

The Professional Development Plan of a Health Care Workforce as a Qualitative Indicator of the Health Care System's Well-Being

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Abstract

The quality of a health care system is heavily dependent on a capable and skillful health care workforce so as to guarantee the delivery of quality health care services to its user groups. Hence, only through continuous training and development can the health care workforce follow rapid scientific progress while equitably balancing investment efficiency in the health care sector. The purpose of this study was, through the factor analysis of principal components, to identify the factors of satisfaction regarding the professional development and training policies as experienced by the Greek health care workforce. This study supports the view that only an education policy based on professional development and training is a fundamental factor for any sector and should aim to respond to the need for quality services.

Keywords: *health care, workforce, professional development*

The importance of the Health Care Workforce in the Effective performance of the Health Care sector

There is no doubt that human resources are the key factor for the efficiency of any organization and for creating and integrating its visions, strategies and targets (Becker & Gerhart, 1996; Gebbie & Turnock, 2006; Jackson & Schuler, 1995; Papadakis, 2002). The health care sector functions within a continuously changing environment (in a social, political, technological and economical sense) where health care decision-makers are continually under pressure to consider ways of investing in the workforce since the rational management of human resources could offer their health care organization a competitive advantage and result in more effective performance (Allegrante, Moon, Elaine Auld & Gebbie, 2001; Buchan & Dal Roz, 2002; 2014; Gebbie & Turnock, 2006; Polyzos, 2014; Sibbald, Shen & McBride, 2004). Indeed, the strategic management of an organization emphasizes the importance of human resources and identified it as the main element for the achievement of competitive advantage. The health care sector is certainly not the exception to the rule while issues of health care workforce have a direct impact on the total efficiency, purpose and sustainability of health care systems. Indeed, Hongoro and McPake 2004 stated that "the health care workforce is at the heart of

the health care system" (p.1451). For this to happen, health care units should have the appropriate organizational support that stem out not only from the health care policy but also is a matter of actions taken by their management.

Hence, the quality of a health care system is heavily dependent on a capable and skillful health care workforce so as to guarantee the delivery of quality health care services to its user groups. Given that the challenge for the health care sector is to optimize the skills base of a diverse workforce, then a key element of success is the emergence of new knowledge and skills through continuous training (Allegrante, et.al., 2001; Buchan & Dal Roz, 2002). Indeed, a competitive advantage is achieved by combing the rational management of the workforce, the overcoming of threats, the use of opportunities and the development of all possibilities and needs of both the internal and external environment of an organization (Ferris, Perrewe, Ranft, Zinko, Stoner, Brouer & Laird, 2007; Stone, Stone-Romero & Lukaszewski, 2007). The professional development and education of the workforce is certainly a fundamental management tool in any organization's attempt to respond to a heavily competitive, noisy and changeable environment (Allegrante, et.al., 2001; Gebbie & Turnock, 2006; Polyzos, 2014). Especially nowadays with globalization, differences in culture and rapid technological changes, an organization should be ready, more than ever, to focus on preparing the workforce with professional abilities, cooperation skills and training in modern technologies (Cheng, 2004).

The training and professional development of the health care workforce has advantages for both sides: employees and health care units. The main advantage for the organization is it obtains an experienced and well-trained workforce that has the best opportunity to implement policies and achieve targets. Within this framework, the obtainment of extra knowledge and skills offers a sense of security and personal satisfaction, improves performance and enhances psychological health (Becker & Gerhart 1996; Bouradas 2002; Gebbie & Turnock, 2006; Sibbald, Shen & McBride, 2004).

More than ever, the workforce in the health care sector needs to be updated with latest techniques to improve the quality of services. In this regard, a strategic professional development policy may enhance the working environment, boost motives and satisfaction and altogether contribute to the effective performance of the health care workforce (Ankli & Palliam, 2012; Carignani, 2000; Dilintas, 2010; Fritzen, 2007; Kontodimopoulos, Nanos & Niakas, 2006; Landon, Reschovsky & Blumenthal, 2003; Xenos, Nektarios, Polyzos, & Ifantopoulos, 2014) use all names first time. Hence, only through continuous training and development can the health care workforce follow rapid scientific progress while equitably balancing investment efficiency in the health care sector.

Based on the above, the purpose of this study was, through the factor analysis of principal components, to identify the factors of satisfaction regarding the professional development and training policies as experienced by the Greek health care workforce. An education policy based on professional development and training is certainly fundamental for any sector and should aim to respond to the need for quality services. Education policy is continually in need of review as society strives to maintain its traditions and values while assimilating ever-expanding knowledge.

It is clear, then, that the health care sector, from a service-provider perspective, should focus on the increasing need for an appropriately skilled workforce.

The Public Health Care Sector in Greece

Health care service managers are frequently confronted with a number of obstacles that are interrelated and inhibit balanced solutions, such as (Polyzos, 2014, pp.164-165) "a) shortage of knowledge or weakness in knowledge management for the desired medical result, b) the nature of the medical profession, c) organizational internal variability and complications, and d) environmental externalities (government, public insurance, patients, etc.)". Hence, the effective performance of a health care unit depends heavily on the subsystems and its interaction with the environment while every change in the assembly and distribution of resources can bring changes not only to the other subsystems but also to the general performance of the health care unit.

With particular reference to the Greek public health care system, the Ministry of Health and Social Solidarity is responsible for the implementation of health care policy and the establishment of the objectives, rules and principles of the system. In Greece, all civilians have social health insurance coverage while the provision of health care services is free and accessible to the entire population.

Indeed, many Greek researchers (Dilintas, 2010; Economou, 2010; Halkos & Tzeremes, 2011; Kastanioti, Kastanioti, Kontodimopoulos, Stasinopoulos, Kapeteneas & Polyzos, 2013; Kontodimopoulos, Nanos & Niakas, 2006; Labrelli & O' Donnell, 2011; Polyzos, Karanikas, Thireos, Kastanioti & Kontodimopoulos, 2013; Xenos, et.al., 2014 etc.) converge on the conclusion that the health care system has certain drawbacks such as a heavy centralization in the decision making process, the lack of a planned health care management strategy, an inefficient allocation of the health care workforce, an unequal and unjust distribution system of financial resources, the limited role of new technology and an absence of an efficient professional development and training policy for the health care employees. The net result is a poorly-trained health care workforce.

Based on the latter, according to New Employee Code of Public Servants of 2007 (No 3528), for medical doctors in the public health care sector there is no introductory training while for those who enter the profession of nursing there is an introductory training program of one week. These introductory programs for nurses are offered by the National School of Public administration and the programs are exactly the same as those who enter the public sector.

Regarding in-service training, the health care workforce has the right to attend training programs while it is compulsory for each hospital to take care of the training needs of its workforce regardless of the category, sector, specialization or rank in the personnel organizational structure. The type of training varies and may take the form of a general training or a more specialized one based on the employee's type of work. While the attendance of any training program by the workforce is mostly optional, there are certain cases when it is compulsory. e.g. epidemics, infections or a new information technology system (New Employee

Code of Public Servants of 2007 (No 3528)). The in-service training programs are offered by external organizations such as Pharmaceutical companies, Universities and the National Centre of Public Administration. According to the current legislative framework, all medical doctors and nurses have the option to follow a program of in-service training. However, in practice, the attendance of training programs depends on hospitals' senior management and in most cases the pursuit of training programs is influenced by the seniority of the health care staff. More specifically, since not all health care staff can attend the training programs at the same time, the senior management of hospitals favor (give priority to) those medical doctors and nurses who have more years of experience in the public health care sector. The idea behind this usual practice is the fact that the development (promotion) path in Greek public hospitals is influenced more by seniority than other more fundamental aspects and so those who are older in age and have more years of experience have more possibilities to be promoted than their younger counterparts. Therefore, given the above, the success and the efficiency of health care professional development and training in the Greek public health care sector remain questionable.

Methodology

In order to address the purpose of the paper, primary source data has been collected through the administration of questionnaires to public health care workforces (medical doctors and nurses) during the years 2012-2015. This paper analyses a part of a bigger study that investigates the perceptions held by the health care workforce of the staffing of Greek health care units. The questionnaire used was compiled after reviewing the relevant literature and includes a section regarding the training and professional development of human resources in healthcare and it is this section that is being interpreted in the present study. Personal and professional characteristics of the health care workforce in question was included in the analysis while respondents were asked to rate the degree of agreement by using the following scale: 1 = disagree very much, 2 = disagree moderately, 3 = neither agree nor disagree, 4 = agree moderately, 5 = agree very much. The statistical analyses used in this research provided the principal components for factor analysis and this method was applied to the original statements of professional development and training included in the questionnaire.

Anonymous questionnaires were administered to 1500 medical doctors and nurses in all 7 administrative health care regions of Greece whereas the necessary condition for its completion by the health care workforce, was the approval from the scientific committees of all public health care units that participated in the research (12 in total from the whole of Greece). The response rate was 35.2% and resulted in a total of 529 questionnaires that were sufficiently completed for analysis. Out of those, 36.8% (195) were completed by medical doctors and 63.2% (334) were completed by nurses.

Findings

Table 1 presents the demographic characteristic of the sample.

Table 1: Demographic Characteristics¹

Variables		
<i>Gender</i>	Men	33.1%
	Women	66.9%
<i>Age</i>	31-40	43%
	>40	34.8%
<i>Married</i>		54.2%
<i>Mean years of experience in the public health care sector</i>		10.6 years
<i>Mean number of years' experience in their current hospital</i>		8.8 years
<i>Medical doctors</i>	Medical interns	34.4%
	Surgeons	15.4%
	General practitioners	14.4%
<i>Nurses</i>	General Practice Clinique	12.3%
	Intensive Care Units	8.4%

The application of factor analysis resulted in the extraction of two factors that have an Eigenvalue above 1. Of these, two factors were selected (Table 2) which provide an explanation for 58.6 per cent of the total sample. The Cronbach's alpha reliability coefficient was 0.70. Based on the empirical findings, the following factors were extracted:

- The first set of factors concerned Professional Development and In-service Training. These were:
 - "Your hospital organizes training programs for medical doctors and nurses at the hospital;"
 - "Your hospital organizes, in collaboration with other organizations, training programs for your professional development and training;"
 - "The provision of motives for professional development came mostly from the hospital;"
 - "Creative initiatives in the working environment were a main means of improving workforce efficiency;" and
 - "For every new information system introduced in the hospital that is supposed to be used, there is a corresponding training program to be attended."
- The second set of factors concerned Introductory Training. These were:
 - "The introductory training includes knowledge and training for all the hospital clinics;"
 - "A new member in the workforce of the hospital is following an introductory training program;"
 - "When a new member came in, the current workforce trained with comfort and pleasure;" and
 - "The hospital facilitates the attendance of an undergraduate or postgraduate program."

¹ Further demographics characteristics are available from the authors upon request.

Table 2: Factor Loadings

	Factors	
	1 st	2 nd
Your hospital organizes training programs for medical doctors and nurses at the hospital	.822	
Your hospital organizes, in collaboration with other organizations, training programs for your professional development and training	.907	
The provision of motives for professional development came mostly from the hospital	.672	
Creative initiatives in the working environment were a main means of improving workforce efficiency	.526	
For every new information system introduced in the hospital that is supposed to be used, there is a corresponding training program to be attended	.613	
The introductory training includes knowledge and training for all the hospital clinics		.473
A new member in the workforce of the hospital is following an introductory training program		.670
When a new member came in, the current workforce trained with comfort and pleasure		.776
The hospital facilitates the attendance of an undergraduate or postgraduate program		.750

The correlation t-Test between the first factor and the age of the respondents indicated a statistically significant positive relation between the first factor and the age range 20-40 years old, suggesting that the older the workforce members the more satisfied they are with the in-service training. Given that older employees in Greece tend to have more years of service experience in the public health care than their younger counterparts, then the usual practice concerning the implementation of training programs in the health care workforce of the Greek hospitals is being confirmed.

Conclusions

In every sector, the substantive factor that contributes to effective performance is human resources. Material resources cannot be used and developed without human efforts since it is people who design programs and coordinate all activities, as well as develop material resources, efficiency indicators and control systems for the monitoring of efficiency. All these managerial activities heavily depend on the knowledge, will and abilities of the workforce. No matter how well a sector (and its organizations) may be organized, it cannot achieve any satisfactory result without professionally developed and well-trained people. Therefore, education policy for employees (and hence those in health care) should focus on the professional development and training of the human factor - a profitable investment that in the long term offers the sector great value benefits.

The factor analysis resulted in two groups of statements while all items included in the first factor concerning professional development and in-service training had high loadings, accounting for 46.49 per cent of the total sample. This strongly

indicates the necessity for professional development and training in new knowledge and skills for the improved and more efficient execution of work. Every reform attempt in the organization and functioning of health care units (and every unit), programs and methods should be accompanied by the relevant training of the workforce. Health care and education - the two fundamental sectors for the prospect of economic development - comprehensively cover the modern educational and social needs of all relevant stakeholders in which the main focus is placed on professional development and training to better enable the system to adjust to current demands.

In Greece, however, education policy for the health care workforce has not reached the appropriate level of awareness and does not fully address the key factor of development and training in an efficient manner. In this regard, the Greek legislative framework does not seem to be focused on the clear target of development and training so as to provide opportunities for a sustainable policy for efficient education. Indeed, the results of this study indicate the need for a more effective education policy in the domain of health care.

Based on the above and taking into consideration that the medical and nursing professions are unique in the services sector (since they are entrusted with maintaining the population's health) the educational policy recommendations for professional development are:

- The development of introductory training programs for both medical doctors and nurses is a much-needed element in order to ensure existing theoretical and practical knowledge is supplemented with latest developments and best practices. The absence of pre-service training programs for medical doctors and the one week introductory general training program for nursing staff certainly do not adequately fulfil an education policy, nor do they provide a basis for a sustainable health care system.
- Since a development and in-service training program for health care employees is not compulsory in Greece, the core issue for education policy should be the implementation of ongoing training programs, on a permanent basis, that focus on the continual awareness of developments in the health care sciences while creating appropriate incentives for health care staff is absolutely necessary for an efficient education policy. Certainly, for a country such as Greece that is facing severe economic problems, such a development and training policy would raise the financial cost. However, the economic sacrifice of the Greek state (and indeed any State) is fundamentally necessary because only through education can countries optimize their investment in economic development.
- The role of University departments and faculties may be expanded in an attempt to improve the development of health care staff. As universities are non-profit organizations and privileged possessors of knowledge and skills, then establishing a greater involvement of universities in development and training policy can bring the desired outcomes by overcoming any distortion in the system.

It is clear from the above that any attempt at sustaining and improving society's standard of living, any attempt at development and growth is actually a struggle for education and knowledge. For this reason, education policy in any sector of the economy should have a single focus: the professional development and training of the workforce. Indeed, the productive members of society are those who determine, more than anything else, the long-term prospects for economic growth and substantially influence a country's development prospects since it is through the production and implementation of scientific knowledge and skills that productivity can increase.

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