

ORIGINAL PAPER  
ΕΡΕΥΝΗΤΙΚΗ ΕΡΓΑΣΙΑ

## Motivations for the participation of nurses in continuing nursing education programs

**OBJECTIVES** To investigate the motivating factors for participation of nurses in continuing nursing education (CNE) and their perceptions about the necessity for programs in CNE. **METHOD** The Participation Reasons Scale (PRS) was completed by 475 nurses working in three hospitals in Athens and the Peloponnese region and the socio-demographic data of participants were recorded. Statistical analysis was performed using the Statistical Package for Social Sciences (IBM SPSS Statistics), version 23.0. **RESULTS** The majority (62.3%) of the sample showed positive perceptions and attitudes about CNE Programs, based on real needs. Subjects rated all five factors (dimensions) of the PRS as “moderately important” in high percentages, specifically: “Professional improvement and development” 98.9%, “professional service” 91.8%, “collegial learning and interaction” 82.6%, “personal benefits and job security” 91.0%, “professional commitment” 88.4%. “Professional commitment” recorded the highest mean score ( $4.95 \pm 0.744$ ). “Professional improvement and development” correlated positively with “collegial learning and interaction” ( $r=0.229$ ;  $p<0.001$ ) and “personal benefits and job security” ( $r=0.115$ ;  $p=0.015$ ). **CONCLUSIONS** Motives and personal professional attitudes exert a significant effect on the participation of nurses in CNE programs.

Continuing nursing education (CNE) has become essential for the assurance and improvement of quality patient care. CNE includes self-education and directed training activities designed to acquire new knowledge further to that which was acquired through the basic nursing education. It is a process that begins with the end of studies and lasts for the entire life of the individual.<sup>1</sup> According to the American Nurses Association (ANA) and the National Nursing Staff Development Organization,<sup>2</sup> CNE comprises all the professional experiences designed to strengthen and broaden the contribution of the nurse to health. The World Health Organization (WHO) defines it as the education received by a health care professional after the end of basic training, or additional prior training to improve skills but not acquiring a new diploma.<sup>2</sup> This definition states that CNE is based not on random training activities but on prearranged courses, which are designed to satisfy the needs and expectations of each nurse.<sup>4</sup>

The importance of continuing education for nurses is emphasized internationally through the relevant literature. The British Association of Nurses (BAN) states that all nurses are responsible for the way they practice their profession, and therefore they should be constantly taking the steps necessary to maintain and improve their professional knowledge and skills.<sup>5</sup> The ANA adopts similar views, and it is significant that both associations have designed lifelong education programs for healthcare professionals, in which, however, emphasis is placed on compulsory rather than voluntary participation.<sup>5</sup>

The reasons that CNE became necessary result from the widespread changes which affect nursing, economic, social and political changes, the industrialization of health, globalization, the spread of technology and the accumulation of new scientific knowledge, and the perennial need to provide patients with high quality nursing care.<sup>6</sup> There is ample evidence that increasing the skills and knowledge

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Κίνητρα που συνδέονται  
με τη συμμετοχή των νοσηλευτών  
στη συνεχιζόμενη νοσηλευτική  
εκπαίδευση

*Περίληψη στο τέλος του άρθρου*

### Key words

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of the nursing staff is associated with improvement in various indicators of quality of care, including reduction of the incidence of nursing errors, hospital infections and pressure ulcers, and it may improve patient safety and staff productivity and reduce occupational stress.<sup>7,8</sup>

Nurses attend CNE for personal, professional and organizational reasons.<sup>9,10</sup> The motivation of nurses for self-learning and participation in standard scheduled continuing nursing courses is influenced by personal experiences and shaped by free will but also by intrinsic motivation and may also be affected by external factors. All these factors create a framework within which the individual sets his(her) objectives. Motivational orientations or motivations can be grouped in five categories: (a) Professional improvement and development, (b) professional service, (c) learning and interaction with colleagues, (d) personal benefits and job security, and (e) professional commitment. Another categorization system classifies the motivations according to the attitude of the health care professionals into: (a) Goal-oriented (according to the goals they expect to achieve through the training program), (b) activity oriented (search for social relationships), and (c) learning oriented (acquiring new knowledge).<sup>11</sup> The most obvious of these factors are professional improvement, improving of knowledge and skills, and finally, personal benefits. Research has highlighted, also, the need for nurses to update their knowledge through CNE. Greek researchers using the Participations Reasons Scale (PRS) found that the main concerns of nurses are update on developments in health care and acquisition of new professional knowledge.<sup>12</sup> In one study,<sup>13</sup> 83% of nurses reported that increase of skills and knowledge is the benefit of CNE while in another the researchers found that updating of information is one of the most significant factors for participation in CNE.<sup>9,14</sup>

Incentives are sometimes necessary in order to overcome constraining factors, such as older age, inexperience and lack of financial resources and technical support. Barriers to participation in CNE programs include understaffing and concerns that CNE would interfere with time outside work,<sup>9,15</sup> but lack of financial support is the most common impediment to participation in CNE.<sup>9</sup> Review studies on the views of nurses concluded that the lack of the possibility to request permission from work to attend the program is a major obstacle to the participation of nurses in CNE.<sup>9,10,16</sup> Other constraints are the time required for learning to use new technologies, unreceptiveness to change and the depersonalization of nursing care, which may cause difficulties particularly for older nurses.<sup>17</sup> Studies show, however, that voluntary CNE based on the nurses' needs has a positive effect on their motivation to participate in CNE programs.<sup>18,19</sup>

## MATERIAL AND METHOD

The purpose of the study was to investigate the motivations and perceptions of nurses regarding participation in CNE.

### Participants

The study participants were 475 nurses working in three Greek Hospitals (the "Hippokraton" General Hospital in Athens and the General Hospitals in Kyparissia and Kalamata in the Peloponnese).

### Data collection

A self-completed questionnaire was used for the data collection, which covered demographic information and the PRS. The PRS, which was created in 1979 by Grotelueschen,<sup>20</sup> is an assessment tool that evaluates the reasons for nurses' participation in CNE. The PRS was translated into Greek and the psychometric properties of Greek version tested, giving Cronbach's alpha 0.93.<sup>21</sup>

The questionnaire consists of five factors (dimensions) covered by 30 questions: (a) Professional improvement and development (9 items), (b) professional service (5 items), (c) collegial learning and interaction (4 items), (d) personal benefits and job security (6 items), and (e) professional commitment (6 items). The responses are recorded on a 7-point Likert scale (1–2: not important, 3–5: moderately important, 6–7: extremely important).

### Ethical considerations

The study was approved by the Scientific Councils of the "Hippokraton" General Hospital of Athens and the General Hospitals of Kalamata, as well as of Kyparissia.

### Data analysis

Mean and standard deviation were used to describe quantitative variables and absolute and relative frequencies were used to describe qualitative variables. To assess the effect of the demographic and general characteristics on the PRS factors independent samples t test and Kruskal-Wallis test were performed. Statistical analysis was performed via the Statistical Package for Social Sciences (IBM SPSS Statistics), version 23.0, with the significance level set at 5%.

### Strengths and limitations

This is the largest study of its kind carried out among Greek nurses. It was a multi-center project including nurses from both regional and urban hospitals. This feature ensures useful findings related to the CNE of Greek nurses which can be compared with those of other countries and cultures.

Exclusion of nurses working in private clinics or specialist hospitals and those in community health centers is a limitation of this study. The participation of those groups would have given

a more comprehensive picture of the reasons for participation of nurses in CNE programs.

## RESULTS

### Sample characteristics

In this study, of the 475 nurses who participated 10.7% were male and 89.3% female, while 40.2% were aged between 40–49 years old. The majority (52.4%) were working at the “Hippokration” General Hospital in Athens, followed by the Hospital of Kalamata (34.9%) and the Hospital of Kyparissia (12.6%). Of these, 72.8% had taken part in scientific/educational activities, 43.4% knew a foreign language and were able to handle a computer, but only 7.4% had a Master’s Degree and none a PhD (tab. 1).

Regarding the five dimensions explored by the PRS, all the factors generated a positive response since study participants ranked them as “moderately important” in high percentages (“professional improvement and development” 98.9%, “professional service” 91.8%, “collegial learning and interaction” 82.6%, “personal benefits and job security” 91% and “professional commitment” 88.4%). In contrast, none considered “professional commitment” extremely important. The descriptive statistics of the participants’ responses to the PRS are presented in table 2.

The dimension “professional commitment” had the highest mean score ( $4.95 \pm 0.744$ ), followed by “personal benefits and job security” ( $4.87 \pm 0.73$ ) and “collegial learning and interaction” ( $4.72 \pm 0.961$ ). The basic statistics measures of the responses on the five dimensions of the PRS are presented in table 3.

Regarding association with the demographic characteristics of the participants, “professional improvement and development” was statistically significantly correlated with the hospital of employment ( $p=0.025$ ), with nurses in the Hospital of Kalamata having the highest score. “Collegial learning and interaction” was statistically significant associated with the hospital ( $p=0.013$ ), educational level ( $p=0.044$ ) and participation in scientific/educational activities ( $p=0.037$ ). Higher scores were reported by nurses from the Hospital of Kalamata, university educated nurses and those who had participated in scientific/educational activities. “Personal benefits and job security” was statistically significantly associated with the hospital ( $p=0.044$ ), with nurses from the Hospital of Kalamata having higher scores. “Professional commitment” was statistically significantly correlated with age ( $p=0.027$ ), with nurses in the 30–40 year age group having higher scores. None of the demographic and general characteristics of the participants

**Table 1.** Demographic and general characteristics of the nurses participating in the study (n=475).

	Frequency	Percentage %
<i>Gender</i>		
Male	51	10.7
Female	424	89.3
<i>Hospital</i>		
Kyparissia	60	12.6
Kalamata	166	34.9
Hippokration	249	52.4
<i>Age (years)</i>		
20–29	18	3.8
30–39	191	40.2
40–49	220	46.3
50+	46	9.7
<i>Marital status</i>		
Unmarried	74	15.6
Married	375	79.3
Divorced	24	5.1
<i>Educational level</i>		
University	11	2.3
Technological institute	253	53.6
High school	208	44.1
<i>Postgraduate degree</i>		
MSc	35	7.7
Specialty	55	12.1
None	365	80.2
<i>Job position</i>		
Head nurse	34	7.4
Deputy head nurse	63	13.6
Nurse	172	37.2
Assistant nurse	193	41.8
<i>Additional skills</i>		
Languages	59	12.4
Computers	95	20.0
Languages and computers	206	43.4
No answer	115	24.2
<i>Participation in scientific/educational activities</i>		
Yes	346	74.2
No	120	25.8

MSc: Master of science

affected “professional service”. The dimension “professional improvement and development” was positively correlated with “collegial learning and interaction” ( $r=0.229$ ;  $p<0.001$ ), and “personal benefits and job security” ( $r=0.115$ ;  $p=0.015$ ),

**Table 2.** Descriptive statistics of responses of nurses to the Participation Reasons Scale (n=475).

		Frequency (N)	Percentage (%)	Relative frequency
<i>Factor 1: Professional improvement and development</i>				
1	Not important	0	0	0
2		0	0	0
3	Moderately important	47	9.9	9.9
4		296	62.3	62.3
5		127	26.7	26.7
6	Extremely important	5	1.1	1.1
7		0	0	0
<i>Factor 2: Professional service</i>				
1	Not important	0	0	0
2		7	1.5	1.5
3	Moderately important	95	20.0	20.0
4		208	43.8	43.8
5		133	28.0	28.0
6	Extremely important	32	6.7	6.7
7		0	0	0
<i>Factor 3: Collegial learning and interaction</i>				
1	Not important	0	0	0
2		0	0	0
3	Moderately important	5	1.1	1.1
4		102	21.5	21.5
5		167	35.2	35.2
6	Extremely important	123	25.9	25.9
7		78	16.4	16.4
<i>Factor 4: Personal benefits and job security</i>				
1	Not important	0	0	0
2		3	0.6	0.6
3	Moderately important	54	11.4	11.4
4		179	37.7	37.7
5		199	41.9	41.9
6	Extremely important	40	8.4	8.4
7		0	0	0
<i>Factor 5: Professional commitment</i>				
1	Not important	0	0	0
2		0	0	0
3	Moderately important	49	10.3	10.3
4		177	37.3	37.3
5		194	40.8	40.8
6	Extremely important	55	11.6	11.6
7		0	0	0
Total		475	100.0	100.0

and "professional service" was positively correlated with "professional commitment" ( $r=0.139$ ;  $p=0.002$ ).

**Table 3.** Basic statistics measures on the five factors of Participations Reasons Scale (n=475).

Score	Mean	SD
Professional improvement and development	4.63	0.584
Professional service	4.61	0.857
Collegial learning and interaction	4.72	0.961
Personal benefits and job security	4.87	0.730
Professional commitment	4.95	0.744

SD: Standard deviation

## DISCUSSION

This study was carried out with nurses working in Athens and the Peloponnese region and aimed to explore their reasons for participation in, and perceptions about CNE. The PRS has been used to assess the reasons for participation in continuing educational programs in a number of professions, including school teachers,<sup>22</sup> nursing staff development specialists,<sup>23</sup> physicians<sup>24</sup> and physical therapists.<sup>25</sup> The PRS categorizes the reasons of participation in five dimensions: (a) Professional improvement and development, (b) professional service, (c) collegial learning and interaction, (d) personal benefits and job security, and (e) professional commitment. "Professional improvement and development", "personal benefits and job security" have been found to be the main motivations in several studies<sup>10,23</sup> in which PRS was used, although in others "collegial learning" was the main motivation.<sup>26</sup>

"Professional improvement and development" is a dimension which involves the concept of professional abilities, knowledge and skills. Some researchers have found that this dimension is one of the most important motivations for participating in CNE,<sup>22</sup> but among the nurses in this study it was not a significant predictor of participation in CNE suggesting that they were not participating in CNE mainly for increasing their knowledge and skills.

"Professional service" involves the professional's ability to better serve his(her) customer base, in this case, patients, by keeping updated on the current trends and new developments in the field. "Professional commitment" involves the need of the professional to provide input and direction to the body of the profession through service to the profession. These two dimensions were found strongly correlated in the current study ( $r=0.139$ ;  $p=0.002$ ).

"Collegial learning" expresses the need or desire of the professional to maintain contact with other professionals in the field as a means of challenging his(her) intellectual abilities. This study revealed a significant association be-

tween “collegial learning and interaction” and “professional development and improvement” ( $r=0.229$ ;  $p<0.001$ ). The effectiveness of “collegial learning” (peer-learning) and “professional development” have been found to be helpful in acquiring new knowledge and skills,<sup>27</sup> while peer learning is positively associated with professional improvement among medical students.<sup>28</sup>

Finally, “personal benefits and job security” include increased salary and improved chances for personal promotion. In this study, higher scores were recorded for “professional commitment” and “personal benefits and job security”, indicating that nurses may participate in CNE to provide an impetus for the nursing body, and for personal profits such as salary or promotion. Professional and personal factors are important motivations in participation in continuing education<sup>29</sup> and similar results were found in another study.<sup>30</sup>

Educational level affects participation in CNE.<sup>10,26</sup> In this study, also, the higher the educational level, the higher the level of participation. Nurses with a degree or post basic qualifications reported higher levels of participation.

In conclusion, the reassessment of knowledge and skills of nurses is an ongoing procedure dictated by the major changes in technology, nursing practice and health care. Motivation and personal and professional attitudes significantly affect the participation of nurses in CNE. The findings of this study agree with and confirm the reasons for participation reported in previous surveys.

In modern, constantly evolving societies, information, knowledge and specialized personnel are key factors for growth and evolution. Significant effort is therefore made to spread knowledge and skills in specialist populations, by organizing the appropriate framework, with comprehensive preparation of trainers, and by motivating the employees to participate in continuing education programs. Continuing

education is always a topical issue for health care professionals and the reevaluation of the knowledge base of health professionals is essential in this rapidly evolving field.

In the health sector, the increasing knowledge base and rapid developments and changes in health care delivery are making the need for well-prepared training nurses urgent. Highly trained nurses, with the support of the organizations where they are employed and the academic communities, are called upon to be strong professional role models for nursing students. They must be prepared to teach knowledge and skills to newly hired nurses and to pass on developments in the field of nursing research to fellow nurses. In addition, they are required to communicate to patients and the general population necessary knowledge and skills as part of health promotion, and to contribute to the progress of nursing science.

Motives and the personal professional attitudes exert a significant effect on the participation of nurses in CNE programs. The development of educational programs based on real needs after investigation of the motivational factors is considered essential. Participation in CNE programs contributes to the improvement of nursing care; it can reduce costs, increase productivity, minimize accidents and errors, and decrease occupational stress. Professional development, progress and security are demanded from nurses as a means of promoting the health of the individual and the development of nursing culture. Lack of information and encouragement from the management, staff shortages, high costs, family obligations, distance and lack of time are obstacles to the attendance of nurses in CNE programs.

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#### ΠΕΡΙΛΗΨΗ

##### **Κίνητρα που συνδέονται με τη συμμετοχή των νοσηλευτών στη συνεχιζόμενη νοσηλευτική εκπαίδευση**

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**ΣΚΟΠΟΣ** Διερεύνηση των κινήτρων συμμετοχής των νοσηλευτών στη συνεχιζόμενη νοσηλευτική εκπαίδευση, καθώς και οι αντιλήψεις τους για την αναγκαιότητα αυτών των προγραμμάτων στη συνεχιζόμενη νοσηλευτική εκπαίδευση.

**ΥΛΙΚΟ-ΜΕΘΟΔΟΣ** Στη συγκεκριμένη μελέτη, 475 νοσηλευτές από τρία νοσοκομεία της Αθήνας και της Πελοποννήσου συμπλήρωσαν την κλίμακα Participation Reasons Scale (PRS). Καταγράφηκαν κοινωνικο-δημογραφικά δεδομέ-

να των συμμετεχόντων. Η στατιστική ανάλυση διενεργήθηκε με τη χρήση του λογισμικού προγράμματος Statistical Package for Social Sciences (IBM SPSS Statistics), έκδοση 23.0. **ΑΠΟΤΕΛΕΣΜΑΤΑ** Η πλειοψηφία του δείγματος (62,3%) παρουσίασε θετικές αντιλήψεις και νοοτροπίες σχετικά με τον σχεδιασμό των εκπαιδευτικών προγραμμάτων Συνεχιζόμενης Νοσηλευτικής με βάση τις πραγματικές ανάγκες. Οι συμμετέχοντες της μελέτης αξιολόγησαν πέντε παράγοντες της PRS ως «μέτρια σημαντικούς» σε υψηλά ποσοστά («επαγγελματική βελτίωση και ανάπτυξη» 98,9%, «επαγγελματική εξυπηρέτηση» 91,8%, «συλλογική μάθηση και αλληλεπίδραση» 82,6%, «προσωπικά οφέλη και ασφάλεια εργασίας» 91% και «επαγγελματική δέσμευση» 88,4%. Η «επαγγελματική δέσμευση» φάνηκε να έχει την υψηλότερη μέση τιμή (4,95±0744). Η «επαγγελματική βελτίωση και ανάπτυξη» έδειξε ελαφρώς θετική συσχέτιση με τη «συλλογική μάθηση και αλληλεπίδραση» ( $r=0,229$ ,  $p<0,001$ ) και τα «προσωπικά οφέλη και ασφάλεια εργασίας» ( $r=0,115$ ,  $p=0,015$ ). **ΣΥΜΠΕΡΑΣΜΑΤΑ** Τα κίνητρα και οι προσωπικές επαγγελματικές συμπεριφορές επηρεάζουν σημαντικά τη συμμετοχή των νοσηλευτών στα εκπαιδευτικά προγράμματα της Συνεχιζόμενης Νοσηλευτικής.

**Λέξεις ευρητηρίου:** Διά βίου μάθηση, Επαγγελματική ανάπτυξη, Κίνητρα, Νοσηλευτική, Συνεχιζόμενη νοσηλευτική εκπαίδευση

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