

The Evolution of Health Workers as A Motivating Factor Towards the Administrations of Health Units

Ntisiou Paraskevi, Sotiria Triantari

Department of Management Science and Technology, School of Economics, University of Western
Macedonia, Greece

bntisiou@gmail.com

Abstract. The continuing education of health workers is vital for enhancing professional practices and health services. This study investigates the motivation and need for further training among employees at the Giannitsa Health Unit in Greece. A survey was conducted using convenience sampling, yielding 100 responses (23.4% response rate). Parametric analysis examined the effects of gender, age, experience, and job position on motivation and barriers to education. Results showed high motivation (Mean=3.46, SD=0.552) but low perceived barriers (Mean=2.25, SD=0.972). Job position significantly impacted motivation ($F(4,95)=2.790$, $p=0.031$), with medical and administrative staff exhibiting the highest motivation. In conclusion, management policies influence employee motivation and educational needs. This study provides insight into promoting continuing education among health workers, which is integral to improving professional development and healthcare delivery. Further research should explore organizational and individual factors influencing participation in ongoing training within the healthcare system.

Keywords: Motivation, continuing education, medical-nursing staff

1. Introduction

It is commonplace that modern technocratic society is evolving and is constantly undergoing changes and radical reorientations. In these changes the workers in all fields and especially in the health sector are called upon to consolidate their position and performance through continuing education and continuous training, with a view to their personal development, their response to the increased demands of the workplace and their requirements and needs, and the subsequent improvement of the quality and effectiveness of health care (Lanara, 1997).

Continuous developments in technology, as well as new knowledge and working practices, give education and training of healthcare staff a primary role. One of the main processes that hold a key position is the education and training of healthcare staff. By education, we mean basic, postgraduate, and continuing education. No educational system, however perfect, can guarantee the continuing competence of its graduates. There is a need for continuous reassessment of knowledge and skills and retraining of employees, due to the constant and significant changes in society, in the health care system (Tsapalaki, 2001).

Health workers are characterised by high specialisation and work intensity. Lifelong learning in the health sciences is one of the main prerequisites for ensuring a high level of health service provision. The efficient and rational operation of these units therefore now requires all their staff to have specialised knowledge and skills. The development of the human resources available, with appropriate ongoing training, education, and practice, is nowadays a necessary condition for the progress of healthcare facilities and for achieving the efficiency that they must achieve. At the same time, the staffing of units with scientists in critical specialties that are currently absent, such as health administration specialists, and health economists, will lead to the improvement of the efficiency of services and will allow a serious scientific approach to health problems (Mallidou, 1997).

In order for health professionals to be driven into continuing education and to acquire training and higher-level knowledge, the role of motivation and incentives from management is important. Therefore, the purpose of this study is to conduct research on the motivation of health care workers in higher-level studies and, in particular, to investigate the views of administrative and nursing staff at the General Hospital of Giannitsa, Pella, regarding the role of continuing education and training, the diagnosis of their learning needs, the degree of their further education, as well as the role of the management as a motivating factor towards the implementation of higher level studies.

2. Literature Review

2.1. Concept and techniques of motivation

The concept of motivation, or incitement, is an important factor, as stated by Barkoukis et al. (2008), that determines people's behaviour. As a whole, the concept of motivation is associated with a specific form of behaviour that individuals manifest in order to achieve the specific goals they have set (Ramadanty & Martinus, 2016-Chen, et al., 2013-Herzberg, 2017; Triantari, 2020). Motivation is a reflection of an individual's internal state that helps to motivate and determine his/her behaviour towards a goal that, once achieved, will lead to the determination of the level of satisfaction of the individual's need (Bostan et al., 2009). According to Durbin, motivation is an effort to achieve results and comes either from the individual himself/herself or from the manager of the organization. Individual motivation influences the elements of initiation, direction, intensity, and persistence of effort (the individual is committed, takes initiative to achieve a goal, and feels optimistic) (Triantari, 2020). Motivation on the part of the manager is a process that drives individuals to achieve objective goals through the development of a climate of respect and trust that promotes the self-worth of individuals, but also through providing employees with the right resources to develop within the organization (Triantari, 2020).

Hoy and Miskel (2008:176), interpret the concept of motivation as "the complex forces, motivation, need, states of tendency or other mechanisms that act and sustain voluntary activity towards the achievement of individual goals". According to another definition, motivation is the internal elements

of an individual's behavior, which are intrinsic or acquired, conscious or unconscious, and constitute simple physical needs or a set of abstract ideas (Bostan et al. 2022). Therefore, in all cases the common goal is the achievement of an outcome. Therefore, the concept of motivation is the processes and procedures that explain the intensity, direction, and persistence of an individual's efforts to achieve their goals (Robbins & Judge 2011).

The concept of motivation receives a variety of definitions in contemporary literature. Initially, it is referred to as an individual's state, characterized as internal, which drives each individual to behave in a specific way each time to achieve a goal. Then, motivation is treated as an internal impulse, which is caused by the satisfaction of a human need. Finally, in the workplace, it is related to the achievement of each organization's goals (Schunk et al., 2014).

According to Wingo et al. (2015), motivation constitutes a complex internal state of individuals that is not directly perceived but affects their behaviour and daily attitude. It is created by the set of internal states of human beings, which exist and are manifested as desires, wishes, and trials and which constitute an internal state that activates or motivates individuals to accomplish a goal. In particular, therefore, motivation constitutes a variable that plays a mediating role between human needs and the behaviour of each individual.

Motivation is achieved through the implementation of appropriate strategies and methods. An important method of motivation is the active involvement of people employed by an organisation in decision-making, so that they feel part of the organisation and are assigned tasks that they need to complete, thus motivating them to self-improvement and continuous action. In addition, the motivation of individuals is achieved through workplace mobility and position change, a process from which individuals gain new experiences, knowledge, and goals and feel that they are contributing to the organization they belong to, and their value and work are recognized, so that they desire to be rewarded and continuous training and career advancement (Brydges et al., 2015).

A healthy and harmonious work environment contributes to motivating individuals, facilitates smooth communication with supervisors and colleagues, and helps in their performance and achievement of the organization's goals. Furthermore, the continuous evaluation of employees is a way of encouraging them, since it is carried out on the basis of objective criteria that improve the employee and provide him with knowledge about the job, while at the same time facilitating his daily coexistence with colleagues and increasing the effectiveness of the organisation or body in question. Incentives provided to the employee, both material and moral, which push the employee to successfully fulfill his/her obligations and achieve high performance in the workplace, also contribute to this (Previzi & Kollia, 2012).

There are two different types of incentives: intrinsic and extrinsic.

Intrinsic motivation (rendered in English as intrinsic motivation) is an internal force that drives employees to achieve personal and organizational goals. It drives individuals to do activities that they find exciting. People with intrinsic motivation have a drive that helps shape behaviours and inspiration to be able to take on responsibilities without external consequences (Franco, et al., 2002-Hee, et al., 2016-Muogbo, 2013-Kamanzi & Nkosi, 2011). Therefore, intrinsic motivation is an outgrowth of the individual's own enjoyment of work or self-interest without being pressured by others. Intrinsic motivation for health professionals is defined as self-satisfaction and pleasure when taking on responsibilities and performing projects, rather than working for external rewards (Roussel & Swanburg, 2009; Ryan & Deci, 2000).

External motivation is an external force that drives employees in a process to achieve both personal and organisational goals. In addition, it is a form of guidance for individuals towards fulfilling their responsibilities in order to receive rewards in return. External rewards consist of bonuses, rewards, and various benefits. It can also be in the forms of good employee relations, better facilities, good working conditions, and higher quality from the manager in the workplace (Hee, et al., 2016; Muogbo, 2013-

Kamanzi & Nkosi, 2011; Reiss, 2012).

The variation, essentially, of motivation is due to the existence of extrinsic and intrinsic factors. Thus, it becomes clear that intrinsic motivation is related to the very desires that individuals have to perform specific tasks on a case-by-case basis (Kontodimopoulos et al., 2009), while on the other hand, extrinsic motivation is related to factors related to the environment rather than the individual. Motivation, in both cases, is important and helps employees to remain productive and provide better results thus contributing to the success of the organization (Ryan & Deci, 2000).

In general, it should be noted that motivation is a complex concept and comes from different sources. For example, as has been mentioned earlier, the leader-manager-manager can motivate the employees of an organization and enhance their psychology, as in the case of the health sector, by showing them respect and trust, promoting a climate of communication within the organization. Still, it should motivate them to take initiative and provide them with the appropriate means to put them into practice, while cultivating their commitment to the realization of the organization's goals (Triantari, 2020).

Finally, as Triantari (2020:97) states "Just as the orator motivates his audience to express, through his speech and ethos, his feelings, his thoughts and to be led to decisions at the prompting of the orator, so the leader must activate employees, identify their needs and satisfy them, enable employees to make the most of their strengths", thus highlighting the importance of the manager-leader.

Finally, a key method of motivating the employees is the opportunities for development and professional advancement of the employees, which should be clearly defined. The organization in question, through the continuous information of the staff regarding the objectives it has and the thorough information regarding the ways of development of the employees, encourages the latter to express their desire for further training, learning new subjects or specialization in the existing subject in which they are already engaged, interest in cognitive development through the realization of higher-level studies and finally improving their position in the organization after completing studies, seminars (Ntoumanis et al., 2012).

From the above, it can be seen that motivating staff brings benefits to the individual and the organization. Motivation achieves the full utilization of the potential of the employees of the organization in question, with significant positive results in the rise and development of the organization. It improves employee performance, increases the desire to work and fulfil higher goals, and creates a healthy, harmonious environment. It engages employees in decision-making, provides opportunities for action, self-improvement, and collaborative action without conflict, and stimulates their mental resilience (Cook, 2012)

2.2. Factors motivating health workers

Today, motivation is influenced by a variety of factors that affect it, which are both internal and external. The former comes from the individual, while the latter comes from the organisation and society. Each person sets different goals, has different expectations, desires different things, acquires different experiences, and is characterised by different abilities and skills in terms of their level of performance.

Almaaitah et al. (2017) investigate how human resources practices and leadership styles affect employee retention in the health sector. Their findings show that financial incentives, career development, and management issues are key motivational determinants. However, employees also seek recognition, sufficient resources, and appropriate infrastructure to improve their morale and performance.

A study by Bakuwa et al., (2013) investigates employee retention factors in the health sector of Malawi and finds that core factors are the non-financial rewards that contribute to employee satisfaction and lower employee turnover intention. Specifically, intangible rewards such as opportunities for personal growth and development, the psychological and/or physical work environment, and career safety are key determinants of employee retention even in developing countries.

Career development has been examined in various studies (Chikanda, 2005; Dieleman et al., 2006) that found that health workers are motivated when they are able to develop in their work.

The work environment is a motivating factor for employees. The climate in the workplace helps the employee to cope with his/her responsibilities, perform to the best of his/her ability, and feel emotionally, psychologically, and cognitively complete. The climate includes smooth relations with the manager-supervisor and cooperation with colleagues, clear delineation of the employee's responsibilities and the establishment of specific and achievable goals, the adequacy of equipment, the provision of incentives for development, material, and moral rewards, recognition and reward of employees (Triantari, 2020).

2.2.1. The importance of motivating health facility staff

Motivation plays a key role in achieving the objectives set by the organisation. The effectiveness and efficiency of the staff and the organisation, in general, is proportional to the degree of motivation of the employees. In public organizations, and in particular, in hospitals, a decrease in the degree of motivation of employees can be observed.

According to what McEwan et al. (2016) report, the factors that constitute a barrier to the motivation of staff in health facilities are diverse. To begin with, the cause of low motivation of hospital workers is the absence of self-motivation, since the majority of workers do not seek advancement in their field but are content and resting on the completion of specific actions, which lead them to routine, boredom, and lack of self-confidence in order to rise and creativity.

Then, the absence of encouragement from the management environment of the workplace deprives health unit staff of motivation. Management either lacks the means to increase staff motivation or appears unable to recognise and utilise staff potential. This results in a lack of motivation and stagnation of staff, who do not set high goals, lack expectations and are 'hooked' into a position with responsibilities that do not meet their needs and potential (Moon et al., 2019).

In addition, a factor of low motivation of health unit staff is the general mindset of the public sector, whereby the individual occupies a permanent, specific position with a fixed salary and has neither the need for development nor, however, performance. In particular, the efforts, training, and values of staff are not rewarded with promotion and financial advancement. Thus, the employee becomes frustrated, passive, works mechanically, and stagnant.

Finally, the absence of employee motivation is due to state intervention, since the change of parties in power directly affects the "position", rise or fall of employees. In this way, the latter's mission and competencies are governed by discontinuity and they themselves seek different interests since interventionism acts as a discouragement towards them (Nichols & Valdez, 2013).

2.3. Leadership in the Health Sector

The healthcare industry presents many challenges; therefore, healthcare providers are required to provide effective care that is characterized by high levels of quality. In order to respond adequately to these challenges, the development of effective and ethical leadership is required (Dorros, 2006).

The work of healthcare leaders includes integrating new technologies, ensuring that operations comply with laws and regulations, and improving levels of quality and efficiency (Wong, 2015, n.d. Disiu, 2022).

Still, health leaders are the ones who set goals and objectives, manage the budget, and communicate with health professionals. To properly complete these tasks, leaders require leaders to be characterized by integrity, vision, and strong listening skills (Garman, et al., 2011).

In the healthcare industry, a leader must build on the principles and values of the organisation he or she serves and push employees to improve the care and services provided to patients. By adopting the role of a leader, it is possible to inspire different individuals, who operate in different sectors to work together to achieve a common purpose by adopting shared values and principles (Korobili, 2017).

Health organisations include different departments and services within them; therefore, the leader is called upon to manage and coordinate their functioning, identify their structures, goals and values and create links aiming at joint risk-taking and more effective collaboration. The spread of the pandemic presents the effective leader with significant challenges, mainly related to the creation of conflictual relationships that make workplaces problematic. However, the effective managerial leader exerts a significant influence on the strategy of the organisation, while the daily lives of the workforce, the quality of services provided, levels of competitiveness and sustainable development depend to a significant extent on his or her effectiveness and efficiency. Still, significant dependence on the personality of the leader seems to be shown in terms of career advancement, the social and corporate responsibility of the organization, the communication relationships developed, the improvement of the local and domestic market and job retention. Therefore, decision making as a process implemented by the leader should be rational in order to achieve organizational effectiveness and efficiency (Triantari, 2020).

2.4. Administrative Leadership in Health Care

In the health sector leadership is related to the management of interpersonal relationships. Essentially, it is a mode of management through which health professionals are guided to understand and realize the goals of the organization. The leader is the one who will direct the action of the employees to bring about the achievement of the intended goals. The complex nature and complex processes of nursing staff and health professionals, in general, create the need for managerial skills both by the leader who manages the organisation and by the employees themselves. An excellent leadership role brings about a quality health system, a well-organized nursing care framework, and the development of interpersonal relationships by achieving immediacy and interface between the work and management environment (Huston, 2008).

In Greece, three levels of nursing management have been documented. The first level is related to the action and work of the head nurse who manages and leads a specific department. The second level is related to the head of the nursing department who seeks and establishes partnerships with heads of other departments. The third level relates to the head of the nursing department who leads all staff in all individual departments and collaborates with senior managers in his/her unit and with managers in other departments. The selection of appropriate methods and practices is a key requirement for any member who wishes to take a leadership role in order to create a well-organized environment. The proper management of resources, equipment, supplies, and all aspects that affect the operation and performance of healthcare organizations should be a main mention of the leader in the healthcare industry (Langabeer & Helton, 2016).

2.5. Total Quality Management

Total Quality Management includes human resources or human capital. Human resources are given special attention by the management systems of health care facilities, whose character is purely human-centred. In particular, human resources consist of the various types of clinical and non-clinical staff who are considered to be responsible for the intervention carried out in a health system. It is a commonplace that the human resources of a hospital have a positive or negative impact on the degree of efficiency and effectiveness of this organization, since the proper functioning and upward progress of health services depend on the cognitive development, skills, and motivation of workers in health structures (Pagliari, 2007).

Human resource management in health service delivery plays a key role in their development and evolution. The practices introduced and implemented by human resource management aim to have a balance between the supply of workforce and motivation, with the consequence that staff is able to carry out their mission with high-performance rates and in an efficient manner. Furthermore, the training and education of human resources is crucial since the allocation of workers in a health system is based on skills and the level of education and specialised training. This means in practice that new perspectives

regarding education and training during working life for healthcare workers are of particular importance. In this way, workers are cognitively equipped and present themselves ready to cope with the current and future demands of the healthcare system (Parry & Tyson, 2011).

As reported by Patterson et al. (2010), in a study conducted regarding employee performance and its link to human resource management in nursing homes in the USA, quality outcomes of service delivery rose following the introduction of a reorganization practice based on the implementation of innovative forms of human resource management through the strategies of job enlargement and continuing education of employees.

Innovative management practices implemented in public hospital structures have made hospitals "magnets". Factors such as organisational culture and work environment contribute to attracting and maintaining talented employees because they act as magnets. In turn, qualified employees are able to provide high-quality services because they feel appreciated and valued in their work environment (Story et al., 2016).

2.6. The role of leadership in total quality management

The leadership model followed by the management of health facilities plays a key role in the adoption and implementation of a Total Quality Management system (Fu et al., 2015; Khanam, Siddiqui & Talib, 2016). It is a commonly accepted fact that management's ability to create a shared vision with employees through motivation, teamwork, and inclusiveness, fostering a communicative climate in the workplace and, at the same time, promoting change through innovations to improve the quality of services are the drivers of successful implementation of Total Quality Management. It is the leaders who are considered responsible for creating a liberal work environment in which employees act independently and autonomously.

2.6.1. The continuous training of human resources in total quality management

Providing continuous training to employees in hospitals is a main tactic of human resource management since through this practice employees appear ready to cope with their tasks, achieve personal goals, adapt to the changing work environment, train, and appear more productive and efficient, while at the same time, they become motivated and receive job satisfaction. As Fahey & Burbridge (2008) found in their research, the effective task performance rates of healthcare workers improve by 39.0% after providing them with training. At the same time, they point out that continuous training of staff in hospitals contributes greatly to the communication sector and improves the quality of services provided.

The implementation of continuous education in human resource management is realized through the management's motivation of employees for cognitive development and acquisition of skills in their field of occupation through higher-level studies, as well as through the adoption of a participatory approach, according to which educational programs regarding problem solving are implemented (Gürol, 2010).

On the other hand, it is also found that in the health sector it is necessary to adapt to new technological data, adaptation that is implemented through the cognitive development of employees. Every employee has the right to further training, retraining and postgraduate education through participation in programs and schools. The management of the organisation concerned is obliged to ensure and motivate and reward the training of workers throughout their working life and irrespective of their category, branch, specialty, and grade. Further training aims to acquire specialized knowledge that is essential and sufficient for the successful completion and performance of the employees' responsibilities (ibid., 2009).

2.6.2. Teamwork and total quality management

Teamwork, like the training mentioned above, is another essential factor in Total Quality Management. Research by Kumar et al. (2013) found that all employees in health care facilities constitute part of one or more teams. The participation of staff in groups promotes cooperation, fair play in the workplace and

increases the efficiency of each part within the context of the whole, as well as the effectiveness and improvement of the work provided. The success of the team depends on the communication skills and behaviour of its members. This means that the roles assumed by the members of the team are considered to be decisive for its subsequent development and success. As they find, the team role constitutes the tendency of the employee to behave, contribute and cooperate in a certain way.

2.6.3. The empowerment of employees in total quality management

The concept of empowerment is related to human resource management and Total Quality Management (Fu et al., 2015).

According to relevant research, empowering staff in the health sector prevents lack of communication, training, and resources and promotes teamwork, collaborative spirit, advancement, and cognitive development. The management concerned must motivate staff to interact, share knowledge, build teams, and train them in good decision-making. Furthermore, it must provide the opportunity and freedom for employees to submit and share their ideas to improve services and make decisions in their area of expertise, developing and fostering a culture where all team members receive satisfaction through contributing to improving the effectiveness of the organization.

2.7. Training of employees in the public administration of health units

Health workers who are properly educated and trained are prepared to manage their work more effectively and successfully complete their mission. They are confident, accountable, and fully understand the vision of the health services and the organization in which they work (Shaikh et al., 2012).

Medical knowledge is changing due to medical technology developments, while the theoretical knowledge of a degree is becoming inadequate and incomplete. On the other hand, continuous changes in society bring about corresponding transformations in health systems, reasons that make the continuing education of medical nurses imperative (Filipe et al., 2017).

Regarding lifelong or continuing education of medical-nursing staff, Feldacker et al. (2017) point out that healthcare workers seek strong leadership, effective collaboration at all levels, and sustainable funding. These factors can surge the framework of continuing professional development, thereby offering health workers an opportunity for career growth. These advances may upgrade quality and patient outcomes.

2.7.1. Personal health motivations for participation in continuing education programs

In a study by van de Burgt et al. (2018), they distinguished the motivations of health professionals to participate in continuing education programs into autonomous/personal and controlled/external. The formers are associated with higher levels of learning and lead to positive attitudes regarding work, as well as providing higher quality health services to patients. In contrast, the latter are lower quality motivational factors. The two types of motivation combine the different attitudes of health professionals regarding continuing education, which constitute the self-determination theory (SDT) and the balance that develops between them is what determines both the motivational factors and the quality of lifelong learning.

2.7.2. Factors affecting the participation of health professionals in continuing education programs

Technological development requires an emphasis on practical and continuous updating, in order to achieve a corresponding improvement in professional competence and to keep up with modern developments. This means that professional improvement and development are essential factors influencing the participation of health professionals in continuing education programs, with the ultimate aim of acquiring new knowledge and skills, as well as maintaining or increasing the quality of work (Papazoglou, 2020). Furthermore, improving the services provided and increasing the effectiveness of

the health professional is associated with improving professional practice and is also a factor in participation in continuing education programs (Panagiotopoulou et al., 2016).

Next, interaction with colleagues involves issues of learning and sharing through intellectual exchange with colleagues and constitutes a course of interaction, which in itself is a factor of participation. It is characterised by a more learning and less social orientation. On the other hand, the achievement of personal and professional security is seen as a participation factor, linked to job security, financial benefits, and benefits for family and close friends. Through this factor, the health professional tries to establish himself professionally and achieve rewards for his services (Panagiotopoulou et al., 2016).

The factors of participation in training programs also include factors with a negative impact on their participation, with the main reason for non-participation being the lack of interest. The factors that inhibit the participation of employees in lifelong learning programs are a) situational, which are related to the state of the trainee at a given time, such as family obligations, lack of time or income, b) institutional, related to procedures, which act as a disincentive for participation in educational programs, such as the venue, hours, participation conditions, c) predispositions, which concern established attitudes, perceptions and previous negative experiences, such as the age of the trainees or low educational level (Vova-Hatzi et al., 2020).

2.7.3. Objectives of continuing education of health professionals

The training of health professionals is a key parameter in the development of human resources, through the acquisition of new knowledge and skills and the effort to maintain and renew them. The set of new knowledge and skills is a key parameter to ensure the health of the population and a means of reforms and implementation of strategic planning goals of an organization, through personal and professional development.

The key points of modern educational programs in the field of health are considered to be the establishment of distinct educational objectives, the integration of evidence-based and modern medical and nursing knowledge into the creation of up-to-date educational programs, the provision of high-performance educational programming that is directly applicable to daily clinical practice, the effective use of innovative educational programs and new technologies, the correlation of educational programs with the realistic time available of health professionals, the continuous evaluation of educational programs by trainees and trainers, with the aim of optimizing them (Narang et al., 2018).

Collaborative learning is also an objective of lifelong learning. This arises through group learning, the association of ideas with those of other colleagues, and intellectual interaction with the ideas and knowledge of other colleagues. It involves learning through observation as well as through the delivery of health care and requires an awareness of the role of each health professional within the team. Another goal is the cultivation of academic thinking. This includes the development of intellectual inquiry skills, participation in research-based learning projects, enhancing curiosity, questioning, and observation. Lifelong learners are inquisitive minds who observe, question, appreciate new ideas, and like to learn new practices and communication skills (Qalehsari et al., 2017).

2.7.4. Course of continuing education of healthcare workers

The advantages of adopting a culture of continuing education are multiple and concern the health professional, the organisation he or she works for, and the community he or she serves. The sum of the benefits derived through continuing education and investment in human resources are related to achieving quality goals and ensuring healthy growth, increased productivity, and overachievement (Lionis et al., 2015).

Health professionals who participate in continuing education programs evolve their practical and scientific knowledge in order to keep pace with rapid and accelerating medical technology advances. In addition, by improving their expertise, they contribute to improving the whole healthcare system and

the management of complex and demanding cases. All this new knowledge is necessary to fill the gaps that inevitably exist after the end of basic education and are related to the rapid changes in the health sector (Kadda, 2013).

The rapid social and demographic changes observed in many countries, with the corresponding epidemiological changes they bring about, are among the social reasons that make continuing education imperative. These changes include the ageing of the population, migration, and the increase in the number of patients with chronic or incurable diseases. In addition, the international phenomenon of financial pressure on health systems due to increased costs makes it difficult to finance them and makes continuing education imperative in order to rationally use available resources through scientifically based knowledge (Kalokairinou et al., 2015).

Finally, personal reasons such as increasing prestige, professional recognition, maintaining or improving an existing position, benefits for the health professional himself/herself, his/her family and friends, enhancing self-confidence and a sense of job satisfaction, make continuing education vital (Prinari, 2019).

3. Research Methodology

3.1. Purpose of research

The research investigates the degree of motivation and the need for further training of employees in the Health Unit of Giannitsa of Pella prefecture (Northern Greece). We also examined the effect of gender, age, work experience, and job position on employee motivation.

3.2. Data collection

We collected the data between May and July 2021 in the Health Unit of Gianitsa of Pella prefecture (Northern Greece). Out of 428 employees, 100 responded, yielding a response rate of 23.4%. We employed convenience sampling to ensure the collection of data without the use of inclusion or exclusion criteria.

3.3. Ethical dilemmas

Before data collection, all prospective participants were informed about the participation process. All procedures, as well as data collection, were done without disrupting the internal operation of the organization. Informing the prospective respondents included details about the purpose of the survey, its voluntary and anonymous nature, and their options to withdraw at any time without providing any explanation.

3.4. Research tool

The research tool of the survey is a pencil and paper questionnaire that consists of seven (7) parts. The authors constructed the questionnaire based on the theoretical framework of the paper. Demographic data are recorded (gender, age, job position) and the respondents are required to answer six (6) separate sections: Motivation, Leadership role, Staff training, Organizational and administrative obstacles, Lack of motivation, and General questions. Each section contains closed-ended questions, scored with a 5-point Likert scale (1=Not at all ... 5=Too much). The General Questions section contains questions that seek to capture the general views of participants on the topic at hand.

3.5. Sample description

Of the 100 respondents, 23% are male, and 77% are female. 6% belong to the age group 26 to 35 years, 23% to the age group 36 and 45 years, 55% to the age group 46 and 55 years, and 16% are older than 55 years. 18% have a working experience of 21 to 26 years, and 25% have more than 25 years of service. Finally, 13 employees belong to the administrative staff, 8 to the medical staff, 47 to the nursing staff, 5 to the paramedics, and 27 to the other staff. The remaining job positions are catering, cleaning, and maintenance (Figure 1).

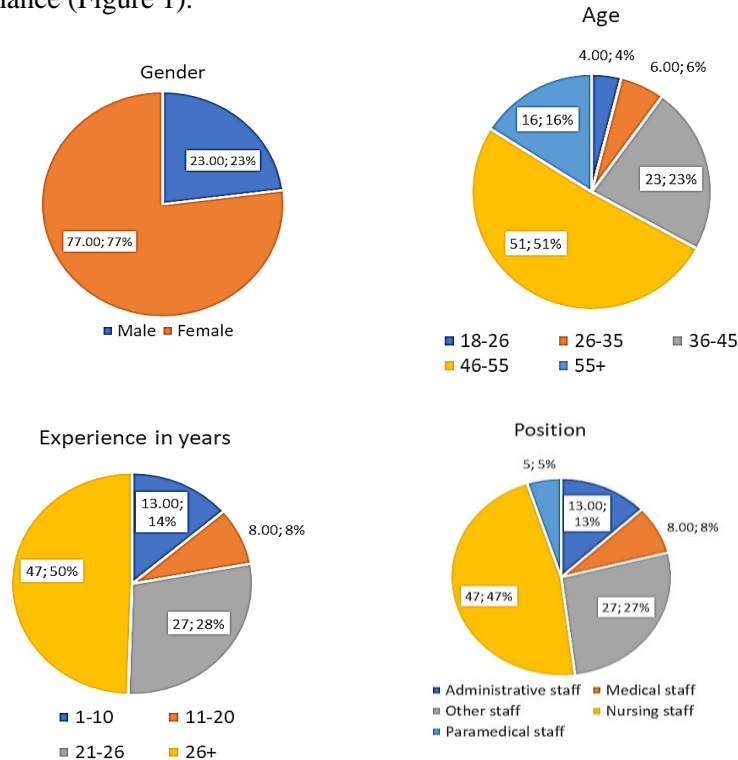


Fig. 1: Pie charts of demographic variables

4. Data Analysis

IBM SPSS V28 statistical package is employed for the statistical analysis at a 5% significance level. Following a normality check with the help of Kolmogorov – Smirnov and Shapiro – Wilk tests, we selected the parametric procedures.

4.1. Results

4.1.1. Descriptives

The first part of the analysis presents the results per section and per question. Table 1 shows the average scores per question in the "Motivation of health care workers" section. According to the results, the highest average scores, i.e., the statements in which the participants showed a higher degree of agreement, are "A20. I feel proud and satisfied when I carry out a difficult task" (Mean=4.22, SD=1.106), "A16. I take responsibility for any of my mistakes" (Mean=4.14, SD=1.215), "A14. I try to be effective through finding suitable means" (Mean=4.13, SD=1.07) and "A13. I like it when I achieve work goals" (Mean=4.05, SD=1.192).

Respondents demonstrated a lower degree of agreement in "A15. My subject of work is of interest" (Mean=3.91, SD=1.083), "A1. I have responsibilities related to my work" (Mean=3.9, SD=1.159), "A3. Colleagues appreciate me for my way of working" (Mean=3.82, SD=1.132), "A2. I have full initiative to do my homework" (Mean=3.76, SD=1.093), "A5. In the workplace there is a collaborative climate" (Mean=3.72, SD=1.223), "A4. I make decisions about my work" (Mean=3.63, SD=1.16), "A11.

Colleagues are supportive in dealing with family problems" (Mean=3.62, SD=1.071), "A19. I like my work because of the experience of satisfaction with taking on challenges" (Mean=3.51, SD=1.21) and "A6. In the hospital there is sufficient materials and equipment" (Mean=3.46, SD=0.989).

The average score of "A8. I feel psychologically charged every day" (Mean=3.16, SD=1.253) was close to the mean value of 3.0, implying a neutral view. Finally, respondents disagreed with "A18. I participate in training programs for the development of my skills" (Mean=2.86, SD=1.349), "A17. There is a mentor who incites me to my work" (Mean=2.83, SD=1.443), "A12. My fee is satisfactory" (Mean=2.64, SD=1.202), "A10. My efficiency is not rewarded" (Mean=2.48, SD=1.389), "A7. There is a possibility of promotion" (Mean=2.39, SD=1.333) and "A9. My performance is rewarded financially" (Mean=2.00, SD=1.279).

Table 1. Average scores of the questions in the "Motivation" section.

| | Mean | SD |
|---|------|-------|
| A1. I have responsibilities related to my work | 3.90 | 1.159 |
| A2. I have full initiative to do my homework | 3.76 | 1.093 |
| A3. Colleagues appreciate me for my way of working | 3.82 | 1.132 |
| A4. I make decisions about my work | 3.63 | 1.160 |
| A5. In the workplace there is a collaborative climate | 3.72 | 1.223 |
| A6. In the hospital there is sufficient materials and equipment | 3.46 | 0.989 |
| A7. There is a possibility of promotion | 2.39 | 1.333 |
| A8. I feel psychologically charged every day | 3.16 | 1.253 |
| A9. My performance is rewarded financially | 2.00 | 1.279 |
| A10. My efficiency is not rewarded (Inverted) | 3.62 | 1.071 |
| A11. Colleagues are supportive in dealing with family problems | 3.62 | 1.071 |
| A12. My fee is satisfactory | 2.64 | 1.202 |
| A13. I like it when I achieve work goals | 4.05 | 1.192 |
| A14. I try to be effective through finding appropriate means | 4.13 | 1.070 |
| A15. My subject of work is of interest | 3.91 | 1.083 |
| A16. I take responsibility for any of my mistakes | 4.14 | 1.215 |
| A17. There is a mentor who motivates me in my work | 2.83 | 1.443 |
| A18. I participate in training programs for the development of my skills | 2.86 | 1.349 |
| A19. I like my work because of the experience of satisfaction with taking on challenges | 3.51 | 1.210 |
| A20. I feel proud and satisfied when I carry out difficult work | 4.22 | 1.106 |

Table 2 presents the average scores of the sub-questions in the "Leadership role" section. According to the results, respondents mostly agree with "B9. The director of the service you belong to makes decisions" (Mean=3.56, SD=1.234), which is also the highest average score observed, followed by average scores close to the neutral view in the "B10. The director of the service you belong to gives the staff freedom to make decisions" (Mean=3.20, SD=1.378), "B7. Teamwork prevails" (Mean=3.15, SD=1.234), "B8. There is a communication climate of administration-personnel" (Mean=3.14, SD=1.287), "B1. We collect data regarding our work" (Mean=3.07, SD=1.281) and "B4. Any complaints of the citizens are heard" (Mean=3.07, SD=1.103).

Respondents disagreed with "B3. The needs of the users of the hospital's services are detected in a timely manner" (Mean=2.87, SD=1.098), "B6. The hospital has a plan with specific targets" (Mean=2.87, SD=1.098), "B11. The workplace inspires health personnel" (Mean=2.85, SD=1.29), "B2. The quality of the services provided is evaluated annually through surveys to users" (Mean=2.8, SD=1.295), "B13. The values of the organization and the staff are consistent" (Mean=2.72, SD=1.207),

"B12. The hospital invests in the learning and training of staff" (Mean=2.67, SD=1.28), "B5. The hospital adopts innovations" (Mean=2.64, SD=1.124) and "B14. The management provides incentives for staff development" (Mean=2.5, SD=1.227).

Table 2. Average scores of the questions in the "Leadership role" section

| | Mean | SD |
|---|------|-------|
| B1. We collect data about the subject of our work | 3.07 | 1.281 |
| B2. The quality of the services provided is evaluated annually through surveys to users | 2.80 | 1.295 |
| B3. The needs of the users of the hospital's services are detected in a timely manner | 2.87 | 1.098 |
| B4. Any complaints of citizens are heard | 3.07 | 1.103 |
| B5. Hospital adopts innovations | 2.64 | 1.124 |
| B6. The hospital has a plan with specific goals | 2.87 | 1.098 |
| B7. Teamwork prevails | 3.15 | 1.234 |
| B8. There is a communication climate of management-personnel | 3.14 | 1.287 |
| B9. The director of the service you belong to makes decisions | 3.56 | 1.234 |
| B10. The director of the service you belong to gives staff freedom to make decisions | 3.20 | 1.378 |
| B11. The workplace inspires health personnel | 2.85 | 1.290 |
| B12. The hospital invests in the learning and training of staff | 2.67 | 1.280 |
| B13. The values of the organization and the staff are in line | 2.72 | 1.207 |
| B14. Management provides development incentives to staff | 2.50 | 1.227 |

The average scores of the sub-questions in the section "Personnel training" are presented in Table 3. According to the results, low agreement pertains to "C2. University education will strengthen the Skills of the staff" (Mean=3.33, SD=1.303), "C3. University education will strengthen incentives" (Mean=3.2, SD=1.287), and "C4. University education will enhance the readiness of employees" (Mean=3.19, SD=1.316).

Respondents remain neutral in "C1. In the process of training – human resource development, frontline executives play an important role" (Mean=3.03, SD=1.403) and "C5. University education will enhance the experience of employees" (Mean=2.99, SD=1.345). Finally, disagreement was found in the statements "C6. You could not fulfill the need for university education for family reasons" (Mean=2.54, SD=1.494), "C10. You were unable to fulfill the need for university education due to lack of time" (Mean=2.34, SD=1.506), "C7. You could not fulfill the need for university education for economic reasons" (Mean=2.31, SD=1.581), "C8. You were unable to fulfill the need for university education due to lack of motivation" (Mean=2.31, SD=1.405), "C9. You were unable to fulfill the need for university education due to stress and burnout from work" (Mean=2.28, SD=1.415), "C12. You were unable to fulfill the need for university education due to personal choice" (Mean=2.20, SD=1.407), "C11. You were unable to fulfill the need for university education due to age" (Mean=2.14, SD=1.378), "C14. You were unable to fulfill the need for university education due to a "volition" in the routine of work" (Mean=2.11, SD=1.37) and "C13. You were unable to fulfill the need for university education due to satisfaction with your workplace" (Mean=2.04, SD=1.31).

Table 3. Average scores of the questions in the "Staff training" section

| | Mean | SD |
|--|------|-------|
| C1. In the process of training – human resource development, frontline executives play an important role | 3.03 | 1.403 |
| C2. University education will strengthen staff competences | 3.33 | 1.303 |
| C3. University education will strengthen incentives | 3.20 | 1.287 |
| C4. University education will enhance employee readiness | 3.19 | 1.316 |
| C5. University education will enhance the employee experience | 2.99 | 1.345 |
| C6. You were unable to fulfill the need for university education for family reasons | 2.54 | 1.494 |

| | | |
|--|------|-------|
| C7. You have not been able to fulfill the need for university education for financial reasons | 2.31 | 1.581 |
| C8. You were unable to fulfill the need for university education due to a lack of motivation | 2.31 | 1.405 |
| C9. You were unable to fulfill the need for university education due to stress and burnout from your work | 2.28 | 1.415 |
| C10. You were unable to fulfill the need for university education due to lack of time | 2.34 | 1.506 |
| C11. You were unable to fulfill the need for university education due to age | 2.14 | 1.378 |
| C12. You were unable to fulfill the need for university education due to your personal choice | 2.20 | 1.407 |
| C13. You were unable to fulfill the need for university education due to satisfaction with your workplace | 2.04 | 1.310 |
| C14. You were unable to fulfill the need for university education due to a "volition" in the routine of work | 2.11 | 1.370 |

According to the results of Table 4, the most frequently mentioned administrative obstacles are "E7. Unequal salary distribution from one public body to another" (Mean=3.33, SD=1.223), "D8. Bureaucratic procedures" (Mean=3.31, SD=1.237), "E3. Lack of education-training" (Mean=3.26, SD=1.186), "E5. Lack of staff upgrading and development" (Mean=3.22, SD=1.177), "E1. Lack of computer handling training" (Mean=3.18, SD=1.298), and "D4. Staff shortages" (Mean=3.14, SD=1.356). All average scores showed low agreement on these statements.

Respondents remain neutral in "E2. Lack of a stable target strategy" (Mean=3.09, SD=1.256), "E4. Lack of motivation factors of subordinates" (Mean=3.09, SD=1.198), "D9. Overlapping responsibilities" (Mean=3.07, SD=1.217), "D3. Lack of sufficient infrastructure" (Mean=3.06, SD=1.324), "E8. Non-meritocratic selection of supervisors with the assurance of scientific competence" (Mean=3.03, SD=1.359), "D7. The existing hierarchy structure" (Mean=2.97, SD=1.259), "D5. Lack of computerization" (Mean=2.96, SD=1.317) and "E6. Lack of cooperation between staff" (Mean=2.95, SD=1.274).

Finally, a low degree of disagreement pertains to "D6. Lack of communication networks and intranets" (Mean=2.88, SD=1.32), "D2. Lack of planning - redistribution of responsibilities" (Mean=2.8, SD=1.443) and "D1. Lack of task" (Mean=2.57, SD=1.358).

Table 4. Average scores of the questions in the "Organizational and administrative obstacles" section

| | Mean | SD |
|---|------|-------|
| D1. Lack of duties | 2.57 | 1.358 |
| D2. Lack of planning - reallocation of responsibilities | 2.80 | 1.443 |
| D3. Lack of adequate infrastructure | 3.06 | 1.324 |
| D4. Lack of staff | 3.14 | 1.356 |
| D5. Lack of computerization | 2.96 | 1.317 |
| D6. Lack of communication networks and intranets | 2.88 | 1.320 |
| D7. The existing hierarchy structure | 2.97 | 1.259 |
| D8. Bureaucratic procedures | 3.31 | 1.237 |
| D9. Overlapping responsibilities | 3.07 | 1.217 |
| E1. Lack of computer handling training | 3.18 | 1.298 |
| E2. Lack of a stable target strategy | 3.09 | 1.256 |
| E3. Lack of education-training | 3.26 | 1.186 |
| E4. Lack of motivation factors of subordinates | 3.09 | 1.198 |
| E5. Lack of staff upgrade and development | 3.22 | 1.177 |
| E6. Lack of cooperation between staff | 2.95 | 1.274 |

| | | |
|---|------|-------|
| E7. Unequal salary distribution from one public body to another | 3.33 | 1.223 |
| E8. Non-meritocratic selection of supervisors with assurance of scientific competence | 3.03 | 1.359 |

Finally, through their answers to the General Questions (Table 5), the participants pointed out that "F3. The educational development of employees (Mean=4.05, SD=1.114) should have been self-evident", "F6. There is an issue in the obsolete state administration" (Mean=4.05, SD=0.999), "F4. Employees who have chosen to follow a different work path with better working conditions are an example for their colleagues" (Mean=3.56, SD=1.157), and that "F5. All employees in the Services of the Greek State face the same problems" (Mean=3.55, SD=1.282). Finally, respondents disagree that "F1. They would recommend to their children or friends to follow the same profession as them" (Mean=2.55, SD=1.29), "F2. In the private sector, things are better, and they would be treated better" (Mean=2.51, SD=1.36).

Table 5. Average scores of the questions in the "General questions" section

| | Mean | SD |
|---|------|-------|
| F1. To what extent do you think you would recommend your children or friends to pursue the same profession as you? | 2.55 | 1.290 |
| F2. To what extent do you think that in the private sector, things are better and you would be treated better? In the private sector do you think it would be better for you? Would you be treated better, more opportunities? You know colleague | 2.51 | 1.360 |
| F3. To what extent do you think that the educational development of employees should have been self-evident? | 4.05 | 1.114 |
| F4. To what extent do you consider that employees who have chosen to follow a different work path with better working conditions are an example for their colleagues? | 3.56 | 1.157 |
| F5. To what extent do you believe that all employees in the Services of the Greek State face the same problems as you? | 3.55 | 1.282 |
| F6. To what extent do you think there is an issue in the antiquated state administration? | 4.05 | 0.999 |

4.1.2. Aggregated results

With the help of the contents of the questions, we developed six (6) new indicators and their average scores. Constructing the motivation indicator required to reverse a question's score to ensure a positive meaning as the rest of the questions. Table 6 presents the evaluation of these indicators. As seen, Cronbach's alpha coefficient as a measure of the internal relevance of the questions is higher than the critical value of 0.7, showing that these indicators are valid to be introduced into the analysis.

The average motivation of the workers (Mean=3.46, SD=0.552) is slightly greater than 3.0, indicating an almost neutral view and corresponding to "Moderate". Respondents consider the role of the leadership as neutral (Mean=2.94, SD=0.891), showing that the employees do not view leadership as a helpful factor in their work, nor that it inhibits their job. They also mention no specific obstacles in their education (Mean=2.25, SD=0.972). Out of the nine (9) questions pertaining to possible obstacles to university education, 29 participants answered for family reasons, and 28 answered, either for family reasons or due to lack of time.

Subsequently, the participants showed a neutral view of the organizational and administrative obstacles they encounter in their work (Mean=2.97, SD=0.965). The main obstacles identified were bureaucracy (N=48), lack of staff (N=43), lack of computerization (N=38), and overlapping responsibilities (N=38).

Lastly, regarding the lack of motivation, an average score of 3.14 (SD=0.969) also shows proximity to the neutral view, with the main cause of lack of motivation the unequal salary distribution (N=48),

followed by the lack of education-training and the lack of motivational factors for subordinates (N=40) and the lack of computer handling training (N=39).

Table 6. Evaluation of indicators

| | Mean | SD | Alpha | N of Items |
|---|------|-------|-------|------------|
| Inducement | 3.46 | 0.552 | 0.803 | 20 |
| Leadership role | 2.94 | 0.891 | 0.931 | 14 |
| Need for education | 3.15 | 1.109 | 0.890 | 5 |
| Obstacles to education | 2.25 | 0.972 | 0.854 | 9 |
| Organizational and Administrative obstacles | 2.97 | 0.965 | 0.893 | 9 |
| Lack of motivation | 3.14 | 0.969 | 0.906 | 8 |

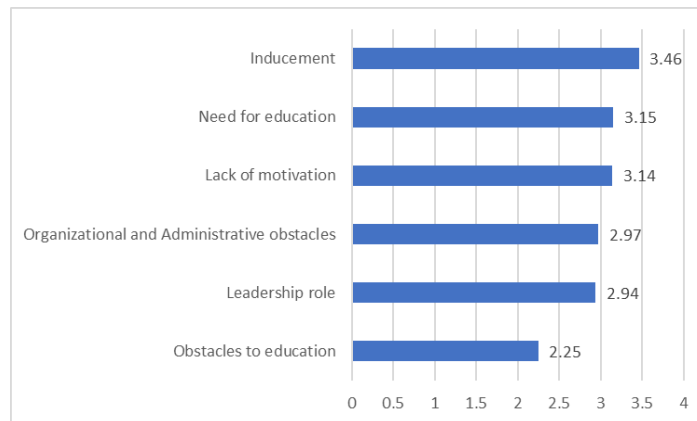


Fig. 2: Average index scores in descending order

4.1.3. Examination of associations

The results of the examination of relationships (Table 7) with the help of the correlation coefficient of Pearson showed that motivation is moderately and positively correlated with the leadership role ($r=0.693$) and with the need for training ($r=0.543$), as well as the leadership role with the need for education ($r=0.557$). Lack of motivation is moderately and positively correlated with organizational obstacles ($r=0.605$), weak and positive with the barriers to education ($r=0.289$), and weak and negative with the role of leadership ($r=-0.260$).

Table 7. Relationships between indicators

| | Inducement | Leadership role | Need for education | Obstacles to education | Organizational and Administrative obstacles | Lack of motivation |
|---|------------|-----------------|--------------------|------------------------|---|--------------------|
| Inducement | 1 | | | | | |
| Leadership role | .693** | 1 | | | | |
| Need for education | .543** | .557** | 1 | | | |
| Obstacles to education | 0.024 | 0.132 | 0.086 | 1 | | |
| Organizational and Administrative obstacles | 0.072 | -0.125 | -0.038 | 0.109 | 1 | |
| Lack of motivation | | | | | | 1 |

| | | | | | | |
|--------------------|-------|---------|-------|--------|--------|---|
| Lack of motivation | 0.010 | -.260** | 0.016 | .289** | .605** | 1 |
|--------------------|-------|---------|-------|--------|--------|---|

Note: * $p < .05$ ** $p < .01$

4.1.4. Mean comparison

Subsequently, we examined possible differences in the average scores of the indicators by category of demographic factors. The results showed that gender, age, and years of service were not statistically significant factors in differences in average values. Job position was a statistically significant factor in motivation ($F(4,95) = 2.790$, $p=0.031$). Also, participants belonging to medical staff (Mean=3.83, SD=0.289) and administrative staff (Mean=3.68, SD=0.435) show the highest levels of motivation as opposed to paramedical staff (Mean=3.04, SD=0.832) and nursing staff (Mean=3.36, SD=0.502) that demonstrated the lowest; in all cases, the average scores are above or equal to the moderate level (Figure 3). Therefore, Tukey's honestly significant difference (HSD) post hoc test could not highlight any statistically significant difference in the average motivational scores between jobs.

Table 8. Motivation by class of seat.

| Place | Mean | SD | F (4,95) | p |
|----------------------|------|------|----------|-------|
| Administrative staff | 3.68 | .435 | | |
| Medical staff | 3.83 | .289 | | |
| Other staff | 3.51 | .613 | 2.790 | 0.031 |
| Nursing staff | 3.36 | .502 | | |
| Paramedical staff | 3.04 | .832 | | |

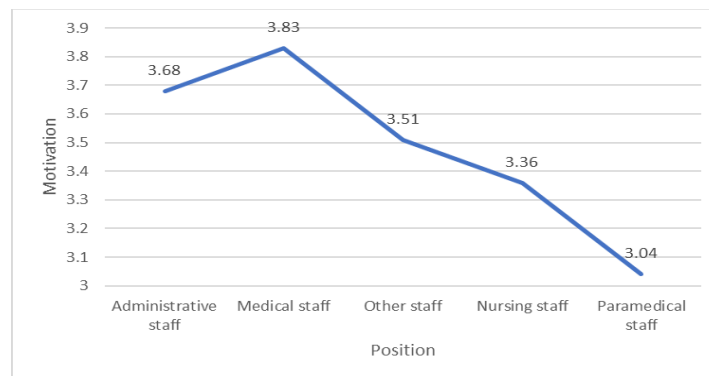


Fig. 3: Average motivational prices per position

5. Discussion

The respondents generally feel satisfied with their work performance while they disagree about taking initiative and cooperating with each other. They also disagree about the financial rewards they receive and the possibility of promotion.

Regarding the topic of leadership in the health sector, the majority of respondents agree with the view that the manager of the department they belong to makes the decisions, while there is a neutral view with the freedom the manager gives the staff to make decisions, which is also neutral and the opinion regarding the cooperation between the employees, the "management-staff" communication, the collection of the data and whether the citizens' complaints are listened to. Finally, the respondents disagreed on all the remaining questions of the survey with the most important being the motivations

that management provides for staff development and investment in staff learning and training.

As far as staff education is concerned, respondents agree that university education will not enhance the skills of the staff, nor increase the motivation of the employees which is contrary to most published studies.

Finally, through their answers to the general questions, the participants pointed out that the educational development of employees should be self-evident, and that there is a serious issue with outdated state administration.

6. Conclusions

According to the results, the motivation level of employees in the Health Unit of Giannitsa of Pella prefecture (Northern Greece) is slightly higher than the average level. Yet, all other indicators are close to the neutral view, thereby inhibiting the drawing of critical conclusions. The survey findings also show that employees in the Health Unit of Giannitsa of Pella prefecture (Northern Greece) have similar views as no differences by gender, age, and work experience are spotted. The investigation of the associations revealed that the role of leadership is vital for employee motivation. Supportive leadership can increase motivation levels. Also, employees for further training-training will have the same effect.

6.1. Research limitations and recommendations for future research

A limitation of the study is the level of agreement of participants and the converging views that imply similar problems at all levels of staff, although this cannot be firmly confirmed. A future survey for the topic at hand could use a standardized questionnaire and a significantly larger sample to avoid such limitations.

6.2. Practical and theoretical implications

Leadership involves transforming a situation and readjusting organizational procedures to meet ongoing challenges. Change derives from an organization's desire to improve efficiency and effectiveness by motivating human resources. However, changing employee behaviors call for motives such as education and training that helps employees improve their social and financial well-being.

Healthcare services are highly demanding, requiring employees to acquire increasing and specialized knowledge. In the health sector, developments are rapid as younger and more technologically adept people are entering the field with more expertise to address the challenges of the constantly changing environment. Hence, continuing education and training are critical elements of employee development.

As governments worldwide limit financial resources for health, healthcare organizations should treat employees as an asset and invest in their development. In doing so, they show appreciation and promote employee evolution as a critical performance factor to ensure organizational effectiveness.

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