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Continuing Education and Development Opportunities in Greek Hospitals: Comparison of Perspectives between Nurses and other Health Professionals

Angeliki Dreliozi[1], Olga Siskou[2], Nikolaos Maniadakis[3] and Panagiotis Prezerakos[4]

Abstract

Important strategic instruments for improving quality that provide solutions to the demanding problems of health care delivery include evidence-based practice and professional education and development. The present study aims to explore the existing organizational climate - in terms of clinical governance' factor «Continuing Education and Development Opportunities» - in the hospital sector in Greece. In particular, it compares nurses' perceptions with those of other health professionals concerning the particular factor. It also explores the influence of hospitals' legal status and demographic and professional characteristics of the participants on the particular subject. It is a cross-sectional study, including all employees working in two Greek hospitals. 479 hospital workers (response rate: 79%) completed, validated in the present study, Clinical Governance Climate Questionnaire (CGCQ). The collection of survey data took place from May to August 2012. The results of our study suggest that the Hospitals' climate was not supportive to «Continuing Education and Development Opportunities» in the hospitals involved in the study. Nurses in particular appear to have a more negative perception of the climate related to: i) training in searching for research evidence, ii) the presence of clear organizational vision and goals, iii) the presence of a "just" culture and iv) presence of adequate support to deliver service changes
The two-tailed significance level was set equal or less than 0.05.

Keywords: Clinical Governance, Continuing Education, Continuing professional development (CPD)

[1]University of Peloponnese.
[2]Center for Health Services Management and Evaluation, Departement of Nurisng, University of Athens.
[3]National School of Public Health.
[4]Department of Nursing, University of Peloponnese.

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1 Introduction

Health care systems globally are confronted with increasing demand to ensure and improve care of their patients. A number of approaches claim to provide solutions to the problems of health care delivery. Approaches that have been proved to be effective include: evidence-based practice (EBP) and professional education and development [1]. The main goal of the second, is to reduce the gap between the first (EBP) and everyday practice. Continuing professional development (CPD) for healthcare professionals is an important strategic instrument for improving health [2]. Clinical Governance (CG) is a new label for old ingredients such as clinical audit, risk management, evidence based practice, continuing professional education and reflective practice [3]. CG's agenda is oriented towards an integrated approach to healthcare quality using means such as team leadership and development, knowledge dissemination of relevant research evidence, clinical audit and risk management skills, continuing professional education and development [4]. Effective risk and error management forms the basis of healthcare quality management activity aiming to reduce risk and ensure safe and high quality health care. It has been demonstrated that health professionals in Greek hospitals tended to perceive negatively the climate associated with quality and risk management [5]. In the same setting, climate related to effective error management tended to be negative [6].

The development of CG requires the consolidation of different quality areas, the establishment of new systems to recognize good and poor care and to attain the required cultural change to address this. This process compels fresh perceptions at every organizational level and new skills development. Developmental needs for quality improvement within CG framework may vary among professional groups because of the different skills and skill gaps they have [4].

There is a widespread variation in best evidence and every day practice. This phenomenon is common among and within countries [7]. Failure to follow best evidence cause problems such as underuse, overuse and misuse of drugs. This consequently, has raised interest in patient safety [8]. Strategies to reduce the gap between evidence and practice have included educational attempts to alter health professionals' behavior as well as organisational and administrative interventions.

In recent years the emphasis has been shifted from Continuing Professional Education (CPE) to Continuing Professional Development (CPD). The latter concept is broader and includes the first one [9], [10]. CPD goes far beyond the increase of knowledge and skills involving the way they are transferred into practice [11], CPD emphasizes health professionals' –as members of the organization actively striving to provide the best healthcare- personal development. In that way, CPD becomes the driving force for change in the attitude and behavior of health professionals towards efficiency, productivity and social welfare. In other words, towards the quality and safety of health services [12]. The final goal of CPD is to contribute to quality improvement of health services [13]. That is, investing in health care professionals - by human resources development and management- is an investment in health care provided. From all the above, it is clear that education and training are critical means of delivering the necessary changes for CG implementation. The organisation's climate valuation of the aspect of CG related to Continuing Education and Development Opportunities can trace deficiencies and develop strategies for successful Quality improvement initiatives.

1.1 The Purpose of the Study

The purpose of the study is to explore the existing organizational climate-in terms of clinical governance' factor «Continuing Education and Development Opportunities» - in the hospital sector in Greece. In particular, it compares nurses' perceptions with those of the other health professionals regarding the particular factor. The research questions of our study were:

How do employees perceive the organizational climate related to the factor " Continuing Education and Development Opportunities"?

What are the differences in perceptions of the above factor:
• between employees in the private and public hospital
• between men and women
• between nursing personnel and other health professionals?

2 Methodology

2.1 Sampling- Data Collection

This study is a quantitative cross-sectional one. The study's sample included employees of Nursing, Medical, Administrative and Technical services in a public and in a private hospital in the prefecture of Attica with similar production function.

Table.1: Questionnaire Distribution & Response Rate

Service / Hospital	NUMBER OF EMPLOYEES	TOTAL PERCENTAGE	NUMBER OF DISTRIBUTED QUESTIONNAIRES	COMPLETED QUESTIONAIRES	RESPONSE RATE
MEDICAL/ PUBLIC	198	14%	90	60	67%
NURSING/ PUBLIC	505	36%	200	164	82%
ADMINISTRATIVE/ PUBLIC	205	14%	100	65	65%
TECHNICAL/ PUBLIC	45	3%	25	15	60%
MEDICAL/ PRIVATE	80	6%	40	25	63%
NURSING/ PRIVATE	290	20%	140	98	70%
ADMINISTRATIVE/ PRIVATE	67	5%	30	21	71%
TECHNICAL/ PRIVATE	17	1%	10	10	100%
TOTAL	1419		635	459	72%

Proportionate stratified sampling method was used to draw a sample of 459 health professionals. This method improves the representativeness of the sample by reducing sampling error. The study population was divided into homogeneous subpopulations

(strata) and random samples were taken of each stratum as shown in Table. 1. The questionnaire was administered personally by the principal investigator through liaison people in each of the hospitals. 635 questionnaires were distributed (415 offprints to the Public and 220 to the private hospital). Response rate was 72% (70% for the private, 73% for the public).
The questionnaire was accompanied by a description of the purpose of the research and additional clarifications in some cases were provided. Questionnaires were collected on a weekly basis. The collection of survey data was held within a period of four months (May to August 2012).

2.2 Tool

For the purpose of the study Clinical Governance Climate Questionnaire (Clinical Governance Climate Questionnaire, CGCQ) was used. It was developed by Freeman [15] specifically to explore the connection between organisational culture and climate and performance in clinical governance. Permission was granted by T. Freeman to use his tool in our research. It consists of 60 items, which are grouped into six dimensions of clinical governance: i) planned and integrated quality improvement, ii) pro-active risk management, iii) absence of unjust blame and punishment, iv) positive working relationships with colleagues, v) training and «Continuing Education and Development Opportunities» and vi) organizational learning. The answers to the questionnaire's statements were scored by the participants in a Five (5) - point - Likert scale. A lower score signifies greater satisfaction in a particular concept. The lower rating reflects on ideal climate of clinical governance. Some of the statements are negatively stated.
The CGCQ was translated and adapted to the Greek culture by a health professional with excellent knowledge of the English language. Reverse translation of the questionnaire from the Greek into English was conducted by an independent health professional with excellent knowledge of the English language. Since the questionnaire translated from Greek to English was not far from the original, the questionnaire was considered ready to be distributed to participants [16]. In order to assess face validity the questionnaire was administered to a convenience sample of health professionals (N = 18). After completing the questionnaire, the principal investigator conducted personal interviews with the respondents who were encouraged to make comment upon clarity or difficulties in completion. The few comments made, were embedded in the final version of the questionnaire.
The assessment of the internal consistency of the questionnaire was performed by calculating the Cronbach coefficient with acceptable values over 0.6. The Cronbach coefficient for the factor of our study was 0.93 which indicates a high level of internal consistency.

2.3 Data Analysis

Descriptive statistics were used. The degree of participants' agreement with each statement under the factor «Continuing Education and Development Opportunities» presented as mean (standard deviation), minimum value and maximum value. The lowest mean price reflects a more supportive climate.
In order to identify the main factors (distinct groups consisting of questions related to each other) which influences the climate of clinical governance in the hospitals under

study, Factor Analysis (FA) was conducted. Varimax rotation was applied and the loadings of the questionnaire data were> 0.30 considered as acceptable, as well as the eigenvalues of the scales which was> 1.

In order to investigate the presence of a relationship between the factor «Continuing Education and Development Opportunities» (dependent variable) with each of the demographic and job characteristics of participants (independent variables) bivariate analyses were performed.

Furthermore, a multivariate linear regression was carried out including in the model, many of the independent variables found in the bivariate analyses that correlated significantly with the dependent variable, the factor of «Continuing Education and Development Opportunities»

The two-tailed significance level was set equal to 0.05. Data analysis was performed with the SPSS 19.0 (Statistical Package for Social Sciences).

3 Results

3.1 The Results of Descriptive Statistics

Demographic characteristics of the studied population

Tables 2 and 3 present the demographic and professional characteristics of employees. The average age of employees was approximately 40 years and the average number of years of employment was 13 years. Two thirds of the study population were working in a public hospital. Women predominated the studied population, the proportion of university and college graduates were about 80% and a significant proportion of them had completed postgraduate studies. Employees in Nursing Services exceeded half of the study population.

Table 2: Demographic characteristics of the study population

Characteristic	**N (%)**
Gender (n=459)	
Males	170 (37)
Females	289 (63)
Age (years) (N=356)	39.8 (9.1)[α]
Hospital (N=459)	
Public	304 (66.2)
Private	155 (33.8)
Educational level (n=459)	
Seconday school graduates	71 (15.5)
College (2 years) graduates	46 (10)
College (3.5 years) graduates	157 (34.2)
University graduates	106 (23.1)
MSc/ Phd graduates	79 (23.8)

Table 3: Professional Characteristics of the population under study.

Characteristic		**N (%)**
Years of previous experience (n=321)		12.8 (9.1)[a]
Service (n=459)		
	Nursing	261 (56.9)
	Medical	82 (17.9)
	Administrative	91 (19.8)
	Technical	25 (5.4)
Post held Non-medical personnel (N=382)		
	Head of division	3 (0.8)
	Head of department	24 (6.3)
	Head of section	32 (8.4)
	Employee	323 (84.6)
Post held Medical personnel (N=77)		
	Medical director	10 (13)
	Consultant	15 (19.5)
	Specialist	34 (44.2)
	Trainee	18 (23.4)
Type of employment (N=459)		
	Permanent contract	301 (65.6)
	Open-ended long term contract	121 (26.4)
	Short term contract	14 (3.1)
	Associate (medical doctors in the private hospital)	23 (5)

Employee's responses regarding the factor "«Continuing Education and Development Opportunities»*"*

In Table 4 the responses of participants regarding the degree of their agreement on the factor "«Continuing Education and Development Opportunities»" of clinical governance climate in their workplace are reported. Specifically, table 4 compares the means for nurses' responses with the means for the other health professionals' (Medical, Administrative, Technical) responses. The item with the smallest mean reflects a more supportive climate.

Table 4: The responses of participants regarding the degree of their agreement on the factor "Continuing Education and Development Opportunities"of clinical governance climate in their workplace. *The smallest mean corresponds to a more supportive climate of CG.*

Issue	Service	N	Mean	Std. Deviation	Minimum	Maximum	P value
1.50 Immediate pressures are always more important than quality improvement	Nursing	261	3.5	1.4	1	5	0.402
	Medical, Administrative, Technical	198	3.6	1.0	1	5	
	Total	459	3.6	1.2	1	5	
1.17 Appraisal does not identify the real development needs of staff	Nursing	261	3.4	1.2	1	5	0.216
	Medical, Administrative, Technical	198	3.6	1.1	1	5	
	Total	459	3.5	1.2	1	5	
1.20 Good practice stays isolated in pockets	Nursing	261	3.6	1.3	1	5	0.560
	Medical, Administrative, Technical	198	3.5	1.2	1	5	
	Total	459	3.5	1.2	1	5	
1.33 The first we know of quality improvements elsewhere in the organisation is when we feel the effects	Nursing	261	3.4	1.0	1	5	0.094
	Medical, Administrative, Technical	198	3.6	0.9	1	5	
	Total	459	3.5	1.0	1	5	
1.28 There is no training available in searching for research evidence	Nursing	261	3.7	1.3	1	5	**0.000047**
	Medical, Administrative, Technical	198	3.2	1.2	1	5	
	Total	459	3.5	1.3	1	5	
1.29 There are lots of quality improvement initiatives, but little change	Nursing	261	3.4	1.3	1	5	0.941
	Medical, Administrative, Technical	198	3.4	1.0	1	5	
	Total	459	3.4	1.2	1	5	
1.30 There is no common approach to risk management	Nursing	261	3.3	1.2	1	5	0.820
	Medical, Administrative, Technical	198	3.3	1.0	1	5	
	Total	459	3.3	1.1	1	5	
1.59 People are forced into making service changes, rather than encouraged to make them	Nursing	261	3.3	1.2	1	5	0.672
	Medical, Administrative, Technical	198	3.2	1.0	1	5	
	Total	459	3.2	1.1	1	5	
1.25 There is no clear vision of what the organisation is trying to achieve	Nursing	261	3.5	1.3	1	5	**0.000000161**
	Medical, Administrative, Technical	198	2.9	1.4	1	5	

	Total	459	3,2	1.4	1	5	
1.58 There are few	Nursing	261	3,2	1.4	1	5	0.681
opportunities to use	Medical,	198	3.2	1.3	1	5	
new skills learned as	Administrative,						
part of development	Technical						
	Total	459	3.2	1.3	1	5	
1.26 We work in an	Nursing	261	3.3	1.3	1	5	**0.009**
atmosphere of	Medical,	198	3.0	1.2	1	5	
blame	Administrative,						
	Technical						
	Total	459	3.2	1.3	1	5	
1.24 There is no	Nursing	261	3.3	1.2	1	5	**0.035**
support to deliver	Medical,	198	3.0	1.1	1	5	
service changes	Administrative,						
	Technical						
	Total	459	3.2	1.2	1	5	
1.46 People don't	Nursing	261	3.0	1.3	1	5	0.612
seem to have shared	Medical,	198	3.1	1.1	1	5	
service goals	Administrative,						
	Technical						
	Total	459	3.1	1.2	1	5	
1.51 Quality	Nursing	261	3.0	1.3	1	5	0.100
improvement activity	Medical,	198	3.2	1.3	1	5	
is largely a response	Administrative,						
to external pressure	Technical						
	Total	459	3.0	1.3	1	5	

Considering the overall mean (3.3 > 2.5) which tends to the negative score, we could argue that climate-related factor of our study is not supportive in the hospitals under study.

3.2 Results of the Factor Analysis and Correlations

One of the three factors that emerged from the factor analysis of the raw data from the present study concerns the factor «Continuing Education and Development Opportunities» and consists of 14 items as listed in Table 4.

Correlation analysis was conducted to investigate the relationship between demographic and occupational characteristics of the population under study and the above factor.

Tables 5 and 6 shows the relationships between demographic and occupational characteristics and the factor of our study.

Table 5: Relations between demographic characteristics and the factor "Continuing Education and Development Opportunities"

Characteristic	**Mean (Standard Deviation)**	**P value**
Gender		
Males	3,18 (1,26)	**p=0,000000000257$^{\alpha}$**
Females	3,38 (1,21)	
Age (years)	0,10$^{\beta}$	**p=0,00000000000123**
Hospital		
Public	3,56 (1,10)	**p=1,77x10$^{-112\alpha}$**
Private	2,78 (1,29)	
Educational level		
Seconday school graduates/ College (2 years) graduates	3,41 (1,18)	**p=0,0002506$^{\gamma}$**
University/ College (3,5 years) graduates	3,26 (1,25)	
MSc/ Phd graduates	3,29 (1,21)	

$^{\alpha}$ t-test

$^{\beta}$ Pearson's correlation coefficient

$^{\gamma}$ Analysis of variance

Table 6: Relations between professional characteristics and factor "Continuing Education and Development Opportunities".

Characteristic		Mean (Standard Deviation)	P value
Type of service			
	Nursing	3,34 (1,28)	**p=6,7x10$^{-27\gamma}$**
	Medical	3,11 (1,28)	
	Administrative	3,37 (1,08)	
	Technical	3,30 (0,99)	
Years of employment		0,18$^{\alpha}$	**p=4,8x10^{-33}**
Post held (Non medical personnel)			0,5$^{\beta}$
Head of Department / Division / Section		3,36 (1,27)	
Employee		2,32 (1,20)	
Post held (Medical personnel)			**0,002$^{\gamma}$**
Consultant / Medical director		3,04 (1,30)	
Specialist		3,10 (1,27)	
Trainee		3,41 (1,36)	
Type of employment			
Permanent contract		3,54 (1,08)	**p=3,65x10$^{-50\gamma}$**
Long term contract		2,70 (1,32)	
Short term contract		3,07 (1,47)	
Associate (medical doctors in the private hospital)		3,53 (1,22)	

$^{\alpha}$ Pearson's correlation coefficient

$^{\beta}$ t test

$^{\gamma}$ Analysis of variance

From the above bivariate analyzes statistically significant relationships resulted between gender, age, hospital, educational level, type of service, post held, the type employment

and the factor «Continuing Education and Development Opportunities».
For this reason, multivariate linear regression was carried out, with dependent variable the factor of our study (Table 7).

Table 7: Multivariate linear regression with dependent variable the factor "Continuing Education and Development Opportunities".

	b coefficient	**95% confidence interval for b coefficient**	**P value**
Women in relation to men	0,24	0,16 to 0,32	p=0,00000000302
Public hospital in relation to private	0,77	0,69 to 0,85	$p=1,36x10^{-112}$
Years of employment	0,04	0,03 to 0,05	$p=4,8x10^{-33}$
Age	-0,02	-0,03 to -0,01	p=0,0000000000235

According to the results shown in Table 7, men had lower mean scores by 0.24 points to the factor «Continuing Education and Development Opportunities» compared with women. Employees at the private hospital had lower mean scores by 0.77 points to the studied factor compared with employees at the public hospital. Increase of the years of service associated with an increase to the studied factor's score. Finally, reduction of the age related to increase to the studied factor's score.
These four variables explain 14% of the variability factor «Continuing Education and Development Opportunities».

4 Discussion

The results of our study suggest that the Hospitals' climate was not supportive to «Continuing Education and Development Opportunities» in the hospitals under study. Corresponding studies reached similar conclusions [17] [18] [19] [20] [21].
The particular aspects that can be seen as problematic issues in a hospital's climate and consequently as blockages to CG success are mainly related to long term planning for initiating change towards quality improvement. That is, I) implementation problems associated with support to deliver change, strong workload pressures, inadequate training, disorientation of the appraisal systems (items 29, 50, 24, 28, 17), II) clear and effective communication of a shared vision and goals of service delivery (item 25, 24), III) poor communication between employees (item 33) IV) and motivation (item 59). These are critical points which the managers of Greek hospitals should consider.
Statistically significant relationships resulted between type of service and the factor «Continuing Education and Development Opportunities». Absence of training in searching for research evidence (item 28) is perceived stronger among nurses compared to the other health professionals. This leads to failure to use research evidence in the appropriate way. Also, lack of clear vision of what the organisation's goals (item 25), presence of a blame culture (item 26) and the inadequate support to deliver service changes (item 24) are perceived more negatively by nurses compared to the other health professionals.
Men perceived the aspect of CG climate related to «Continuing Education and Development Opportunities», more positively than women. Similarly, men perceived the aspect of CG climate related to Quality and Risk management more positively than

women [5]. In contrast, women perceived the aspect of CG climate related to effective error management more positively than men [6]. No corresponding studies were found demonstrating similar gender influence. Still, there is evidence of gender stereotyping in work which often result in discrimination. [22]. In recent years, women have entered almost every field, including those traditionally dominated by men. Still, women are underrepresented in top leadership positions in companies , academia and government, as well as private and public organizations providing health services [23]. The number of women in leadership positions has increased, however, the evidence suggests that even in Hospitals - Centers of Excellence in developed countries gender discrimination is still present [24], although it has been shown that women are not inferior in their leadership skills [25].

Senior employees perceive the aspect of CG climate related to «Continuing Education and Development Opportunities» more negatively than employees with less years of experience. This finding could be connected with the low levels of motivation found, which affects employees' attitudes over time [5]. This finding seems inconsistent to the next one according to which, older in age employees perceived the aspect of CG climate related to «Continuing Education and Development Opportunities», as more positive than the younger ones. Given that the age range of the sample was from 30 to 50 years and the range of the years of working experience was from 4 to 22 years, it is possible that younger employees could have, in some cases, more years of experience. Moreover, the precedent finding is probably due to the psycho emotional, and ideological development of individuals, which is a progressive process that associated with aging and the acquisition developmental experiences [5].

Finally it was evident that workers in the private hospital perceived the aspect of CG climate related to «Continuing Education and Development Opportunities», as more positive than employees in the public hospital. From the literature search no studies including employees working in public and private hospitals was found. In the study of Karassavidou et al. [17] - conducted in three hospitals in Central Macedonia of which one was of special legal status (semi-public) - found that the legal personality of the hospital affects positively the climate of Clinical Governance and quality of service. Particularly, employees of the semi-public hospital perceived the climate of the organization related to «Continuing Education and Development Opportunities", more positive than those working at the two public hospitals. In their conclusions, the authors raised issues such as the promotion of decentralization of hospitals, autonomy, flexibility, infrastructure and commitment of leadership.

Inherent differences in the internal environment of public and private sector such as the differentiated nature of the pressures of the external environment result in dissension in attitudes and behaviors of the employees. Bourandas's [26] study aimed to investigate and interpret differences in satisfaction, organizational commitment and motivation in Greek public and private institutions. The key point of their study was that public services are inferior to almost all of the variables that influence positively employees' attitudes towards efficiency and superior to the variables that have negative impact on spirit and performance. According to their survey results this lag is due to a number of characteristics of the human resource management in the public sector, which is dominated by problems regarding: autonomy, dissemination of the results, confusion and conflict in roles, policies and procedures, interference of politics, irrationality in service, rewarding system and lack of vision.

The factor of our study includes variables focusing on organizational opportunities for

employees' learning and development. Those variables point out the organizational short-term and long-term strategies directing staff training in quality improvement. This is done in parallel with their personal professional development, which is also subserves the overall development of the hospital. The presence of opportunities for learning (Learning HRM Policies), and the subsequent assessment of these opportunities (appraisal), are key elements for the introduction of an effective framework of CG [27].

Globally, health care systems encounter the challenge to improve quality and to minimize risks. The use of research evidence to make informed decisions is necessary across health care providers, patients, managers and policy makers. There is strong evidence of failure to use research evidence effectively in both developed and developing countries and also in care provided by all disciplines [28]. That failure, leads to insufficiency and poor quality. Provision of research evidence is necessary but not enough. Awareness of this issue has raised interest in knowledge translation (KT) which aims in closing the gap between knowledge and best practice There are several approaches to KT definition, all reflecting the applying of knowledge rather than just simply disseminating knowledge.

5 Limitations of the Study

This study as a descriptive cross-sectional one, identified the characteristics of the existing organizational climate in terms of the feature of clinical governance, "«Continuing Education and Development Opportunities»". These characteristics are not static but are drastically changing in response to external events. Therefore, probably the survey data have a limited duration. The study population was drawn from one public and one private hospital, so the generalization of the results to the public and private hospital sector should be treated accordingly. Finally, the tool used although that has demonstrated high reliability and validity, as appropriate, has been used in a limited number of studies [17] [18] [19] [20] [21], probably due to it's relatively recent development, which took place in 2003. It also explored «Continuing Education and Development Opportunities» as a single factor, under the umbrella of Clinical Governance, therefore, the information and correlations drawn regarding the subject were limited. Given the importance and sensitivity of the subject we are planning further research in order to obtain a better and deeper understanding of the Greek hospital setting context, and to shape comprehensive, reliable and valid tools for quantitative measurement of climate in terms of «Continuing Education and Development Opportunities», which will serve as tools for policy-making and administration.

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