

Original Article

## Educational Needs and Motivations for Lifelong Learning of Nurses

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### Abstract

**Introduction:** Lifelong learning is defined as "the official training following undergraduate education but differs from traditional postgraduate and doctoral programs." It is particularly important for health professionals as it prepares medical and nursing staff to improve and perform better in current or future positions.

**Purpose:** The main aim of this study was to investigate the educational needs and motivations for lifelong learning of nurses in hospitals of Thessaloniki and the Region of Central Macedonia.

**Material and methods:** The convenience sampling method was chosen for the study. After nurses were approached in certain hospitals, a questionnaire, which was used as a tool for data collection, was distributed to them. The sample of the study consisted of 196 adult nurses, working in various departments in 2 hospitals of Thessaloniki, as well as one in the Region of Central Macedonia. The administrative staff of the hospitals was excluded from the study.

**Results:** Approximately 90% of the participant nurses claimed that are being informed about developments in the science. The main sources of information are the conferences and the Internet. Only 62.6% of nurses had participated in lifelong learning programs at some point, while in the last year, the percentage of people who had participated in such programs was equal to 33.5%. The most common lifelong learning programs in which the nurses of the sample participated were inpatient classes, conferences and workshops.

**Conclusions:** Nurses' motivations for lifelong learning programs are similar regardless of their country of origin, the hospital they work and their demographic characteristics. There are significant differences in the extent to which these motivations affect nurses. The job, the hospital, the country and the personal and demographic data of nurses contribute greatly to these differences.

**Keywords:** educational needs, motivations, lifelong learning, nurses

## Introduction

Lifelong learning is defined as "the official training following undergraduate education but differs from traditional postgraduate and doctoral programs." (Bourne et al., 2005) It is particularly important for health professionals as it prepares medical and nursing staff to improve and perform better in current or future positions. It also modifies their thinking and their actions, and provides them with useful, professional information needed to achieve specific organizational goals. (Shahhosseini et al., 2014)

Nurses are a group of health professionals who take care of the patient. Nowadays, patients tend to be heavily involved in their own care, using their personal knowledge, views and values, participating in decision-making and taking responsibility for those decisions. (Christiansen et al., 2017). Addressing the needs of patients and their relatives and providing appropriate support requires a multidimensional and multidisciplinary approach. The World Health Organization (WHO) emphasizes that the lack of education and knowledge in palliative care among health professionals, especially nurses, is a major obstacle to the improvement of health. (Sekse et al., 2017) Thus, today, nurses undertake to abandon outdated, inefficient nursing practices, to use the latest research findings and to practice nursing care on the basis of these findings. (Bianchi et al., 2018) Therefore, nurses should obtain knowledge and constantly keep abreast of new developments in their field in order to provide higher quality care to patients. (Bressan et al., 2017) Continuing education is an increasingly necessary measure for the nursing profession and gives them the opportunity to follow the rapid changes that have taken place in patient care due to significant and rapid developments in knowledge and technology. (Ni et al., 2014) Continuing education, especially for the health care professionals, is a guarantee and security tool for better care and patient safety within the context of cross-border mobility of patients and health professionals. (Panagiotopoulou et al., 2016)

The high importance of lifelong learning in nursing has been well documented in the literature. Lifelong learning is a concept that can be reported with the use of other, similar terms, such as continuing education, lifelong education, knowledge translation or continuing vocational

training and can be defined in many different ways. (Ni et al., 2014) Lifelong education also facilitates learning within the workplace of nurses and enhances their professional capacity. (Govranos et al., 2014) Lifelong learning should last as long as the career of a nurse, and serves two main functions, the maintenance of current practice and the application of knowledge in practice. Nurses' commitment to lifelong learning affects the quality of nursing care, increases job satisfaction, improves patient outcomes, and improves nurses' perceptions on self-efficacy. (Caporiccio et al., 2019) Indeed, in many countries, lifelong learning is now mandatory for nurses and each nurse should acquire a certain number of participation points in continuing education programs within a given period of time in order to remain accredited and to continue working in the same position. (Ni et al., 2014)

Lifelong learning programs help nurses improve their performance and keep pace with rapidly changing health systems. When lifelong learning programs are based on the real needs of the nursing staff and nurses participate voluntarily, they are particularly effective. To ensure the responsiveness of nursing programs to the needs of nurses, and therefore their effectiveness, the assessment of the needs and expectations of the participants plays a key role. (Hamzehgardeshi et al., 2013)

**Aim:** The main aim of this study was to investigate the educational needs and motivations for lifelong learning of nurses in hospitals of Thessaloniki and the Region of Central Macedonia. In this context, the sub-objectives of the study are the following:

- . The investigation of the educational needs of nurses.
- . Exploring nurses' perceptions of lifelong learning.
- . Exploring nurses' motivations for lifelong learning.
- . The investigation of the relationship between the educational needs and the demographic characteristics of the nurses.
- . Exploring the relationship between nurses' perceptions of lifelong learning and nurses' demographic characteristics.
- . Exploring the relationship between nurses' motivations for lifelong learning and nurses' demographic characteristics.

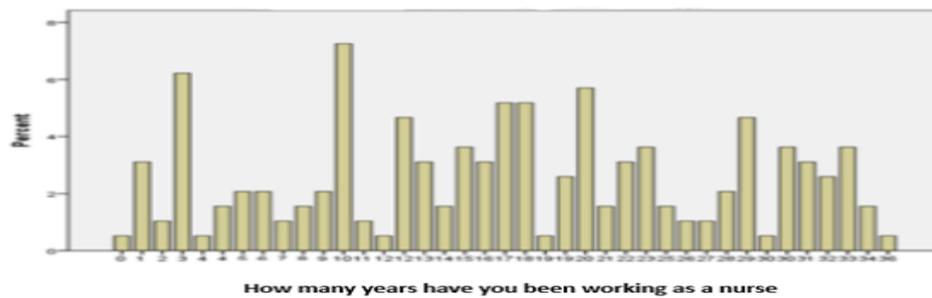
**Material and Methods:** The convenience sampling method was chosen for the study. After nurses were approached in certain hospitals, a questionnaire, which was used as a tool for data collection, was distributed to them. The sample of the study consisted of 196 adult nurses, working in various departments in 2 hospitals of Thessaloniki, as well as one in the Region of Central Macedonia. The administrative staff of the hospitals was excluded from the study. The study was conducted between October and December 2019. Initially, 100 questionnaires were distributed to each hospital, but in the end, the people who agreed to participate in the study and completed the questionnaire were 196 in total. Thus, the response rate was equal to 65,33%. The questionnaire selected consisted of a set of questions on demographic characteristics and the "Participation Reason Scale" (PRS). (Grotelueschen et al., 1985 & Kavga et al., 2007 & Kavga et al., 2012 & Panagiotopoulou et al., 2012 & Panagiotopoulou et al., 2016). This scale examines the reasons for individuals' participation in lifelong learning programs, which are categorized into 5 key factors or subscales: professional development (9 questions included), group learning and interaction (4 questions included), providing nursing services (5 questions included), the causes related to professional interest (6 questions included), and occupational safety and personal benefits (6 questions included). (Kavga et al., 2012). This is a quantitative research. The data analysis was carried out with the use of statistical package SPSS v21. The statistical analysis included descriptive statistical analysis, ie calculation of frequencies, percentages, valid percentages and cumulative percentages for all individual questions, as well as some correlations between different hospitals and all individual incentives and barriers to participation in programs of lifelong learning. These correlations were performed using the One-way Anova method. The

One-way Anova is used to test whether a factor has an influence on an outcome or not. (Huang et al., 2019) Thus, in this case, through this method, it was investigated whether the hospital where the participant nurses were working had a significant effect on their motivation to participate in lifelong learning programs.

## Results

The first question of the questionnaire was about the gender of the participants. According to the responses of the participants, the majority of them, with a percentage of 89.3% were women and 10.7% men. Regarding their age, 41% of the participants belonged to the age group between 45 and 55 years, 32.3% were between 35 to 45 years, 19.5 between 25 to 35 years, while only 6.7 % and 0.5% of them were between 55 and 65 years old, and less than 25 years old, respectively. As to the marital status, the majority of the respondents were married (72.8%), 20% were single, while 5.1% and 2.1% were divorced and widowed, respectively. The majority of participants, with a percentage equal to 77, 6%, reported that they had children, while 22.4% had no children. Of those who had children, the majority (59.1%) had 2 children, 28.9% had one child, 10.1% had three children, while 2% had 4 children. The majority of the respondents (59.7%) were TEI (Technological Educational Institute) graduates, 22.4% were Secondary Education graduates, 8.2% were graduates of Vocational Training Institutes, 7.7% were postgraduates and 2% were University Graduates. As for their job, 82.7% were nurses, 8.2% were head nurses of the departments, 5.6% were nurses with increased responsibilities, 0.5% of them were head nurses of the sectors, while 3.1% were working in another position. The mean value of the working years of the participants was equal to 17.25 years, the standard deviation was equal to 9.631, and the range was equal to 36 years (0 working years to 36 working years). (Chart 1)

**Chart 1. How many years have you been working as a nurse?**

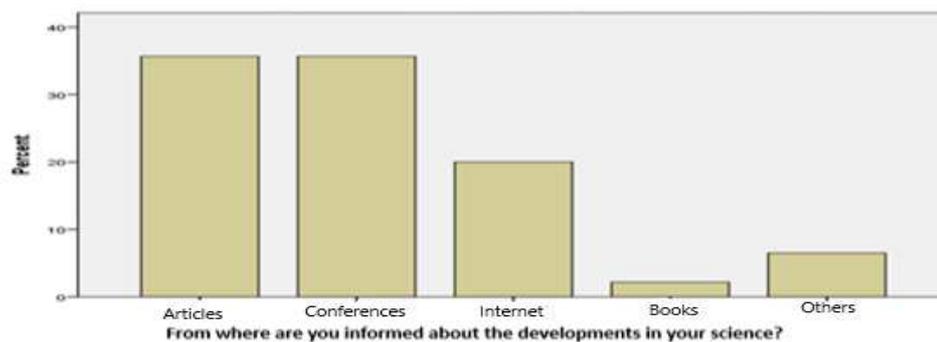


Regarding the department where the participants were working, the highest percentages of them were working in internal clinic (15.4%), surgery (14.2%), orthopedics (13%), pediatrics (12.4) and in cardiology (11.2%).

The nurses were then asked if they were aware of the developments in their science. The 88.2% of the participants reported that they

were informed about the developments in their science, while 11.8% were not informed about the developments. Of all the people who were informed about the developments, the most popular sources of information were the internet (33.6%) and the conferences (32.5%), followed by articles. On the contrary, a lower percentage was noticed to the books (9.5%) and the category "Other" (5.5 (Chart 2)

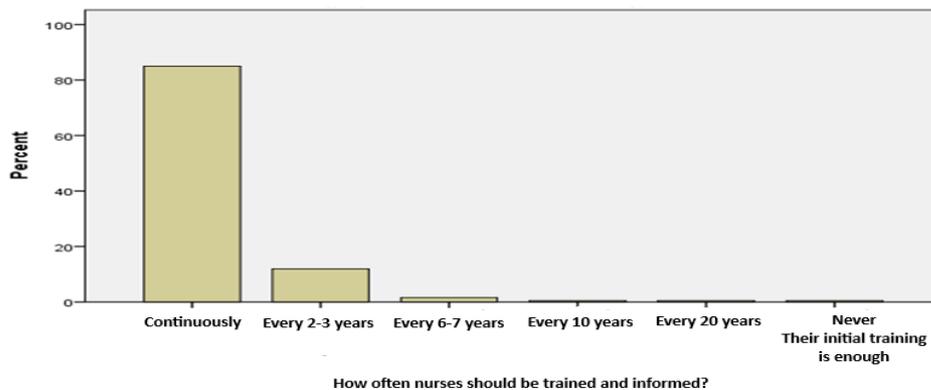
**Chart 2. From where are you informed about the developments in your science?**



Regarding lifelong learning programs, the majority of participants, with a percentage of 62.6%, stated that they had participated in such programs, while 37.4% had not participated. In the last year, 66.5% had not participated in any lifelong learning program, while 33.5% had participated in such programs in the last period. In terms of program types, 45.5% of the nurses participated in inpatient courses, 36.6% in conferences or workshops, 9.9% in seminars, and 7.9% in other programs.

Almost all the respondents believe that lifelong learning is essential for their profession (%), and most of them (85%) consider that all nurses should be trained and constantly updated. 11.9% of the participants stated that education and training of nurses should be received every 2-3 years, 1.6% believe that they should be informed every 6-7 years, while the percentages of nurses who supported that education should be repeated every 10 years, every 20 years and never, is 0.5%, 0.5% and 0.5%, respectively. (Chart 3)

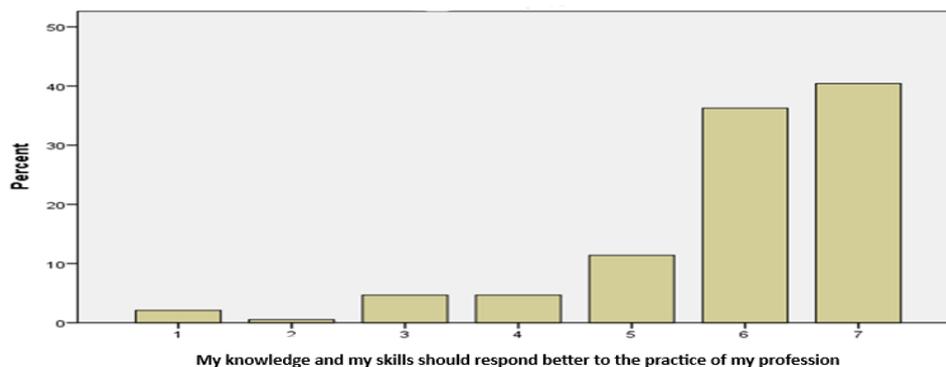
**Chart 3. How often nurses should be trained and informed?**



In the next main part of the questionnaire, 30 different proposals are presented, and the participants were asked to state how powerful / important they consider each of the motivations for participation in lifelong learning programs. Grades 1 and 2 correspond to low motivation, grades 3, 4 and 5 correspond to moderate motivation, and grades 6 and 7 correspond to high motivation.

The first motivation was to evaluate the responsiveness of knowledge and skills of nurses in practice. The majority of the sample (76.7%) considers this motivation very important to participate in a lifelong learning program, 20.8% considers this motivation to be of moderate importance, while only 2.6% of the nurses evaluated it as of minimum value (Chart 4)

**Chart 4. My knowledge and my skills should respond better to the practice of my profession**



The motivation concerning the exchanging views with colleagues was very important for 57.8% of the nurses involved, moderately important for 39.6%, while it was less important for 2.7%. A major motivation for 80.2% of nurses were being themselves more productive in their professional role. In contrast, 1.5% of nurses considered this motivation as not at all significant, and 18.3% felt it as of moderate importance.

Lifelong learning programs are very useful to better meet patients' expectations by nurses for 74% of the participants, of moderate relevance for 24.4% and of minimal importance for 1.5% of nurses. Participation in lifelong learning programs aiming at more effective adaptation to the patients needs was a priority for 76.3% of the participants, while this adjustment was considered less important and unimportant for 19.5% and 4, 2% of the sample nurses respectively. Another

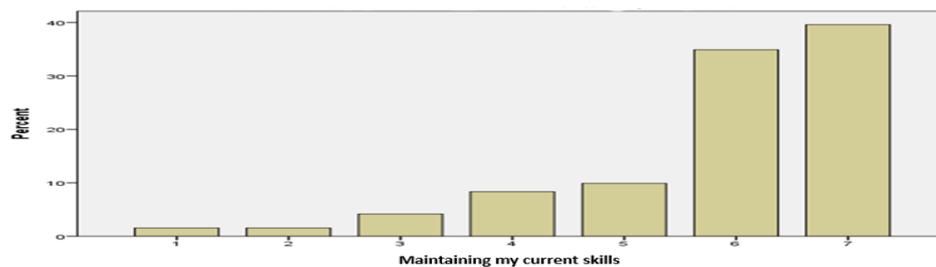
important incentive for a large percentage of nurses (73.8%) is to increase the likelihood of better patient care, while this perspective employs less the 23.5% and not at all the 2.6% of the nurses who participated in this study.

Increasing potential benefits for family and friends is also a very important incentive to participate in lifelong learning programs for

49.5% of the sample nurses, while for 9.4% and 41.1% of participants, increasing benefits for family and friends are of minor and moderate importance, respectively.

Maintaining their current skills was a very important motivation for 74.5% of the participants, a moderate motivation for 22.4% and a minimal motivation for 3.2% of them. (Chart 5)

**Chart 5. Maintaining my current skills**



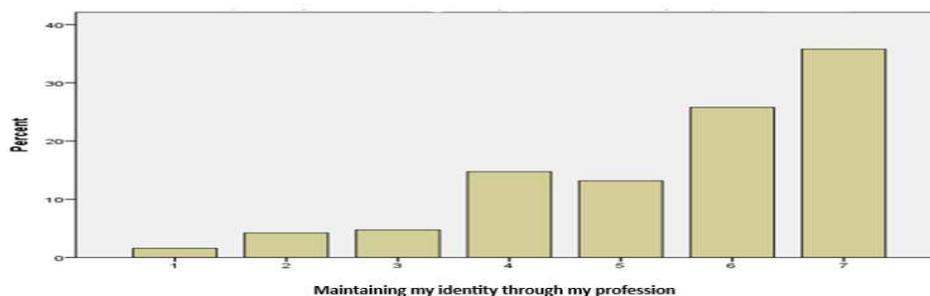
The probability of increased personal financial benefit is a very important motivation for 50.3% of the participants, while 36.3% of them considered this motivation to be of moderate importance and 12.5% considered it to be of minimal importance. Regarding the motivation for the nurses to have the opportunity to correlate their professional views with those of their colleagues, 59.3% of the participants considered it extremely important, 36.5% as moderate, while only 4.1% described it as of minor importance.

Learning through interaction with other nurses is a very important motivation for participation in lifelong learning programs to 59.6% of respondents, while only 2.6% of

them felt it was insignificant. The best response to the cognitive challenges of colleagues is also a very important motivation for 56.5% of nurses, it is moderate for 37.2% and minor for 6.3% of them. Redefining nurses' commitment towards their profession is an important incentive for the majority of participants (58.1%), less important for 34.5% of participants, and of minor importance for 7.3% of individuals who participated in the present study.

Maintaining their identity through their profession is a significant incentive for 61.6% of the sample nurses, less important for 32.6% of participants, and of minor importance for 5.8% of respondents. (Chart 6)

**Chart 6. Maintaining my identity through my profession**



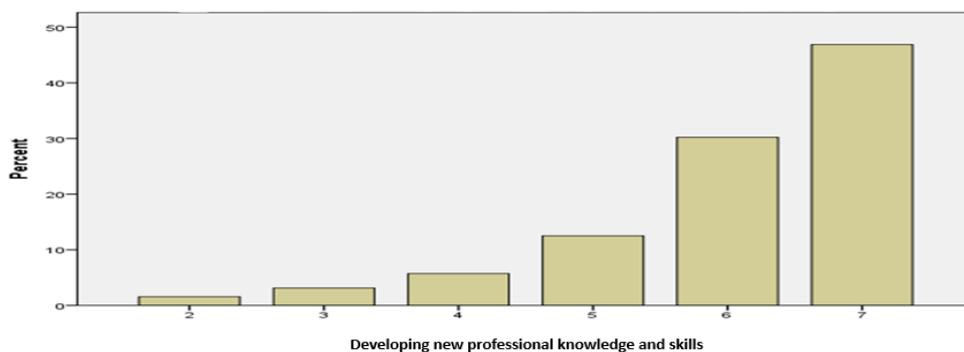
The motivation of developing leadership skills for the nursing profession through lifelong learning programs was considered very important for 47.7% of the participant nurses, while 11% of them thought that this motivation was completely insignificant.

Improving professional patient management skills is a very serious reason for a nurse to participate in lifelong learning programs for 73.6% of the sample, while only 3.1% of them considered this motivation insignificant.

A percentage of 5.3% of participants believes that redefining of current professional duties is not a significant motivation for a nurse to participate in lifelong learning programs, while 62.6% of them believe that this motivation is of high importance.

77.1% of the sample stated that it is very important for a nurse to participate in lifelong learning programs in order to develop new professional knowledge and skills, while, on the contrary, 4.7% of the sample considered that this motivation was completely insignificant. (Chart 7)

**Chart 7. Developing new professional knowledge and skills**



Another important motivation for the majority of nurses has been to broaden their perspective in relation to their professional role or practice. 27.7% of the participants considered that this motivation is of moderate importance, while 1.6% consider it unimportant. However, it is worth noting that no nurse rated this motivation with the number 1. Keeping up with new developments in nursing is a very basic motivation for the participation of nurses in lifelong learning programs for the majority of participants (85.2%), while only 3 persons in the whole sample (1.6%) consider this motivation of extremely low importance.

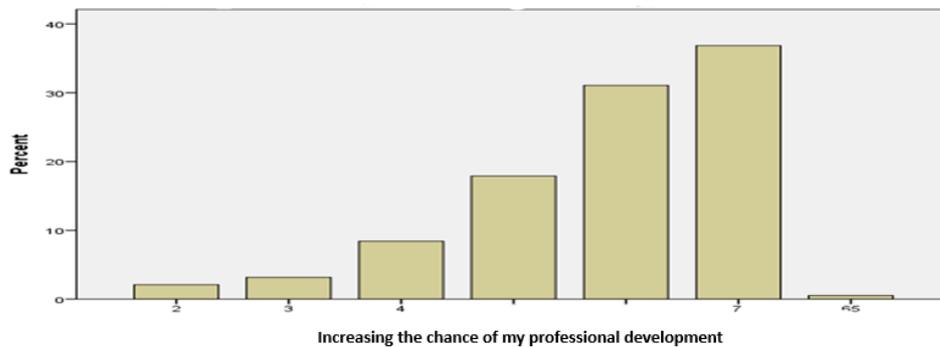
It also seems that a strong motivation is the strengthening of the image of the profession, since 29.8% of the sample rated the importance of this motivation with 6 and

35.6% with 7, while only 1.6% rated it with 1 and 3.1% with 2.

Almost half of the participants (59.2%) consider that a lifelong learning program is very important for the evaluation of the direction taken by the nursing profession, while this view is not shared by 3.7% of the respondents.

Another motivation was whether lifelong learning programs help nurses become more proficient in their work. The 77.7% of the sample supports this position, while only 2.2% of the participants considered this criterion insignificant. Increasing the probability of professional development is a very important incentive for 37.9% of the sample, while 2.1% totally disagreed with the high importance of this motivation (Chart 8)

**Chart 8. Increasing the chance of my professional development**



The improvement of the individual offer to the public was assessed as a very important motivation for a nurse to participate in a lifelong learning program by 68.8% of the sample, while it was of moderate value for 25.9% of the participants.

For 56.3% of the total sample, the consideration of the limitations of the role of the nurse is a significant motivation for participation in lifelong learning programs, while for 4.7%, the motivation is not important at all.

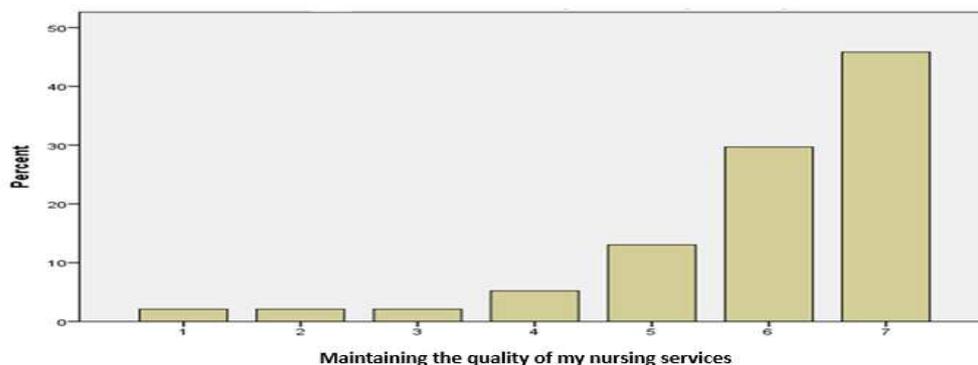
77.1% of the participants stated that a very important motivation for the participation of nurses in lifelong learning programs is the

development of professional skills necessary to maintain a high-quality work.

73.4% of the participants stated that the feeling of greater safety for their current position would be a serious motivation for their participation in a lifelong learning program. On the contrary, 6.3% of the sample characterized this motivation as insignificant.

Maintaining the quality of nursing services is a very important incentive for 75.5% of the participants, a moderate significance motivation for 20.3% of the sample of nurses, and a trivial motive for 4.2% of the sample. (Chart 9)

**Chart 9. Maintaining the quality of my nursing services**



**Correlations**

The One-way Anova analysis showed that statistically significant relationship exists between

the hospital where the sample nurses work and three motivations to participate in lifelong learning programs. At the evaluation scale of the

importance of motivation, the higher the value (1-7), the more important the specific motivation.

Initially, the correlation between the hospital and the participation in lifelong learning programs in order to develop new professional knowledge and skills is statistically significant at 95% confidence level, the p-value is equal to 0.013, which is less than 0.05. This motivation was more important for the employees of the hospitals of Thessaloniki (average value 6.25), followed by the hospital of the Region of Central Macedonia with an average value of 5.80.

The correlation between the hospital and the participation in lifelong learning programs to broaden their perspective related to professional role or practice is statistically significant at 95% confidence level, the p value is equal to 0.016, which is less than 0.05. This motivation was more important for the employees of the hospitals of Thessaloniki (average value 5.97), followed by the hospital of the Region of Central Macedonia with an average value of 5.48.

Finally, the correlation between the hospital and the participation in lifelong learning programs in order to keep up with new developments in nursing are statistically significant at 95% confidence level, the p-value is equal to 0.033, which is less than 0.05. This motivation was more important for the employees of the hospitals of Thessaloniki (average value 6.36), followed by the hospital of the Region of Central Macedonia with an average value of 5.97.

## Discussion

Approximately 90% of the participant nurses claimed that are being informed about developments in the science. The main sources of information are the conferences and the Internet. Only 62.6% of nurses had participated in lifelong learning programs at some point, while in the last year, the percentage of people who had participated in such programs was equal to 33.5%. Similar levels of overall involvement of nurses from California, New Jersey, and Pennsylvania in lifelong learning are presented to Altmann (2012) study. (Altmann, 2012) In contrast, according to the International literature, the involvement of nurses in continuing education programs in Taiwan appears to be much more limited, while extremely high was the participation of nurses in such programs in the last year in China. (Ni et al., 2014 & Chang et al., 2003) The most common

lifelong learning programs in which the nurses of the sample participated were inpatient classes, conferences and workshops. (Tachtsoglou et al., 2019)

Almost all participants said that they have to be constantly informed about their profession, however, the reduced percentage of their actual participation in lifelong learning programs indicates the existence of certain obstacles and / or the lack of sufficient motivation to participate in these programs. According to the respondents of the study, the main motivations for them were the following: the responsiveness of knowledge and skills in the practice of nursing profession, the better fulfillment of patients' expectations, being themselves more productive in their professional role, maintaining their current skills and adapting more effectively to patients' needs. (Tachtsoglou et al., 2020) Other important incentives for participation in continuing education programs are the improvement of professional skills in patient management, the development of new professional knowledge and skills, keeping up with new developments in nursing and increasing the chances of better patient care. In addition, improving nurses' ability to work, developing the necessary professional skills to maintain a high quality work, a greater sense of security for their current position, and maintaining the quality of nursing services are also key motivations for them. Improving the quality of nursing care, improving efficiency, increasing professional knowledge, increasing self-esteem and enhancing professional status, have emerged as the most important motives in the international literature of past years. (Al-Majid et al., 2012 & Jaradeh et al., 2010 & Nalle et al., 2010 & Richards et al., 2010 & Sarver et al., 2015 & Tachtsoglou et al., 2020)

Until today, in the literature, nurses' motivations for participating in lifelong learning programs have been mainly correlated with demographic factors, such as gender, age, and job. (Tachtsoglou et al., 2019) More specifically, it has been found that there are significant differences in the mean values of nurses' perceptions about their desire to participate in continuing education activities depending on gender, years of experience and the length of annual leave taken from the hospital. (Jaradeh et al., 2010) Nurses' participation in lifelong learning tends to be lower among younger nurses, nurses in lower positions, and among

nurses working in mid-sized general hospitals and in specialized, non-psychiatric hospitals. (Kvas et al., 2013)

In Greece, the participation of nurses in lifelong learning programs was statistically significantly correlated with the age and length of service of health professionals. (Michou, 2015 & Lera et al., 2019)

In the present study, an attempt was made to correlate the motivations with the area in which the hospital, where the nurses work, is located. Comparing the motivations among the employees in three different hospitals, a statistically significant difference emerged among the three hospitals in terms of three incentives to participate in lifelong learning programs. Specifically, the nurses working in the smaller hospital of Thessaloniki considered as more important the motivations for the development of new professional knowledge and skills, the broadening of their perspective in relation to their professional role or practice and to keep up with new developments in nursing, compared to the staff at the hospital of the Region of Central Macedonia and the largest hospital in Thessaloniki, who had different opinions regarding this issue.

**Conclusions:** Although almost all the participant nurses reported that they were aware of the developments in their science, only about 2/3 of them had participated in lifelong learning programs at some point of their lives, and about 1/3 had participated in such programs in the last year. These levels of participation were similar to those of other studies, but are not considered satisfactory, as in the field of nursing, there are constantly new developments, and nurses should be constantly informed. These continuous developments stem from the advancement of medical science and the improvement of technology, and automatically create the need to upgrade and modernize the knowledge and skills of nurses. Nurses' motivations for lifelong learning programs are similar regardless of their country of origin, the hospital they work and their demographic characteristics. There are significant differences in the extent to which these motivations affect nurses. The job, the hospital, the country and the personal and demographic data of nurses contribute greatly to these differences.

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