

Original Article

Through the Crisis, the Change Came: Greek Nurses' Motivations and Perspective on Continuous Professional Development after the COVID-19 Experience

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Abstract

Background: Nurses worldwide face their biggest professional challenge fighting against the pandemic COVID-19. Many of them were forced to move from a specialized clinical department and work in a COVID-19 department, with their knowledge and skills in many cases being insufficient.

Objective: The object of this study was to identify the motives that urge nurses to participate in the continuous professional development (CPD) and in addition their perspective and willingness to expand their professional knowledge.

Methodology: A cross-sectional study was conducted using a convenience sampling method. Via the use of the Participation Reason Scale (PRS), the reasons for nurses' participation in CPD were explored anonymously. The data has been analyzed with SPSS Statistics 22.

Results: 114 nurses took part in this study and among those who had worked in COVID-19 units 72.6% wanted to expand their professional knowledge and 87.3% of the participants believed that nursing wards rotation during the professional route accompanied by CPD would benefit nurses in case of a new healthcare crisis.

Conclusions: Access to knowledge is not just a right for nurses but also an obligation against the patients who care. Although nurses worked during the pandemic under extremely stressful conditions with a heavy workload, full of insecurity, not only eagerly gained new skills but also expressed their willingness to enrich their professional knowledge through CPD.

Keywords: nurses, COVID-19, continuous professional development, Greece, motives

Introduction

Nurse science overhauls constantly through the years, due to the rapidly evolving

scientific and technological developments of the health science sector. Therefore, nurses must be up to speed with their sciences' advancement, in order to provide holistic,

high-level quality health care to their patients (Pool et al., 2013). Unexpected issues like the economic crisis, the overpopulation of the earth, the cultural changes which arise from the continuous immigrating populations, and the ever-growing social needs with the latest example of the Covid-19 crisis, demand nurses capable of adjusting and responding to these new challenges (King et al., 2021). The only way to conquer this achievement is to sustain, upgrade and expand their professional and personal knowledge through continuous professional development (CPD) (Mather et al., 2017).

Background

CPD for nurses starts right after graduation and lasts throughout their career, (Caporiccio et al., 2019) sometimes even for 40 years (Pool et al., 2015). Nursing knowledge has a lifetime of about 2 to 5 years and in addition, nursing care is based on scientific evidence of research that never stops and revises the existing data (Pool et al., 2015, Vázquez-Calatayud et al., 2021). Engagement in the CPD can only have positive outcomes for health professionals and especially for nurses. Some of them are reduction of stress and burnout levels, boosting their job satisfaction, and minimizing errors that occur in their everyday care practice (Taxtsoglou et al., 2020). As a result, nurses' involvement in CPD should not get sidetracked. On the contrary, it must become a tendency and professional duty to their patients in order to provide them with the best possible, updated care (Vázquez-Calatayud et al., 2021).

During the first two epidemic waves of COVID-19, a big percentage of nurses worldwide was forced to move from their working ward or unit to a COVID-19 ward or unit, in order to assist in the increased demand for providing care (Cadge et al., 2021, Marceau et al., 2022). In most cases, nurses worked in specialized units such as surgery and dialysis units and this sudden transition followed a difficult adjustment (Robertson et al., 2021). In some countries, nurses did not receive the required training for this transition (Bergman et al., 2021).

To our knowledge, no study in Greece has examined nurses' motives and perspectives on CPD during a health crisis. The aim of

this study was to investigate nurses' perspective and motives regarding CPD after their working experience during the pandemic COVID-19. Moreover, it is worth mentioning that participation in CPD is not compulsory for nurses in Greece (Mlambo et al., 2021). The results of this study could contribute to the acquisition of new knowledge and experience that may be useful, in the event of a new health crisis beyond COVID-19.

The main research questions that this study tried to answer were:

1. Nurses with little or none experience in nursing wards rotation throughout their professional route, after their working experience during the pandemic would participate more in CPD activities compared to nurses with greater experience in nursing ward rotation?
2. Nurses who were forced to move due the circumstances, from their working unit during the pandemic would participate more in CPD activities than nurses who did not move from their working unit?
3. Nurses with higher education level would participate more in CPD activities compared to nurses with lower education level?

Methodology

Method of study:

A cross-sectional study was conducted using a convenience sampling method. The data were collected from October 2021 to May 2022, using a structured questionnaire, either through Google Forms in its electronic form or through a hardcopy form.

Sample: The sample consisted of nurses working in Greek hospitals for more than 1 year. Participation in this study was anonymous and volunteered.

Ethical Issues: Potential participants were informed about the purpose of this study, its anonymous and volunteering form, and that they could refuse to participate or withdraw from the study at any time they wish. The study was approved by the research ethics committee of the Nursing department of the National and Kapodistrian University of Athens.

The questionnaire: The questionnaire consisted of 3 parts, the first one had 14

questions about participants' demographic characteristics and their views on CPD. The second part had 14 questions about participants' working situation and their experience during the two first waves of the pandemic and the third part contained the Participation Reasons Scale (PRS). PRS scale has been developed by Grotelueschen et al., in 1985 and explores adults' reasons for participating in CPD with the use of a 7-point Likert scale. PRS consists of 30 reasons-statements for participating in CPD, which according to their thematic content are divided into four motivational main factors. The PRS scale has been translated and validated into Greek in 2016 by Panagiotopoulou et al.

Data analysis: The data were analyzed using the SPSS22.0 statistical program. The significance levels were two-sided, and the level of the statistical significance was defined at 0.05.

Results

A total of 114 nurses participated in this study and 83.3% of them were women. Participants' demographic characteristics, their educational level, and their working situation results are shown in Table 1. Regarding their educational level, 34.2% had a Master, 0.9% had a PhD, and 10.5% had a nursing specialty degree. Most of the participants (30.7%) were working in the operating room, when the questionnaire was distributed to them. Further on, the average value of their working time was 14.8 years (SD = 9.5 years) and 95.6% have been working in different nursing wards throughout their careers, with the median value of the different nursing wards being 2 (IQR = 2-4 nursing wards).

Table 2 displays the results of the participants' opinion about CPD and the form of CPD activities they have taken part in throughout their careers. Most participants

(93.3%) strongly suggest that nurses must participate in CPD activities throughout their professional route.

Afterward, the participants' working experience through the first two epidemic waves of COVID-19 was examined. As it is shown in Table 3, 47.7% were transferred to another nursing ward or unit during that time and 86.6% of those who have been transferred worked in a COVID-19 ward or unit. The average value of working time in a COVID-19 ward or unit was 12 months (SD = 7.8). Half of them stated that they had enough knowledge to work efficiently in the new working ward or unit, 83.0% that they gained specialized experience in something unprecedented. Additionally, 72.6% mentioned that after having worked in a COVID-19 ward or unit wanted to expand their professional knowledge, and 87.3% believed that nursing wards rotation in the early stages of nurses' professional route accompanied by participation in CPD activities would help young nurses to respond better in case of a new healthcare crisis like COVID-19.

Furthermore, Table 4 shows that the four motivational factors of the PRS scale are correlated with each other. A stepwise multiple regression has been applied with dependent variables the motivational factors and independent variable the positive answer to the question '*Do you consider that nurses must participate in CPD activities throughout their professional route?*'. A positive correlation has been found between them and specifically 'Improving professional skills and services to patients' ($\beta = 0.36, p < 0.001$), 'Professional commitment' ($\beta = 0.39, p < 0.001$), 'Collegial learning and interaction' ($\beta = 0.43, p < 0.001$), 'Personal benefits and job security' ($\beta = 0.31, p = 0.004$) (Table 5).

Table 1. Samples' demographic characteristics, educational level, and working situation.

		N (%)
Sex	Female	95 (83.3)

Age	41-50 years old	38 (33.3)
Marital status	Married	64 (56.1)
Do you have children?*		62 (54.4)
Number of children, Average (SD) Median (inter-quartile range)		1.9 (0.8) [2 (1-2)]
Postgraduate studies	Master degree	39 (34.2)
	PhD	1 (0.9)
Nursing specialty		12 (10.5)
Years of working, Average (SD) Median (inter-quartile range)		14.8 (9.5) [14 (7-21)]
Have you been working in different nursing wards throughout your working career?*		109 (95.6)
If you have, how many different nursing wards you have been working in? Average (SD) Median (inter-quartile range)		2.8 (1.7) [2 (2-4)]
Working ward	Operation room	35 (30.7)
* Reflects the number and percentage of participants answering “yes” to this question.		

Table 2. CPD participation and views.

	N (%)
Fill in which of the following forms of CPD activities you have participated	
<i>Update on the latest developments in the nursing profession through a bibliographic review</i>	32 (28.1)
<i>Participation in conferences/seminars</i>	85 (74.6)
<i>Accomplishing scientific papers in conferences/seminars</i>	27 (23.7)
<i>Other</i>	3 (2.6)
<i>I have never participated in any form of CPD activity</i>	19 (16.7)
Do you consider that nurses must participate in CPD activities throughout their professional route?*	107 (93.3)
* Reflects the number and percentage of participants answering “yes” to this question.	

Table 3. Working experience during the pandemic COVID-19.

	N (%)
Did you transfer to a new working ward or unit during the pandemic COVID-19?*	54 (47.7)
If you answered yes	

The new ward or unit was a COVID-19 ward or unit?	46 (86.8)
If you answered no	
The ward or unit that you are working in was transformed into a COVID-19 ward or unit?	63 (63.0)
If you answered yes	
For how long have you worked in a COVID-19 ward or unit? Average (SD) Median (inter-quartile range)	12 (7.8) [12 (5 – 18)]
The knowledge that you had were sufficient for working in the new ward or unit?	31 (50.0)
Do you think that you had benefited from your work/offering in a COVID-19 ward or unit?*	53 (86.6)
If you answered yes in which of the next statements, have you benefited?	
Knowledge and skills	36 (67.9)
Specialized experience in something unprecedented	44 (83.0)
New accountancies with other colleagues and health professionals	24 (45.3)
Additional asset in my CV**	19 (35.8)
Other	2 (3.8)
After having the experience of offering nursing care to patients with COVID-19 do you want to expand your professional knowledge?*	45 (72.6)
Do you consider that nursing wards rotation in the early stages of nurses' professional route accompanied by participation in CPD activities would help young nurses to respond better in case of a new healthcare crisis like COVID-19?*	55 (87.3)
* Reflects the number and percentage of participants answering “yes” to this question.	
** Curriculum Vitae.	

Table 4. Correlations of motivational factors of PRS scale.

		Professional commitment	Collegial learning and interaction	Professional benefits and job security
Improvement of professional competence and patient services	Rho	0.82	0.70	0.62
	P	<0.001	<0.001	<0.001
Professional commitment	Rho		0.74	0.72
	P		<0.001	<0.001
Collegial learning and interaction	Rho			0.61
	P			<0.001

Table 5. Correlation between motivational factors and the need for compulsory participation in CPD

Nurses must participate in CPD activities throughout their professional route*	β+	SE++	P
Improving professional skills and services to patients	0.36	0.08	<0.001
Professional commitment	0.39	0.10	<0.001
Collegial learning and interaction	0.43	0.11	<0.001
Personal benefits and job security	0.31	0.10	0.004
+ Dependence coefficient. ++ Standard coefficient error. * Reflects the number and percentage of participants answering “yes” to this question.			

Discussion

The COVID-19 pandemic changed people’s everyday life all over the world, in a radical and sudden way, with the healthcare community being the most affected. Most of the nurses who participated in this study agreed that systematic participation in CPD activities along with nursing wards rotation for young nurses could result in an effective response to the possibility of a new healthcare crisis. Also, the vast majority of the participants stressed the importance of compulsory participation in CPD and their willingness to embrace CPD after their working experience during the pandemic. New knowledge and specialized experience in something unprecedented are what Greek nurses gained from their working experience in a COVID-19 nursing ward or unit. Furthermore, a positive correlation has been found between the 4 motivational factors of the PRC scale.

Specifically, the majority (93.3%) of the participants stated that nurses should participate in CPD activities throughout their professional route, a finding that has been found in previous studies (Yfanti & Spitanou, 2016, Sbonia, 2020, Taxtsoglou et al., 2020, Masai & Boibanda, 2022). The paradox with this finding is that 16.7% of the nursing staff has never taken part in any form of CPD activities so far, and this may be a result of various deterrent factors such as family obligations and economic difficulties that obstruct their willingness to participate

in CPD (Katsikitis et al., 2013, Vázquez-Calatayud et al. 2021). Additionally, Greek nurses have considered the non-compulsory character of CPD in their country, as a deterring factor for its complicity in educational activities (Vova-Chatzi et al., 2020). The fact that even working under extremely difficult and stressful conditions, Greek nurses obtained new knowledge and skills should be a trigger for converting CPD in Greece into a mandatory form. In this way, nurses will imperatively absorb new knowledge, even if they have not personally chosen their participation in CPD activities.

Furthermore, 72.6% of the participants who worked in a COVID-19 ward or unit wanted to expand their knowledge. This high percentage may reflect their need to acquire specialized knowledge about the effective management of critical healthcare occurrences. As others have mentioned, nurses should enrich their knowledge and competencies for an impactful response to potential health emergencies (Salehi et al., 2023, Tsiouris et al., 2022).

One-half of the nurses who have been transferred to a COVID-19 ward or unit considered that their knowledge was sufficient to cope with the new working conditions, and this can be explained by the fact that 95.6% of the participants have been working in more than one nursing wards or units throughout their careers. Previous research by Halberg et al. in 2020, showed that nurses who participated in nursing wards

rotation during their professional route acquired new knowledge and skills in a short period of time, and that comes in agreement with the present finding. Another finding from this research that further supports the effectiveness of nursing rotation, is that the positive outcomes of working in a COVID-19 ward or unit, which can be considered as nursing rotation, were the acquisition of specialized experience in something unprecedented with a percentage of 83.0% and new knowledge and skills with a percentage of 67.9%. A very interesting finding is that 87.3% of the nursing staff agreed that a combination of systematic participation in CPD activities and rotation could prepare young nurses to respond better to the possibility of a new crisis such as COVID-19.

Moreover, we found that the four motivational dimensions of the PRS scales are correlated with each other ($p < 0.001$). Similar results have been found by other researchers (Kamariannaki et al., 2017, Sbonia, 2020) highlighting the fact that these dimensions interconnect, and even if nurses' participation in CPD is urged by only one of them, through the learning process their minds open and may discover new motives that inspire them to continue their engagement to CPD activities. This is strongly supported by the positive correlation between each of one of the 4 motivational dimensions of the PRS scale and the positive answer to the question '*Do you consider that nurses must participate in CPD activities throughout their professional route?*' ($p < 0.001$, $p = 0.004$), assuming that once someone acknowledges the power and the benefits of CPD in their everyday working life, it is more likely to become loyal to continuous learning.

The application of rotation as a compulsory CPD activity in Greek hospitals should be considered further for the effective nurses' preparedness in case of a sudden crisis or a disaster. Over the last years, disaster incidents have alarmingly increased worldwide, including natural disasters such as earthquakes, floods, etc., or man-made incidents such as terrorism and bioterrorism attacks, and human conflicts. Disasters usually hit without a warning, at any time,

and in any place, causing severe damage to the community that has been affected (Park & Kim, 2017, Hugelius & Adolfsson, 2019). As a result, nurses should have efficient knowledge and skills to respond to such sudden and urgent events. Additionally, more opportunities, motives, and conveniences should be given to nurses so that they furtherly participate in CPD activities.

Limitations and strengths: The current research is subject to significant limitations such as the small number of sample and the use of a convenience sampling method, and therefore the results cannot be generalized in the population. As a result, we suggest the conduct of further research with a larger sample and a mixed research method quantitative with the use of a questionnaire and qualitative with the process of individual interviews, concerning nurses' views about CPD and their working experiences during the pandemic. Nevertheless, the results seem to have significant statistical power because the demographic results come to an agreement with previous Greek studies (Kamariannaki et al., 2017, Sbonia, 2020, Taxtsoglou et al., 2020). Moreover, this is the first study that gives an insight into Greek nurses' perspective and motives regarding CPD after their working experience through the first two years of the pandemic COVID-19.

Conclusions: In the last three years, nurses worldwide are fighting against their biggest ever challenge, the pandemic COVID-19 feeling exhausted, facing mental and physical fatigue, and insecurity. Nevertheless, they do not get discouraged and declare that not only have they gained new knowledge and skills but also, they expressed their willingness to participate actively in CPD after this working experience.

Many researchers have stressed the importance of appropriate training not only in theoretical nursing knowledge but also in effective competencies, resulting in empowered nurses capable to cope with every sudden major incident that comes their way (Goodwin Veenema, 2016, Veenema et al., 2017). During the first two waves of the COVID-19 pandemic, many participants

realized that the gaps they had in their professional knowledge, made their already challenging working situation even more difficult. Through this study, nurses highlighted the importance of the continuous and conscious participation in CPD throughout their professional route. Nurses emphasized the necessity of perpetual compulsory participation in CPD activities, signaling that knowledge is the only weapon they have to fight every obstacle that comes their way. To our opinion, compulsory participation in CPD accompanied by nursing wards rotation should be applied by nurses worldwide, in order to respond efficiently in a case of a new healthcare crisis or disaster, as they owe in obedience to the recommendations of the International Nursing Coalition for Mass Casualty Education (INCMCE) (Stangeland, 2010).

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