al. (2013) also support that overloading programs with extra assignments is one of the educational challenges. (Zargham - Boroujeni et al., 2013) The increased workload of the educational institute could disrupt the planning of educational programs; as being an important repressive factor for the participation of nurses in continuing nursing education programs. (Arslanian et al., 2011)

The type of planning of continuing education activities is one of the barriers to nurses' participation in training programs. (Chong et al., 2011) Nurses' attitudes are not mostly taken into account while planning and therefore, it can be noted that the training programs implemented in the context of continuing nursing education do not meet the needs in terms of clinical practice. (Farzi et al., 2018) However, if nurses, head nurses and training supervisors are jointly involved or may be involved in some way in the training programming process, design challenges can be reduced. They should also be encouraged in this direction. (Wilson et al., 2015)

In the study by Ghasemi -Emamzade, Vanaki & Memariyan (2004) a model of continuing nursing education programming was described. The

specifications, priorities and teaching methods, duration of training and location of the program were determined at the request of staff and were based on in the clinical facilities available within the health service where they worked. The training was perfectly adapted to the nurses' needs depending on their specialty and the department in which they worked. Since all the staff was involved in the planning, it can be noted that the number of designers was higher than usual. (Ghasemi -Emamzade, Vanaki & Memariyan, 2004)

If a model of educational planning is properly designed and implemented accurately with the involvement of academic, nursing authorities and nurses, it can improve the quality of nurses' education and, ultimately, their effectiveness. (Fulmer et al., 2011) In addition, trainees' practice should be supervised after educational training to determine whether they have achieved the educational goal or not. (Latter et al., 2007)

In the study of Govranos & Newton (2014), the design of the model was based on the existing facilities of the departments in which the participating nurses worked. The model was applied, and it finally led to the promotion of the quality of education with great success, increasing the newly acquired skills of the participants and their ongoing satisfaction from the program. (Govranos & Newton, 2014)

The need for appropriate vocational training, especially clinical learning, is an important issue for nurses. It is noteworthy that appropriate continuing nursing education should include consideration of different ways of learning observed between different generations of nurses. For example the younger generation of nurses is more familiar with online education than the older ones. (Kataoka et al., 2011).

Qalehsari, Khaghanizadeh & Ebadi (2017) found in their study that educators cannot only help maintain the zeal of nurses who are willing to learn, but can also help those who are less motivated by adopting more student-centered approaches when designing lifelong learning programs. (Qalehsari, Khaghanizadeh & Ebadi, 2017)

Studies also indicate the need for nurses to participate in continuing education programs that are exciting and make learning enjoyable and engaging. (Mohamadi & Dadkha, 2005)

Moreover, a combination of both mandatory and optional attendance hours is the most appropriate way to conduct continuing nursing education programs that can address the challenge of participants' satisfaction within the duration of the program. Simultaneously, it will facilitate the personal planning of the nurses, which, as mentioned above, is a repressive factor for their participation. (Farmani & Mohamadi, 2009).

Participatory evaluation in continuing nursing education programs is also important and should be properly planned when designing educational programs. The study by Aminoroaia et al. (2014) showed that participants show a preference for periodic assessment, strict supervision of assessments, measuring the effectiveness of training and conducting knowledge tests both before and after the completion of the training program. (Aminoaia et al, 2014).

Fulmer et al (2011) suggested that an assessment be made of trainee satisfaction and its effectiveness in upgrading patient care to determine whether or not it is applicable to large numbers of nurses. (Fulmer et al, 2011).

Bloos et al . (2009) showed that it is possible to calculate the degree of achievement of the objectives by evaluating the knowledge of the participants before and after the completion of the program, so that after their implementation, their results can be evaluated. (Bloos et al, 2009)

As knowledge advances and technological developments in tools, diagnostic and therapeutic methods and procedures develop, the continuing education and training of health professionals is considered to be a key investment strategy. Continuous professional development also offers nurses the opportunity to maintain, improve and expand their knowledge, expertise and develop the personal and professional traits required throughout their professional lives.(Mccarthy & Illiffe 2013)

**Modern educational methods:** Each nurse can seek participation in either self-education or organized educational programs, which can be offered not only from in-service resources but also from resources not related to the service. (Kostaki, 2013)

In the case of in-service education, it includes simple educational procedures such as orientation and training in the applied protocols of new employees, updating the knowledge of older employees in the changes of the applied

protocols, as well as the various training programs, including lectures, courses, interactive workshops or demonstrations in the workplace. (Kanellopoulos, 2003)

Ongoing nursing education not related to the service includes participation in educational, training programs and events (e.g. conferences, seminars and presentations, which relate exclusively to the specialty or field in which the nurse works (e.g. pathology, surgery, etc.). Constructive continuing education practices that have been evaluated in terms of their effectiveness in the nursing sector are considered to be interactive educational approaches, distance education, case study, continuous seminars of various medical and nursing interest. (Taxtsoglou et al, 2019)

Research by Eslamian, Moeini, & Soleimani (2015) showed that educators should have the appropriate teaching method and skills of the relevant specialty, so that trainee nurses can relate to them and feel more satisfied with the educational training program. Participants in lifelong learning programs often report the lack of different teaching methods and the use of only lectures and presentations in many of the classrooms, which were tedious and one of the main factors in their reduced satisfaction with continuing nursing education programs. (Eslamian et al, 2015)

Farmani & Zaghimi-Mohamadi (2009) also showed that 67.4% of nurses believe that the combination of study and non-university education was the best teaching method for lifelong learning, with participatory teaching, where students participate in group discussions guided by the instructor as the next ideal way of delivering training programs. (Farmani & Zaghimi-Mohamadi, 2009) Mohamadhoseini et al. (2012) also showed that over 50% of participants identified workshops as an equally appropriate way to conduct continuing education programs. (Mohamadhoseini et al, 2012)

A regards continuing education methods, Griscti & Jacono (2006) showed that interactive laboratories have the best influence on professional effectiveness, compared to the course method and university education. (Griscti & Jacono 2006)

**Online learning:** An increasing trend in continuing nursing education programs is e-learning. E-learning (or "e-learning", "web based

training" etc.) includes tutorials and learning programs, where participants connect to a "live" e-presentation and take online courses based on an e-learning system that contains PowerPoint presentations, lectures, notes, live participation, taped workshops and tests on newly acquired knowledge. (Karaman, 2011)

E-learning offers a number of potential benefits, such as reduced additional costs (no housing, parking or transportation costs, etc.), reduced time (e.g. e-learning is a viable option for shift nurses, with family responsibilities and / or working in remote and non-urban areas. (Xing et al, 2018) Nevertheless, disadvantages may include the need for a computer with Internet access (preferably broadband) and Internet skills, including Internet browsing, document loading and electronic communication (forums). and online chat rooms) (Lera et al, 2020)

In addition, e-learning that can be accessed globally should be applicable and appropriate to the specific educational needs of nurses in each country. For example, a training program could lead to new qualifications in one country but not in another one. The nurse should also have knowledge of the language of instruction of the program. (Rouleau et al, 2017)

The cost of online courses can range from minimal to quite large, depending on the attendance time, the usability and readability of the attendance certificate and the possible upgrade that its possession can provide to the trainee nurse. The specialized online nursing education websites offer a range of courses and participants can choose from a variety of offers to meet the requirements of their vocational training and upgrading. (Lera et al, 2020)

Irving, Irving & Sutherland (2007) highlighted some of the issues faced by nurses seeking to upgrade their skills and knowledge, including the fact that many nurses, especially those working in non-urban or remote areas, find it difficult to attend conventional education programs that require the physical presence of the trainee due to the observed understaffing in their work department and geographical isolation. (Irving et al, 2007) They conclude that these nursing professionals need to explore other options, and therefore consider e-learning, which offers many benefits, including flexibility and accessibility as being the ideal choice for constantly improving their skills and acquiring new knowledge in favor

of their professional upgrade. (Tachtsoglou et al, 2020)

**Free learning programs:** Free tuition learning programs usually include workshops, seminars, conferences, lectures and compulsory education offered on-site or off-site at designated teaching or conference centers (locally, nationally and internationally). The cost of these programs can be covered by state or international resources (e.g. European subsidized seminars through the NSRF packages) and the duration of attendance can range from a few hours to a year. (Doe et al, 2018) Additional costs include travel, accommodation, the free hours which are usually borne by the interested nurses, although in some cases they are covered or subsidized by service resources or by companies active in the field (e.g. pharmaceutical companies, etc.)

**Conclusion:** In modern, ever-evolving societies, information, knowledge and skilled personnel are key factors to growth and development. Therefore, significant efforts are being made to disseminate knowledge and skills by organizing the appropriate framework, by completing the preparedness of trainers and by motivating employees to participate in continuing education programs. (Tachtsoglou et al, 2019)

In the field of health, the growing knowledge base, rapid scientific developments and changes in the provision of health care creates the urgent need for well-prepared and trained nurses. (Lera et al, 2020)

Specifically, nurses' continuing education, adapted to modern methods and techniques, shows investment and faith in human resources so that nurses can use their physical or educational abilities and skills better, and ultimately, they could offer better services to patients. (Lera et al, 2020)

## References

- Adams, N. E. (2015). Bloom's taxonomy of cognitive learning objectives. *Journal of the Medical Library Association*. JMLA, 103(3), 152-3.
- Aminoroaia, M., Mashhadi, M., Maracy, M. R., Attari, A. (2014). Efficacy of purposeful educational workshop on nursing care. *Journal of education and health promotion*, 3, 82. doi:10.4103/2277-9531.139248
- Arslanian-Engoren, C., Sullivan, B.J., Struble, L (2011). Revisioning a clinical nurse specialist curriculum in 3 specialty tracks. *Clin Nurse Spec*. 2011, 25(5), 253-9.

- Bloos, F., Müller, S., Harz A., Gugel, M., Geil, D., Egerland, K., Reinhart, K., Marx, G. (2009). Effects of staff training on the care of mechanically ventilated patients: a prospective cohort study. *Br J Anaesth*, 103(2), 232-7.
- Chong, M.C., Sellick, K., Francis, K., Abdullah, K.L. (2011). What influences Malaysian nurses to participate in continuing professional education activities? *Asian Nurs Res (Korean Soc Nurs Sci)*, 5(1), 38-47. doi: 10.1016/S1976-1317(11)60012-1. Epub 2011 Apr 5.
- Doe, J. (2018, July 26). Adult Education and Training Funding. Available in: [https://eacea.ec.europa.eu/national-policies/eurydice/content/adult-education-and-training-funding-1\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/adult-education-and-training-funding-1_en)
- Eslamian, J., Moeini, M., Soleimani, M. (2015). Challenges in nursing continuing education: A qualitative study. *Iranian journal of nursing and midwifery research*, 20(3), 378-86.
- Farmani, P., Mohamadi, Z. (2009). Point of view nurses in tamin ejtemai hospital in Karaj and Shahriyar related to continues nursing education. *Iran J Educ Med Sci*, 11, 326–38.
- Farzi, S., Shahriari, M., & Farzi, S. (2018). Exploring the challenges of clinical education in nursing and strategies to improve it: A qualitative study. *Journal of education and health promotion*, 7, 115. doi:10.4103/jehp.jehp\_169\_17
- Fulmer, T., Cathcart, E., Glassman, K., Budin, W., Naegle, M., Devanter, N. V. (2011). The attending nurse: an evolving model for integrating nursing education and practice. *The Open Nursing Journal*, 5, 9–13. doi:10.2174/1874434601105010009
- Ghasemi –Emamzade, H., Vanaki, Z., Memariyan, Z. (2004). The effect of use nursing continues education pattern on quality of nursing care in surgery unit. *Iran J Educ Med Sci*, 4, 13–21.
- Govranos, M., Newton, J.M. (2014). Exploring ward nurses' perceptions of continuing education in clinical settings. *Nurse Educ Today*, 34(4), 655-60.
- Griscti, O., Jacono, J., (2006). Effectiveness of continuing education programmes in nursing: literature review. *J Adv Nurs*, 55(4), 449-56.
- Irving, M., Irving, R., Sutherland, S. (2007). E-learning for cancer nurse education. *Nurs Times*, 103(9), 30–31.
- Kanellopoulos, Ch., (2003) *Personnel Management*, Athens
- Karalis, T. Vergidis, D. (2004). Lifelong education in Greece. recent developments and current trends. *International Journal of Lifelong Education*, 23(2), 179–189.
- Karaman, S. (2011). Nurses' perceptions of online continuing education. *BMC Medical Education*, 11, 86.
- Kataoka-Yahiro, M.R., Richardson, K., Mobley, J. (2011). Benefits, barriers, and intentions/desired of nurses related to distance learning in rural island communities. *J Contin Educ Nurs*, 42(3), 127–135.
- Kostaki, K. (2013). Evaluation of training needs of nurses. The case of the Kozani hospital. (Bachelor's thesis). AP Cyprus
- Latter, S., Maben, J., Myall, M., Young, A. (2007). Evaluating nurse prescribers' education and continuing professional development for independent prescribing practice: findings from a national survey in England. *Nurse Educ Today*, 27(7), 685-96.
- Lera, M., Tachtsoglou, K., Iliadis, Ch., Frantzana, A., Kourkouta, L. (2020). Nurses' Attitudes towards Lifelong Learning via New Technologies. *Asian / Pacific Island Nursing Journal* Asian / Pacific Island Nursing Journal, 5(2), 89 – 102.
- Lera, M., Tachtsoglou, K., Iliadis, Ch., Frantzana, A., Kourkouta, L., (2020). The Use of New Information and Communication Technologies in Nursing Practice. *EAS Journal of Nursing and Midwifery*, 2(1), 40 – 44.
- Mccarthy, C., Illiffe, Jill. (2013). Continuing Professional Development for Nurses and Midwives: A Toolkit for Developing a National CPD Framework.
- Mohamadhoseini, S., Karimi, Z., Momeni, E., Abasi, A., Sadat, S. (2012). Nurses point of view about continues education in kohkiloye and boyerahmad hospital. *Med J Hormozgan*. 16, 73–80.
- Mohamadi, A., Dadkha, B., (2005). Assessment of continues education process nurse point of view in Ardebil Hospital. *J Ardabil Univ Med Sci*. 5:271–4
- Page, T. (2005). Formal, non-formal and informal education in Greece. Athens.
- Qalehsari, M.Q., Khaghanizadeh, M., Ebadi, A. (2017). Lifelong learning strategies in nursing: A systematic review. *Electronic physician* 9(10), 5541-5550.
- Rouleau, G., Gagnon, M. P., Côté, J., Payne-Gagnon, J., Hudson, E., Bouix-Picasso, J., Dubois, C. A. (2017). Effects of e-learning in a continuing education context on nursing care: a review of systematic qualitative, quantitative and mixed studies reviews (protocol). *BMJ open*, 7(10), e018441. doi:10.1136/bmjopen-2017-018441
- Tachtsoglou, K., Lera, M., Iliadis, Ch., Frantzana, A., Kourkouta, L. (2019). Continuing Nursing Education. *Nur Primary Care*, 3(5), 1-5.
- Tachtsoglou, K., Zioga, O., Iliadis, Ch., Frantzana, A., Kourkouta, L., (2020). Factors Affecting Nurses' Lifelong Learning. *International Health Administration and Education (Sanitas Magisterium)*, 6(2), 1-9.
- Tachtsoglou, K., Lera, M., Iliadis, Ch., Frantzana, A., Kourkouta, L., (2019). Evaluation of continuous nursing education. *Prog Health Sci*, 9(1), 37 – 42.
- Wilson, R., Godfrey, C.M., Sears, K., Medves, J., Ross-White, A., Lambert, N. (2015). Exploring conceptual and theoretical frameworks for nurse

- practitioner education: a scoping review protocol. JBI Database System Rev Implement Rep, 13(10), 146-55.
- Xing, W., Ao, L., Xiao, H., Cheng, L., Liang, Y., Wang, J. (2018). Nurses' Attitudes toward, and Needs for Online Learning: Differences between Rural and Urban Hospitals in Shanghai, East China. *International journal of environmental research and public health*, 15(7), 1495. doi:10.3390/ijerph15071495
- Zargham-Boroujeni, A., Mahdavi-Lenji, Z., Hasanpour, M., Sadeghnia, A. (2013). Discovering the barriers to spread the usage of peripherally inserted central venous catheters in the neonatal intensive care units: A qualitative research. *Iranian Journal of Nursing and Midwifery Research*, 18(4), 259–265.