

Original Article

## Life Long Learning Programmes in the Nursing Context and Nurses' Satisfaction

**Kiriaki Taxtsoglou, RN, MSc**

General Hospital "G. Gennimatas" Thessaloniki. Greece

**Maria Lera, RN, MSc**

General Hospital "Ippokratio" Thessaloniki. Greece

**Christos Iliadis, RN**

Private Diagnostic Health Center of Thessaloniki. Greece

**Aikaterini Frantzana, RN, MSc**

General Hospital "Papanikolaou" Thessaloniki. Greece

**Petros Ouzounakis, RN**

University General Hospital of Alexandroupoli. Greece

**Lambrini Kourkouta, PhD**

Professor. Nursing Department. International University of Greece. Thessaloniki. Greece

**Correspondence:** Kourkouta Lambrini. Professor. Nursing Department. International University of Greece. Thessaloniki. Greece. P.O BOX 141. GR - 574 00 Thessaloniki GREECE. Email: laku1964@yahoo.gr

### Abstract

**Introduction:** Continuing vocational education and training includes educational activities that usually follow the completion of a more formal structured vocational education leading to the acquisition of a professional qualification.

**Purpose:** This research manuscript is to delve into the degree of nursing satisfaction regarding nurses working in state hospitals in the Municipality of Thessaloniki. Their degree of satisfaction arises from their participation in Lifelong Learning programs.

**Methodology:** The study was conducted from January to March 2019. The sample of the study consisted of 137 participants (n = 137). A questionnaire with a total of 20 questions was used as a research tool. SPSS 23 statistical software platform was used for the statistical analysis.

**Results:** The detailed analysis demonstrates a strong desire amongst participants to participate in continuing nursing education programs. Barriers to participation in these programs include staff shortages and concerns that continuing nursing education will interfere with time-off work. **Conclusions:** Participating in continuing nursing education programs helps improve nursing care. reduce costs, increase productivity, minimize accidents and medical and pharmaceutical errors and reduce work-related stress.

**Keywords:** lifelong education, continuing nursing, education, nurses, satisfaction.

### Introduction

Continuing Vocational Education and training is an umbrella term that includes educational activities that usually follow the completion of a more formal structured vocational training leading to a qualification. Continuing Vocational Education and Training programs are usually designed to retain or enhance relevant professional knowledge or technical skills (Morton-Rias. 2016). Continuing Education

and Lifelong Learning are essential elements of the practice and offer for those individuals working in a sector that affects public health and well-being. That is why continuing nursing education (CNE) is required as a part of the process of professional development and improvement of the health services offered (Asser. 2017; Tactsoglou et al. 2019). Staff training concerns adults while the structure of these training programs is quite different from

the conventional training programs. as adult participants need tailor-made programs and approaches to serve their needs and meet their professional and educational needs (Karalis. 2003; Taxtsoglou et all. 2019). In many countries, continuing vocational education and training is considered a fundamental ethical obligation for all healthcare workers to maintain the current scientifically documented knowledge to ensure the proper provision of modern quality health services (Bertulis. 2008; Drey et all. 2009). On average, nurses spend about 20-40 hours per year on educational programs or activities worldwide. It is likely to be more hours in developing countries. although neither nurses nor health organizations and lifelong learning authorities are satisfied with the results of the training and the way its results evolve (Kelly-Heidenthal. 2003). Internationally, continuing nursing education has begun to flourish in nursing science since 1950, where sporadic informational and post-graduate seminars and programs have been offered to public hospital nurses. The 1980s and 1990s were the first decades when the right bases were set for training systems for nursing professionals who were mainly active professionals and were offered follow-up certificates thereby improving their professional progress (Levett. 2012; Lera et all. 2019). Most countries provide continuing education programs to nursing staff. Which, according to research results, has a positive impact on healthcare (Eley et all.. 2018). In Greece, continuing nursing education, and especially since the late 1980s and early 1990s, has been introduced and developed into a subject of interest to both Greek nursing school graduates and other health professionals. It is now the largest participant rate in continuing education (Andrioti. 2011).

**The purpose** of this research study is to investigate the degree of Nurses' satisfaction who work in state hospitals in the Municipality of Thessaloniki with their participation in Lifelong Learning programs. as well as the parameters that shape the degree of Nurses' satisfaction with their participation in nursing lifelong learning programs.

### Material and Methods

The research study was conducted from January to March 2019. The sample of the study consisted of 137 participants (n = 137) from

three state hospitals in Thessaloniki that met the following inclusion criteria:

- The participants were 25 - 60 years old
- They only worked in state hospitals
- Their educational level was secondary or tertiary
- They had at least 1 year of work experience and a maximum of 30 years.

The research tool used was a questionnaire consisting of 20 questions, of which 7 questions were related to the demographic characteristics of the participants and the remaining 13 were questions related to the degree of nurses' satisfaction regarding their participation in lifelong learning programs and the factors that influenced them. It is a questionnaire consisting closed-ended questions which has the main advantage that it can be completed in a short period of time and the collected data is easily editable (Boynnton. 2004)

SPSS 23 statistical tool was used for statistical analysis, which analyzed the demographic information of the sample and then the answers of the participants derived from the questionnaire. The statistical analysis following was adjusted for each research parameter which was as follows:

- \* Degree of satisfaction by age group
- \* Degree of satisfaction by gender
- \* Degree of satisfaction by years of work experience
- \* Degree of satisfaction by the marital status of the participant
- \* Degree of satisfaction by the level of the participant's study

These tests were initially tested to determine whether or not the ordinal variables expressing satisfaction were appropriately distributed. It is found that none of the variables followed the normal distribution ( $p < 0.001$ ) through the control (One-Sample Kolmogorov-Smirnov Test). Thus. non-parametric tests were used to delve into the variables. The statistical significance level of controls is 95% ( $p < 0.05$ ).

### Results

The sample reportedly consisted of 137 participants. 11 of whom did not report their gender (8% of the total). 35 were male (25.5% of the total and 27.8% of the valid responses) and

91 are women (66.4% of total and 72.2% of valid responses). Regarding age, the sample of participants was divided into four age groups. Of these, the most numerous group is nurses aged 45-55 (61 participants, 44.5% of the sample), followed by age group 35-45 (48 persons, 35%), followed by nurses 25-35 years (20 participants, 14.6%) and 55-65 years old (8 people, 5.8%). Regarding the marital status of the participants, most responded that they were married (80 participants, 60.2% of the answers), 39 replied that they were unmarried (29.3%), 10 that they were divorced (7.5%) and 4 (3%) are widows or widowers, while 4 did not answer concerning their marital status. Concerning their educational level, the majority of the participants (88 persons, 64.2%) stated that they are graduates of Technical and Vocational Education, 41 (29.9%) of Secondary Education and 8 persons (5.8%) of University Education. Concerning postgraduate studies, 57 (42.2% of the respondents) answered that they did not have any further education, 33 (24.4%) of the participants answered that they have a Nursing Degree and 33 participants that they have a postgraduate degree. Also 12 people (8.9%) answered that they have a second degree, while 2 did not answer this question at all. The participants of the research (93.2%) are mostly nurses and 9 (6.8%) are head nurses. Regarding nursing experience, it appears that the most crowded groups are those with more years of service: 52 participants (38%) have over 20 years of service, 41 people (29.9%) have 16-20 years of service. Regarding the question *"Do you agree that Lifelong Learning Nurses should be mandatory for health professionals?"*, the majority of participants agreed very or very much (80.9%) on the mandatory programs: 62 people strongly agree (45.6%) and 35 s agree very much (35.3%) (Table 1). The question *"What do you think would help the need for mandatory Lifelong Learning Nursing Programmes?"* is a multiple-answer question, meaning participants could provide more than one answer, which makes the number of responses greater than the number of participants. The answer chosen by most is 'Nursing Upgrade' with 83 answers representing 53.2% of the answers and given by 61% of the sample. (Table 2). As regards the question *"When was the last time you participated in a Lifelong Learning Program?"*, 19 participants answered less than 1 year (13.9%), 12 answered between 1 and 2 years (8.8%), 20 replied that

they had passed more than two years after participating in a Lifelong Learning program (14.6%), 16 participants answered more than 3 years (11.7%) and 35 participants answered more than 5 years (25.5%), 35 participants (25.5%) did not answer the question, indicating that they did not participate in Lifelong Learning Programs. (Table 3) Regarding the question *"Do you feel the desire to be further trained and educated either in the field you are currently working in or in a different one"*, the majority of participants answered positively: 212 people, 88.3% of the sample answered "yes". While the question *"Choose the Lifelong Nursing Learning Programs you participate in according to your learning needs"*, most (65 participants, 50% of the answers) sometimes answered, 47 people (36.2 of the answers answered always and 18 (13.8%) responded never (Table 4). Question 15 is a set of questions that delves into the extent to which participating nurses believe that they contribute to a range of factors in acquiring knowledge and skills in their work. It is found that the majority of respondents think that this information is very or very helpful (except for the written exams). The dominant answer for printed material - textbooks is "Very" (59 replies, 45.4%), for Magazine Articles the predominant answer is also "Very" (49 answers, 38.3%). for Electronic Technology 59 (43.7%) answered "Very" and 52 (38.5%) answered "Too much", for the written exams the predominant answer is "moderate" (39 people, 33.3%), for the written exams 40 people (33.9%) answered "Very" and for Teamwork the dominant answer was "Very" (46 people, 37.4%). (Chart 1) Concerning the question *"Is your participation in Lifelong Learning Nursing Programs your personal choice or mandatory by your employer?"* the predominant response was that the choice was personal (78 people, 59.5% of the answers), while 12 people (9.2%) answered the employer chose it and 41 people (31.3%) answered both. (Table 5). As regards question 17 *"What are your motivations for participating in Nursing Lifelong Learning Programs?"* (multiple answers), the answer given by most participants is "Professional interest / personal benefits and occupational safety" (70.1% of the sample) followed by "Professional Development-Evolution" (69.3% of the sample), followed by "Money" (40.1%), followed by "Credits" (37.2%), followed by "Attendance Certificate / participation "(34.3%);" Educational leave

"(33.6%). (Chart 2). Regarding question 18 "What training opportunities do you have within your working surroundings?", the most common answers are "Seminars of general health interest" (63.7% of the sample). "Attendance through

conferences" (63% of the sample). "Training on personal initiative" (54%). Also, 40% of the sample replied 'Seminar in their field' and 13.3% 'Service Library'. (Chart 3).

**Table 1. Do you agree that Nursing Lifelong Learning Programs should be mandatory for healthcare professionals?**

|                | <b>N</b> | <b>%</b> | <b>% on the responses</b> |
|----------------|----------|----------|---------------------------|
| Not at all     | 4        | 2.9      | 2.9                       |
| A little       | 4        | 2.9      | 2.9                       |
| Moderate       | 18       | 13.1     | 13.2                      |
| Agree          | 48       | 35.0     | 35.3                      |
| Strongly agree | 62       | 45.3     | 45.6                      |
| Total          | 136      | 99.3     | 100.0                     |
| No answer      | 1        | .7       |                           |
| Total          | 137      | 100.0    |                           |

**Table 2. What would help the need for compulsory Lifelong Learning Programs?**

| <i>What do you think would help the need for compulsory Lifelong Learning Programs?</i> | <b>N</b> | <b>Answers %</b> | <b>% on the sample</b> |
|---|----------|------------------|------------------------|
| Technological development   | 15       | 9.6%             | 11.0%                  |
| Upgrading of the nursing profession   | 83       | 53.2%            | 61.0%                  |
| Need to improve holistic patient care   | 51       | 32.7%            | 37.5%                  |
| Another factor  | 7        | 4.5%             | 5.1%                   |
| Total   | 156      | 100.0%           | 114.7%                 |

**Table 3. When was the last time you participated in a Lifelong Learning Program for Nurses?**

|           | <b>N</b> | <b>%</b> | <b>% on the responses</b> |
|-----------|----------|----------|---------------------------|
| <1 year   | 19       | 13.9     | 18.6                      |
| > 1 year  | 12       | 8.8      | 11.8                      |
| > 2 years | 20       | 14.6     | 19.6                      |
| > 3 years | 16       | 11.7     | 15.7                      |
| > 5 years | 35       | 25.5     | 34.3                      |
| Total     | 102      | 74.5     | 100.0                     |
| No answer |          |          |                           |
| Total     |          |          |                           |

**Table 4. Select the Lifelong Nursing Learning Programs you participate in according to your learning needs**

|           | <b>N</b> | <b>%</b> | <b>% on the responses</b> |
|-----------|----------|----------|---------------------------|
| Always    | 47       | 34.3     | 36.2                      |
| Sometimes | 65       | 47.4     | 50.0                      |
| Never     | 18       | 13.1     | 13.8                      |
| Total     | 130      | 94.9     | 100.0                     |
| No answer |          | 5.1      |                           |
| Total     |          | 100.0    |                           |
| Always    | 47       | 34.3     | 36.2                      |

**Table 5. Your participation in Lifelong Learning Nursing Programs is your personal choice or mandatory by your employer?**

|                           | <b>N</b> | <b>%</b> | <b>% on the responses</b> |
|---------------------------|----------|----------|---------------------------|
| Mainly Personal           | 78       | 56.9     | 59.5                      |
| Mandatory by the employer | 12       | 8.8      | 9.2                       |
| Both                      | 41       | 29.9     | 31.3                      |
| Total                     | 131      | 95.6     | 100.0                     |
| No answer                 |          | 4.4      |                           |
| Total                     |          | 100.0    |                           |

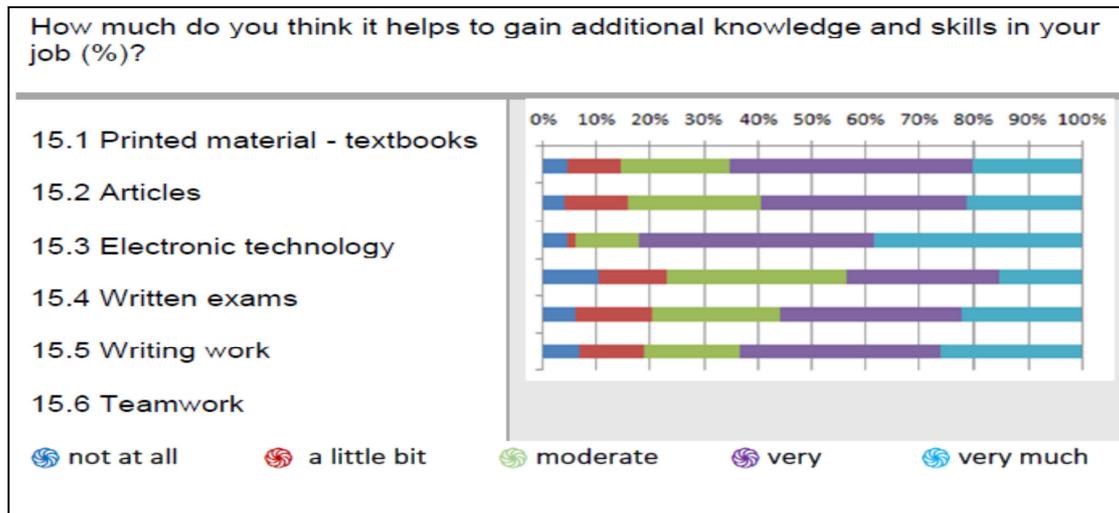
**Table 6. Degree of Satisfaction of Educational Needs arising from Lifelong Learning Programs or Conferences**

|              | <b>N</b> | <b>%</b> | <b>% on the responses</b> |
|--------------|----------|----------|---------------------------|
| Low          | 20       | 14.6     | 15.6                      |
| Satisfactory | 26       | 19.0     | 20.3                      |
| Good         | 46       | 33.6     | 35.9                      |
| Very Good    | 32       | 23.4     | 25.0                      |
| Excellent    | 4        | 2.9      | 3.1                       |
| Total        | 128      | 93.4     | 100.0                     |
| No Answer    |          | 6.6      |                           |
| Total        |          | 100.0    |                           |

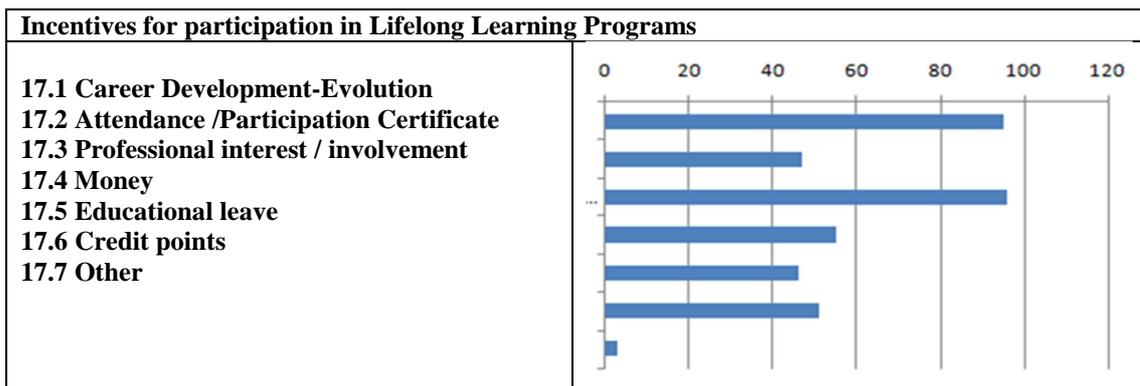
**Table 7. Mann-Whitney U test for gender impact assessment on nurses' satisfaction**

|   | <b>Gender</b> | <b>Mean Rank</b> | <b>Sum of Ranks</b> | <b>Mann-Whitney U</b> | <b>Z</b> | <b>p</b> |
|---|---------------|------------------|---------------------|-----------------------|----------|----------|
| Note the Educational Satisfaction Degree from Lifelong Learning Programs or Conferences | Man           | 68.05            | 2245.50             | 1087.500              | -1.883   | .060     |
|   | Woman         | 55.45            | 4657.50             |                       |          |          |
| Satisfaction Degree [Educational Material]  | Man           | 79.91            | 2637.00             | 894.000               | -3.475   | .001     |
|   | Woman         | 55.43            | 4989.00             |                       |          |          |
| Satisfaction Degree [Teaching staff]  | Man           | 74.21            | 2449.00             | 1016.000              | -2.618   | .009     |
|   | Woman         | 56.05            | 4932.00             |                       |          |          |
| Satisfaction Degree [Facilities]  | Man           | 74.35            | 2453.50             | 978.500               | -2.769   | .006     |
|   | Woman         | 55.25            | 4806.50             |                       |          |          |
| Satisfaction Degree [Innovation of learning]  | Man           | 77.99            | 2651.50             | 901.500               | -3.442   | .001     |
|   | Woman         | 54.36            | 4729.50             |                       |          |          |
| Satisfaction Degree [workplace surroundings]  | Man           | 66.63            | 2265.50             | 1321.500              | -1.026   | .305     |
|   | Woman         | 59.52            | 5237.50             |                       |          |          |
| Satisfaction Degree [Ease of Understanding Learning Objective]                          | Man           | 73.84            | 2510.50             | 1008.500              | -2.729   | .006     |
|   | Woman         | 55.23            | 4749.50             |                       |          |          |
| Satisfaction Degree [Duration of training]  | Man           | 72.02            | 2376.50             | 1055.500              | -2.321   | .020     |
|   | Woman         | 56.13            | 4883.50             |                       |          |          |
| Satisfaction Degree [Cost of training program]  | Man           | 81.06            | 2675.00             | 757.000               | -4.129   | .000     |
|   | Woman         | 52.70            | 4585.00             |                       |          |          |

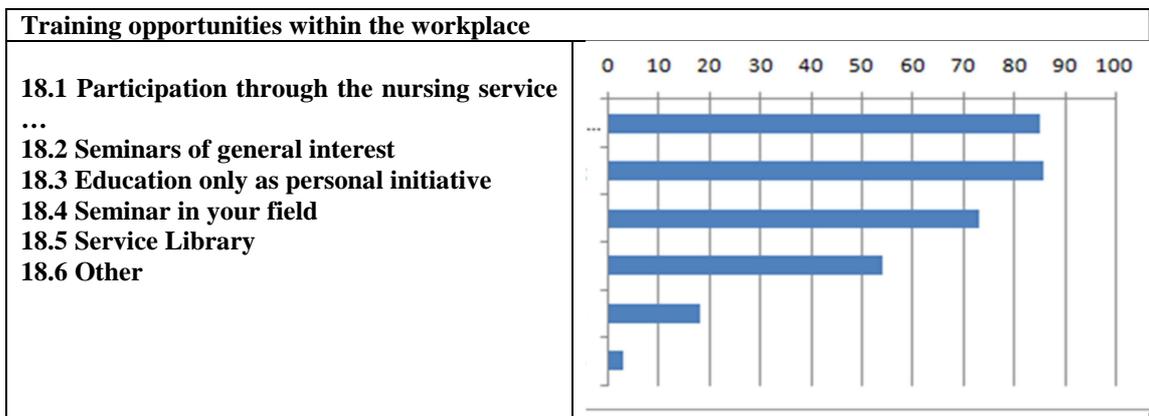
**Diagram 1. How much do you think it helps to gain additional knowledge and skills in your job?**

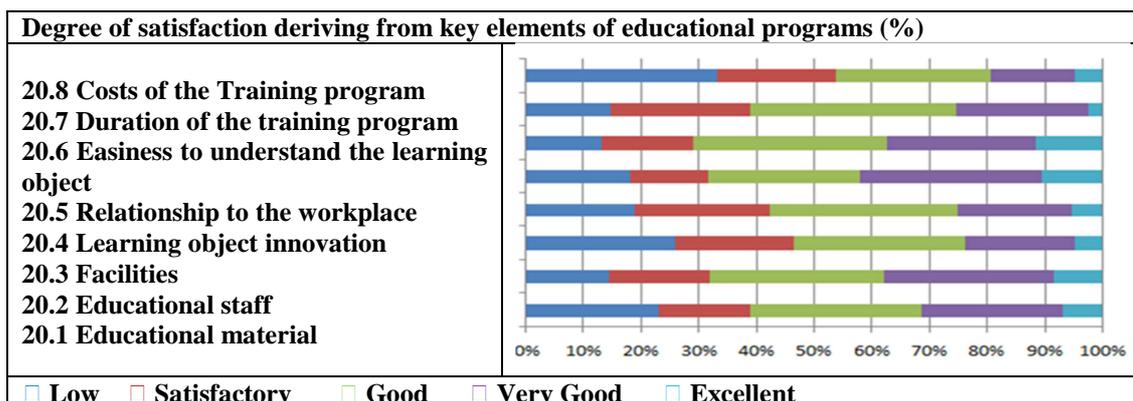


**Diagram 2. Incentives for participation in Lifelong Learning Programs**



**Diagram 3. Training opportunities within the workplace**



**Diagram 4. Degree of satisfaction deriving from key elements of educational programs**

The satisfaction score was good to very good according to the answers to the question "Mark your Satisfaction Rate arising from Lifelong Learning Programs or conferences you have attended" Specifically, 20 people (14.6% of the sample) answered "Low", 26 people (19% of the sample) answered "Satisfactory", 46 people (33.6% of the sample) answered "Good", 32 people (23.4% answered "Very Good" and 4 people (2.9%) answered "Excellent", while 4 people did not answer this question. (Table 6).

The last set of questions (20) concerns the degree to which nurses are satisfied with a number of components of Lifelong Learning programs. These are Training Material, Training Staff and facilities, Innovation of the Learning Object, Relevance to the Workplace, Ease of Understanding of the Learning Object, Duration of the Curriculum and Cost of the Curriculum. From the answers presented in Table 16 and the following Chart 16, it is found that the dominant answers for the satisfaction level are: 40 for the educational material (29.9%) answered good, for the teaching staff also 40 participants (29.9%) answered good and 39 (29.5%) very good, for facilities 39 people (29.8%) answered good and 34 (26%) answered low, for Learning Object Innovation 43 participants (32.6%) responded good. Regarding to workplace, 42 participants (31.6%) answered very good and 35 people (26.3%) good while for ease of learning the subject 44 participants (33.6%) answered good and 34 people (26%) very good but 47 (35.9%) responded Good to the duration of the training program. while for the training cost the dominant response was Low (43 persons. 33.1%). In summary, both the table and the diagram show that the highest degree of satisfaction is expressed in relation to the workplace, followed by the teaching staff and the ease of understanding the

learning object. (Chart 4). **Correlations:** Thereafter, it is examined whether participants' characteristics such as gender, age and years of service differentiate satisfaction levels arising from satisfaction of their Educational Needs. from Lifelong Learning Programs or conferences and from the various key elements of the educational program.

**Gender:** Mann-Whitney U test was conducted to examine whether gender differentiates outcomes for nurses' satisfaction. Their results are presented in Table 7.

Accordingly, participants' overall satisfaction of Lifelong Learning Needs Programs was assessed; as a result, general satisfaction did not differ statistically significantly from lifelong learning programs or conferences ( $U = 1087.500$ ,  $p = 0.06 > 0.05$ ). Furthermore, it was found that there was no significant difference between men and women in terms of job satisfaction ( $U = 1321.500$ ,  $p = 0.305$ ), while concerning other components, men were more satisfied than women ( $p < 0.05$ ). Specifically, this is valid for the educational material,  $p = 0.001$ , for educational staff  $p = 0.009$ , for facilities  $p = 0.006$ , for Learning Object Innovation  $p = 0.001$ , for Learning Objective Ease  $p = 0.006$ , for Training Duration  $p = 0.020$  and for Training Cost  $p = 0.000$ .

**Age:** A non-parametric Kruskal Wallis test was performed to discover whether age differentiates satisfaction. It was found that age did not differentiate satisfaction for any of the parameters ( $p > 0.05$  in all cases).

**Work experience:** Similarly, previous service was considered as a factor that can differentiate between the level of nurses' satisfaction from the elements of educational programs and the degree of Satisfaction of their Educational Needs. The results of the non-parametric Kruskal Wallis test

show that prior experience in the field, as well as age did not affect satisfaction ( $p > 0.05$  in all cases).

**Marital status:** Similarly, marital status was considered as a factor that could differentiate nurses' satisfaction levels from the three components of educational programs and the degree of Satisfaction of their Educational Needs. The results of non-parametric Kruskal Wallis test show that Family Status does not affect the degree of satisfaction ( $p > 0.05$  in all cases).

**Level of education:** Similarly, the level of study was considered as a factor that can differentiate the level of satisfaction of nurses amongst the elements of educational programs and the degree of Satisfaction of their Educational Needs. The results of the non-parametric Kruskal Wallis test show that the level of study differs from many satisfaction factors. Specifically, the degree of Satisfaction of Educational Needs with Lifelong Learning Programs or conferences did not differ ( $p = 0.355$ ). Also, the degree of satisfaction with the teaching staff, the Facilities, the Innovation of the learning object and the Relationship with the professional area are not different ( $p > 0.05$ ). Antithetically, Educational Material, Ease of Learning, Duration of Training, and Training Cost vary the answers ( $p > 0.05$ ) with more satisfaction being expressed by postgraduate, post-graduate and post-secondary education participants.

### Discussion

The degree of satisfaction of educational needs arising from lifelong learning programs or conferences appears to be good to very good according to the results of the present study. Moreover, the highest degree of satisfaction was expressed with the relevance of the training programs to the professional environment, the ease of understanding of the subject of study and the teaching staff as regards the degree of satisfaction with the individual components of the training programs. Antithetically, the lowest score was expressed concerning the cost of the programs, facilities and innovation of the learning object. Moderate satisfaction was also expressed for the teaching staff, the duration of the training program and the educational material. The demographic factors under consideration, namely gender, age, work experience, marital status and level of education appear to influence nurses' satisfaction regarding continuing nursing education or lifelong learning programs as follows:

⊕ **Gender Impact:** Gender was not found to significantly affect the overall satisfaction of participants' Educational Needs with

Lifelong Learning Programs. For the rest factors (Training Material, Training Staff, Facilities, Learning Object Innovation, Ease of Understanding Learning, Duration of Training, Cost of Training Program), men expressed a higher degree of satisfaction than women.

⊕ **Age:** Age does not affect the level of satisfaction deriving from educational programs.

⊕ **Work experience:** Work experience does not affect the level of satisfaction deriving from educational programs.

⊕ **Marital status:** It does not affect the level of satisfaction deriving from educational programs.

⊕ **Level of Study:** As regards the elements of Educational Material, Ease of Learning, Duration of the Curriculum and the Cost of the Curriculum, the answers vary: university graduates express higher levels of satisfaction; then, technical vocational education graduates come while secondary education graduates show the lowest levels of satisfaction.

The broader analysis of the benefits of continuing nursing education demonstrates a strong yearning amongst participants to improve patient health care. The patients' benefits for patients arising from the anticipated changes in their professional behavior have revealed that they focus on changing clinical practices. Nevertheless, this desire also revealed a disappointment on the part of some nurses of the perceived barriers that participants expect to impede the application of newly acquired knowledge while practicing their professional duties in the workplace. The most important factors that prevented nurses from participating in continuing nursing education were work commitments, family responsibilities, time constraints, continuing nursing education planning activities and course costs. The major deterrent that prevents nurses from participating in continuing nursing education was shift work since night shift nurses are more likely to encounter problems in attendance. Therefore, the consequences of staff shortage may affect their ability to attend continuing nursing education during working hours. Despite the unfavorable rate of nurses' participation in lifelong learning programs in this study, nurses scored high on motivation factors, which indicates that low participation rates are not due to personal adherence and nurses' unwillingness to participate but it appears to be owing to other restrictive factors. Nurses particularly assessed factors such as knowledge acquisition, improvement of their practical skills and

communication through this study that would enable them to provide patients with qualitative health care. The results of the present study are similar to those obtained from international literature. According to the results of continuing nursing education, incentives are sometimes necessary to deal with restrictive factors such as the nurse's older age, inexperience at work, lack of financial resources and technical support. Barriers to continuing nursing education programs include staff shortages and worries that continuing nursing education will interfere with out-of-work time although lack of financial resources is the most common obstacle for nurses to participate in continuing nursing education programs (Summers. 2015; Pena. 2006). Reviewing studies concerning nurses' views was concluded that the lack of the opportunity to apply for educational leave to attend the program is a major obstacle to nurses' participation in continuing nursing education (Schweitzer. 2010; Kamariannaki et al. 2017). Several other studies show that the challenges of continuing nursing education are as follows: Compulsory education and lack of motivation for learning at a sufficiently large proportion of nurses. Furthermore, the large number of class attendees, the limitation in the clinical application of newly acquired knowledge and skills, a reduction in the education budget, a reduction in personal financial resources and an excessive labor burden that lead to a lack of sufficient time to participate in lifelong learning programs (Viljoen et al. 2016; Fitzgerald et al. 2012; Chong et al. 2011). Aside from these, the mundane type of continuing education program design, the lack of satisfaction due to time limits, timing of past educational programs, the lack of co-ordination regarding educational needs, skills acquisition and training needs (Eslamian et al. 2015). Other limitations include the time required to learn to use new technologies, the difficulty of accepting updated changes and the use of new technologies, and the depersonalization of nursing care, which can cause difficulties especially to older nurses (Kamariannaki et al. 2017).

**Conclusions:** The issues mentioned in the literature and in the present study as regards factors affecting nurses' satisfaction through their participation in lifelong learning and continuing educational programs include participants' demographics, Beliefs, attitudes motivational factors and the educational opportunities offered (Lera et al. 2020). Motivation and individual professional behavior have a significant impact on nurses' participation in continuing nursing education programs. All in all, the findings of the study reveal no correlation amongst demographic

factors, the number of underage children or dependent family members and years of experience in nursing perceptions related to continuing education programs. Developing training programs based on real needs following motivational research is considered essential. Participation in continuing education programs helps improve nursing care; it may reduce costs, increase productivity, minimize accidents and medical and pharmaceutical errors and reduce work stress. Career development, progress and safety are required as a means of promoting one's health and developing a nursing culture by nurses. Lack of both information and encouragement from the administration, lack of staff, high costs, family obligations, difficulty in accessing geographical distances and lack of time are obstacles to nurses' participation in continuing education programs.

## References

- Andrioti D. Assessment of the education and training needs of human health resources in our country in the context of the national strategic development plan. *Greek Journal of Nursing Science*. 2011
- Bertulis R. & Cheeseborough (2008). The Royal College of Nursing's information needs survey of nurses and health professionals. *Health Info Libr Journal*. 25(3):186-97.
- Boynton P.M. & Greenhalgh T. (2004). Selecting, designing, and developing your questionnaire. *BMJ (Clinical research ed.)*. 328(7451). 1312-5.
- Chong MC, Sellick K., Francis K. & Abdullah KL. (2011). What influences Malaysian nurses to participate in continuing professional education activities? *Asian Nurs Res (Korean Soc Nurs Sci)*. 5(1):38-47.
- Drey N., Gould D. & Allan T. (2009). The relationship between continuing professional education and commitment to nursing. *Nurse Educ Today*. 29(7):740-5.
- Eley R., Fallon T., Soar J., Buikstra E. & Hegney D. (2008) The status of training and education in information and computer technology of Australian nurses: a national survey. *J Clin Nurs*. 17(20):2758–2767.
- Eslamian J., Moeini M. & Soleimani M. (2005). Challenges in nursing continuing education: A qualitative study. *Iranian journal of nursing and midwifery research*. 20(3). 378-86.
- Fitzgerald C., Kantrowitz-Gordon I., Katz J. & Hirsch A. (2012). Advanced practice nursing education: challenges and strategies. *Nursing research and practice*. 854-918.
- Kamariannaki D., Alikari V., Sachlas A., Stathoulis J., Fradelos E.C. & Zyga S. (2017). Motivations for the participation of nurses in continuing nursing education programs *Archives of Hellenic Medicine*. 34(2):229-23
- Karalis Th. & Vergides D. Developments in education. Athens. 2003.
- Kelly-Heidenthal P. (2003). Nursing leadership and management. Thomson Canada.

- Lera M., Tachtsoglou K., Iliadis Ch., Frantzana A. & Kourkouta L. (2019). Continuing Distance Education in Nursing. *EAS Journal of Nursing and Midwifery*. 1(5): 155-160.
- 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.
- Levett-Jones. T. (2012). Continuing education for nurses: a necessity or a nicety? *The Journal of Continuing Education in Nursing*. 36(5):229-233.
- Morton-Rias D. (2016. December 21). The Value of Continued Education for Healthcare Professionals. Retrieved November 2018 from the website: <http://health-system-management.advanceweb.com/the-value-of-continued-education-for-healthcare-professionals/>
- Peña Y.F. & Castillo M.A. (2016). Factors influencing nursing staff members participation in continuing education. *Revista Latino-Americana De Enfermagem*. 14(3). 309-315.
- Sasser J. & National Healthcare Association. (2017). What is continuing education? Why is it important in healthcare? Retrieved November 2018 from the website: <https://info.nhanow.com/blog/what-is-continuing-education-why-is-it-important-in-healthcare>
- Schweitzer D.J. & Krassa T.J. (2010). Deterrents to nurses' participation in continuing professional development: An integrative literature review. *J Contin Educ Nurs* 41:441–447
- Summers A. (2015). Continuing professional development in Australia: Barriers and support. *J Contin Educ Nurs*. 46:337–339
- Tachtsoglou K., Lera M., Iliadis Ch., Frantzana A. & Kourkouta L. (2019). Continuing Nursing Education. *Nur Primary Care*. 3(5): 1-5.
- Tachtsoglou K., Lera M., Iliadis Ch., Frantzana A. & Kourkouta L. (2019). Evaluation of continuous nursing education. *Prog Health Sci*. 9(1): 37 – 42.
- Viljoen M., Coetzee I. & Heyns T. (2016). Critical Care Nurses' Reasons for Poor Attendance at a Continuous Professional Development Program. *Am J Crit Care*. 26(1):70-76.