



Conflicts management in public sector nursing

Eleni Lahana, Konstantinos Tsaras, Aikaterini Kalaitzidou, Petros Galanis, Daphne Kaitelidou & Pavlos Sarafis

To cite this article: Eleni Lahana, Konstantinos Tsaras, Aikaterini Kalaitzidou, Petros Galanis, Daphne Kaitelidou & Pavlos Sarafis (2019) Conflicts management in public sector nursing, International Journal of Healthcare Management, 12:1, 33-39, DOI: 10.1080/20479700.2017.1353787

To link to this article: <https://doi.org/10.1080/20479700.2017.1353787>



Published online: 31 Jul 2017.



Submit your article to this journal [↗](#)



Article views: 4299



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 12 View citing articles [↗](#)



Conflicts management in public sector nursing

Eleni Lahana^a, Konstantinos Tsaras^a, Aikaterini Kalaitzidou^a, Petros Galanis^b, Daphne Kaitelidou^b and Pavlos Sarafis^c

^aNursing Department, Technological Educational Institute of Thessaly, Greece; ^bNursing Department, School of Health Science, National and Kapodistrian University of Athens, Greece; ^cDepartment of Nursing, Cyprus University of Technology, Cyprus

ABSTRACT

We investigated the sources of conflicts in nursing and individual as well as nurse management strategies for conflict resolution, according to certain demographic and work-related characteristics. A cross-sectional study was conducted using a five-part questionnaire, which was administered to 100 nurses. The majority of nurses reported conflict with other professions, usually physicians, and this type of conflict was mostly reported by the more experienced and in managerial positions nurses. The most common style for conflict management was avoidance, followed by collaboration and also in significantly smaller percentages compromise, competition, mediation and accommodation. Age, work experience, education and managerial position significantly affected the strategy of choice for conflict resolution, with younger nurses, with less responsibilities and no previous conflict management education choosing avoidance as their primary strategy. Collaboration was a strategy chosen by the more educated nurses and the supervisor was the most appropriate person for conflict management. The majority of the nurses reported that the management style of choice was problem solving, indicating a more appropriate and integrated management style that often relates to better job satisfaction and work relations. The most effective way in conflict management is improving our understanding and clarifying the parameters that structure the situation in hand.

ARTICLE HISTORY

Received 6 February 2017
Accepted 30 May 2017

KEYWORDS

Conflicts management;
nurses; managerial strategies;
hospitals; problem solving

Introduction

Background

Conflict in healthcare, as in every working environment, is an inevitable challenge in the working relationships of nurses and other members of the healthcare team or other employees of the organization, which is also believed to be of a complicated character [1]. Although conflict in nursing is commonly perceived as a negative issue it can address matters of care management and lead to personal and organizational growth.

While conflict may potentially help, if the involved parties cannot handle it properly it may hinder teamwork and result in reduced productivity, therefore its effective resolution and management is quite essential. Conflict, though frequently defined as a disagreement in which the involved parties feel threatened and concerned, it is far more complex than that [2]. In actual fact, conflict is comprised of certain psychological, procedural and substantive dimensions and it can change form and type by the individualized perception of the participants. These parameters define the ongoing dynamics of the workplace relations, which are also commonly led by emotion [1].

Previous reports have attempted to define the types of conflict nurses may experience in a hospital setting. The most commonly experienced types of conflict are those that occur interpersonally between two or more individuals that are commonly further subdivided to intragroup conflicts, which occur between group colleagues and intergroup conflicts, which occur between different groups, like other professions [3].

Conflict management towards constructive action it is by far the best approach, but conflict management styles are complex and although some may use one style more than others, that is usually dependent on the particular situation and the participants [4]. It is common practise for nurse managers to use compromise as their primary tool for conflict resolution, but sometimes avoidance may also be their conflict management style of choice. Other styles involve accommodation and collaboration, dependent on whether the conflict needs to be resolved in a quick, assertive manner or the matter is of great importance and the areas of agreement and disagreement need to be identified before the most appropriate solution is suggested. Unfortunately sometimes competition might be chosen as a style of direct decision-making that usually leaves one party unsatisfied [5,6].

Reports on nurse's intergroup conflict are limited and nurse management strategies are poorly defined in the Greece of the economical crisis, where staff and material resources in public hospitals are restricted under the burden of high cost [7–9]. This in addition to the highly educated and more qualified nursing staff, conflict may inevitably increase and change form and shape.

The basic aim of this cross-sectional study was to identify the main sources of interpersonal conflicts in nurses and their strategies in handling conflict individually as well as by nurse management. Furthermore, we investigated the characteristics that might influence conflicts and their management in the working environment of a big public hospital.

Methodology

Study design

A cross-sectional study was conducted in a public general hospital (hospital capacity: 800 beds) of Thessalonica in 2016 for a period of two month (dates of the study: 1 April 2016 –30 May 2016). One hundred and forty three questionnaires were handed out in the nursing and nursing assistant's staff of the two nursing divisions of the pathology (41 nurses) and surgical (102 nurses) wards. The questionnaires were completed in the morning and afternoon shifts by 100 nurses and nursing assistants (response rate 70%). The study protocol was approved by the ethical committee of the hospital and participation in the study was voluntary. The questionnaire was anonymous and the responders were reassured for the confidentiality of the information given and the questionnaire was supplemented by an introduction letter explaining the purpose of the study.

Questionnaire

A self-administered questionnaire specific for conflicts in healthcare organizations was used in order to assess the existence of conflicts and their management in the public healthcare sector. A previously translated and applied in a Greek pediatric hospital, five-part questionnaire with a reliability measure of Cronbach's alpha exceeding 0.75 [8], was used, after the appropriate permission. The questionnaire is based on the original questionnaire of Tenglilimoglu and Kisa [10] specific for conflicts in the hospital setting and during the sample collection no specific participation criteria were applied apart from being a full-time hospital-based nursing staff.

The questionnaire included in the first part (eight questions), the demographic, educational and work-related characteristics as well as information concerning previous knowledge of nurses on conflicts management. The second part involved four questions on the

types and the strategies used for conflicts management. The third and fourth part referred to the organizational and group factors that may lead to conflict, measured by a five- point Likert scale (not at all, little, moderately, much, very much). The fifth and final part concerned conflict resolution and in particular the responders were asked to select in order of importance five statements from a list concerning possible suggestions for conflicts resolution from the manager's point of view.

Statistical analysis

A chi-square test (X^2) or Fisher's exact test was used to estimate differences between groups. The SPSS 19.0 (Statistical Package for Social Sciences; SPSS Inc., Chicago, IL, USA) for Windows was used for data analysis. A probability (P) value <0.05 was considered significant.

Results

Demographic characteristics are presented in Table 1. Most of the participants were females (79.0%) and older than 40 years of age (58.0%). Most of the responders had acquired higher education with a university degree (77.0%), but a significantly high percentage (91.0%) did not continue to further postgraduate studies. In terms of work experience, 61.0% of the responders had more than 10 years and only 18% held a managerial position. Those with the managerial position were either chiefs (50.0%) or deputy chiefs (50.0%). The majority of the participants had no previous knowledge on conflict management (63.0%), whereas those that reported prior education (37.0%) stated that this was not acquired during their university or postgraduate studies (56.8%).

Table 1. Demographic characteristics of the participants in total and according to conflicts management education ($n = 100$).

	<i>n</i>	Conflicts management education		χ^2	<i>P</i> value
		Yes ($n = 37$)	No ($n = 63$)		
Gender				0.014	0.907
Male	21	8	13		
Female	79	29	50		
Age (years)				5.405	0.020
<40	42	10	32		
≥40	58	27	31		
Educational level				0.063	0.802
University*	77	29	48		
Higher school**	23	8	15		
Master/PhD				1.461	0.227
Yes	9	5	4		
No	91	32	59		
Years of experience				1.065	0.302
≤10	39	12	27		
>10	61	25	36		
Managerial position				11.683	0.001
Yes	18	13	5		
No	82	24	58		

*University: nurses.

**Higher school: nursing assistants.

The statistical analysis revealed that the older nurses (>40 years of age) were more informed on conflicts management issues than their younger counterparts (46.6% versus 23.8%, $\chi^2 = 5.405$, $p = 0.020$), which was also true for the nurses with managerial position in comparison to those with non-managerial work status (72.2% versus 29.3%, $\chi^2 = 11.683$, $P = 0.001$).

As far as conflicts source is concerned when categorized according to the participants in the conflict developing (1) within and among nurses, (2) among nurses and other healthcare professional, (3) among nurses and managers and (4) among nurses and administrative staff, it is described in Table 2. Most of the responders (68.0%) reported conflicts with other professions in the hospital than nurses and then with their colleagues (55.0%). The nurses with university education tend to report more conflicts with other professionals than with assistant nurses (72.7% versus 52.2%, $\chi^2 = 3.438$, $P = 0.064$).

In particular, regarding conflicts among nurses and other professions the participants reported more conflicts with doctors (55.0%), followed by other working groups (15.0%), assistant nurses (13.0%), nurses (12.0%), administrative staff (7.0%) and lastly with university trained nurses (6.0%). Nursing staff with more than 10 years working experience reported more conflict with doctors in comparison to their less experienced counterparts (59.1% versus 25.0%, $\chi^2 = 4.959$, $P = 0.026$), which was also true for the nurses with managerial position when compared with the ones without (77.8% versus 50.0%, $\chi^2 = 4.602$, $P = 0.032$). As far as nurses with a technological university education were concerned, they reported more conflicts with assistant nurses in comparison to their colleagues and nurses with university education (26.1% versus 7.8%, $\chi^2 = 5.613$, $P = 0.018$). Nurses with postgraduate studies reported more conflicts with assistant nurses in comparison to those without any further titles (44.4% versus 9.9%, $\chi^2 = 8.646$, $P = 0.003$). As far as nurses with a managerial position were concerned they reported more conflicts with the administrative staff than those in no managerial positions (16.7% versus 4.9%, $\chi^2 = 3.151$, $P = 0.076$).

In terms of position hierarchy, 18.0% of nursing staff reported conflicts with higher corporate members of the hospitals management, 15.0% with their subordinates or with lower educational level and 14.0% with the chief managers. More conflicts with chief managers and higher corporate hospital managers was also reported by the nurses with postgraduate titles when compared with those without further studies (55.6% versus 9.9%, $\chi^2 = 14.185$, $P < 0.001$) and (44.4% versus 15.4%, $\chi^2 = 4.686$, $P = 0.030$). In addition, women reported more conflicts with subordinates or colleagues with lower educational level in comparison to men (19.0% versus 0.0%, $\chi^2 = 4.691$, $P = 0.030$). Finally, more conflicts with higher corporate hospital managers were also reported by the nurses with managerial positions in comparison to those without, exhibiting a tendency (33.3% versus 14.6%, $\chi^2 = 3.497$, $P = 0.061$) and similarly by the nurses that stated to have acquired some education on conflict management compared to those that reported no previous education (29.7% versus 11.1%, $\chi^2 = 5.475$, $P = 0.019$).

When the participants were asked about their conflict management strategies (Table 3), the majority of nurses stated avoidance (64.0%) as their primary strategy and also collaboration as their second choice for conflict resolution (51.0%). These techniques were followed by compromise (15.0%), competition (14.0%), mediation (10.0%) and accommodation (8.0%).

As far as competition was concerned it was a strategy more frequently chosen by the university educated nurses in comparison to the assistant nurses (18.2% versus 0.0%, $\chi^2 = 4.863$, $P = 0.027$), by the nurses with postgraduate studies when compared to those without (44.4% versus 11.0%, $\chi^2 = 7.614$, $P = 0.006$) as well as the nurses with managerial position than those with no managerial position (33.3% versus 9.8%, $\chi^2 = 6.815$, $P = 0.009$).

Furthermore, the statistical analysis revealed that avoidance was the strategy of choice for the younger (<40 years of age) nurses than their older counterparts (78.6% versus 53.4%, $\chi^2 = 6.673$, $P = 0.010$), for the nurses with no managerial position in comparison to those with a managerial position (72.0% versus 27.8%,

Table 2. Distribution of conflicts sources according to the participants' ($n = 100$) characteristics.

Sources of conflict	%	Gender	Age (years)	Educational level	Postgraduate studies	Work experience (years)	Managerial position	Conflicts management education
Colleagues	55.0	—	—	—	—	—	—	—
Other professions	68.0	—	—	$P = 0.064$	—	—	—	—
Doctors	55.0	—	—	—	—	$P = 0.026$	$P = 0.032$	—
University nurses	6.0	—	—	—	—	—	—	—
Technical University nurses	12.0	—	—	$P = 0.018$	—	—	—	—
Assistant managers	13.0	—	—	—	$P = 0.003$	—	—	—
Administrative staff	7.0	—	—	—	—	—	$P = 0.076$	—
Others	15.0	—	—	—	—	—	—	—
Chief managers	14.0	—	—	—	$P < 0.001$	—	—	—
Subordinates	15.0	$P = 0.030$	—	—	—	—	—	—
Higher managerial	18.0	—	—	—	$P = 0.030$	—	$P = 0.061$	$P = 0.019$

Table 3. Selected strategies for conflicts resolution according to the demographic and other characteristics of the participants ($n = 100$).

Strategy (nurses)	%	Gender	Age (years)	Educational level	Postgraduate studies	Work experience (years)	Managerial position	Education on conflicts management
Competition	14.0	–	–	$P = 0.027$	$P = 0.006$	–	$P = 0.009$	–
Compromise	15.0	–	–	–	–	–	–	–
Avoidance	64.0	–	$P = 0.010$	–	–	–	$P < 0.001$	$P = 0.043$
Accommodation	8.0	–	–	–	–	$P = 0.021$	–	–
Collaboration	51.0	–	–	$P = 0.025$	–	–	–	–
Mediation	10.0	–	–	–	–	–	–	–

$\chi^2 = 12.500$, $P < 0.001$) together with those reporting to be less informed about conflicts management when compared to those with previous education on the matter (71.4% versus 51.4%, $\chi^2 = 4.078$, $P = 0.043$).

The strategy of accommodation related only with work experience, where nurses with up to 5 years work experience chose acceptance more than their more experienced counterparts (25.0% versus 5.7%, $\chi^2 = 5.354$, $P = 0.021$). Cooperation/collaboration was the strategy of choice for the university-educated nurses when these were compared with the assistant nurses (57.1% versus 30.4%, $\chi^2 = 5.055$, $P = 0.025$) and compromise and mediation did not relate to any of the participants characteristics.

When the participants were asked about their person of choice for their conflicts resolution (Table 4) most nurses stated their supervisors (66.0%) and then their colleagues (41.0%), followed with the on call manager (8.0%), anyone (8.0%), someone from another profession (6.0%) and the managing doctor (2.0%).

The nurses with less than five years work experience and those without a managerial position chose more frequently a colleague to resolve their conflict when these were compared with their more experienced and with a managerial position counterparts (66.7% versus 37.5%, $\chi^2 = 3.714$, $p = 0.054$ and 45.1% versus 22.2%, $\chi^2 = 3.200$, $P = 0.074$, respectively). Regarding the choice of the on call manager this although it so no relation to the participant characteristics, it seemed to relate with the strategy of mediation, since the participants that chose mediation as their strategy also chose more frequently the on call manager to mediate when compared to the nurses that did not choose mediation (30.0% versus 5.6%, $\chi^2 = 7.307$, $P = 0.007$).

The younger nurses (<40 years of age) and those with less work experience tended to report more the managing doctor as their person of choice for conflict resolution in comparison to the older and more experienced counterparts (4.8% versus

0.0%, $\chi^2 = 2.818$, $P = 0.090$ and 8.3% versus 1.1%, $\chi^2 = 2.795$, $P = 0.092$, respectively).

Finally the nurses were asked the strategies the management uses to resolve their conflict (Table 5). Forty seven percent of the nurses reported problem resolution, 29.0% reported the approach according to the hospital rules and regulations, 21.0% the peace-making strategy, 20.0% the repressive approach and lastly 10.0% a resolution that satisfies the majority.

The strategies reported according to the nurses characteristics concern problem resolution that was reported by the majority of the nurses without postgraduate studies in comparison to those with further studies (51.6% versus 0.0%, $\chi^2 = 8.770$, $P = 0.003$) and also a tendency by the nurses that did not have report previous knowledge on conflict resolution when compared to the nurses with conflict management education (54.0% versus 35.1%, $\chi^2 = 3.319$, $P = 0.068$).

On the other hand, regarding conflict resolution by the hospital management according to the rules and legislation, was reported mostly the nurses with postgraduate education than by the nurses without further studies (66.7% versus 25.3%, $\chi^2 = 6.815$, $P = 0.009$). Whereas younger nurses (<40 years of age) and those with the less work experience (<5 years) tended to believe that the management usually is in favor of the majority as a strategy to resolve conflict when compared to older nurses and more experienced nurses (16.7% versus 5.2%, $\chi^2 = 3.576$, $P = 0.059$ and 25.0% versus 8.0%, $\chi^2 = 3.409$, $P = 0.065$). The other reported strategies did not relate with any of the participants characteristics.

Discussion

Nurses as first-line healthcare providers experience conflicts at significantly high rates, on a regular base and most reports identify that interpersonal and intragroup conflict are the most common sources

Table 4. Distribution for the person of choice for conflicts resolution amongst the participant nurses ($n = 100$) in accordance to their characteristics.

Person of choice for conflict resolution	%	Gender	Age (years)	Educational level	Postgraduate studies	Work experience (years)	Managerial position	Education on conflict management
Colleague	41.0	–	–	–	–	$P = 0.054$	$P = 0.074$	–
Supervisor	66.0	–	–	–	–	–	–	–
On call manager	8.0	–	–	–	–	–	–	–
Managing Doctor	2.0	–	$P = 0.090$	–	–	$P = 0.092$	–	–
Other profession	6.0	–	–	–	–	–	–	–
Anyone	8.0	–	–	–	–	–	–	–

[11]. There are many sources for nurses' stress with job dissatisfaction and personal perspective playing a pivotal role in conflict perception and successful management. The current study aimed to determine the demographic and other characteristics of the participants, identify types of conflicts experienced by nurses in a public hospital, and explore the experienced conflicts management styles of preference.

The nurses of the current study experienced mostly conflicts with other healthcare professionals (68.0%) and in particular the majority reported intragroup conflicts with physicians (55.0%) and this source of conflict was more prominent in the more experienced nurses (>10 years work experience) and in those with managerial positions. This finding is not surprising since the further development of advanced nursing practice made the roles of nurses and physicians less distinct and their duties not as clearly defined, which in accordance to the historical dominance of the physician, can give rise to increased conflict between nurses and physicians. This relationship is frequently reinforced by education, remuneration and experience, fundamental elements that seem to orchestrate a more significant need for synergy effort [12]. Furthermore, increasing evidence suggests that empowered professions in healthcare usually lack emotional intelligence, which can hinder interpersonal communication and teamwork [7]. Consequently, the findings of the current study that relate work and educational characteristics to increased conflict are to be expected, since they clearly indicate certain parameters relating to increased competence and commonly known to affect social behavior that could in turn reinforce conflict [3,13]. In particular, characteristics such as further postgraduate studies were related to increased conflicts with assistant nurses and managers, managerial position was related to increased reported conflicts with administrative staff and higher corporate hospital managers and also previous education on conflict management favored increased conflict with hospital managers.

As far as the strategies for handling conflict are concerned, the majority of nurses stated avoidance (64.0%) as their primary choice, followed by collaboration (51.0%), with the least utilized strategies being mediation (10.0%) and accommodation (8.0%). In fact, avoidance was the strategy of choice for the younger nurses (78.6%), with less professional responsibilities (72.0%, no managerial position) and no previous conflict management education (71.4%). Avoidance is a strategy of conflict management commonly reported by nurses and this is in accordance to previous studies in Greece and other countries [5,9,12,14]. Avoidance is a strategy employed in cases of denial that a problem exists and there is no active resolution of conflict, which may be dysfunctional in the long term, but in the short term it may provide the appropriate time and information needed for adequate handling of the

situation at hand [5]. Furthermore, it is a strategy usually employed in case of fear of consequence which comes with young age and less responsible position or cases of low concern of one self and others [1] and sometimes in cases where there is insufficient background to deal with the situation [15].

On the other hand, collaboration was the strategy of choice for the nurses with university education (57.1%), but the more educated nurses (university and postgraduate studies) and those with a managerial position also reported competition as a conflict management strategy (14.0%). Increased educational level may lead towards a more appropriate, mature and efficacious approach such as collaboration, that in most cases is a more productive resolution of conflict often reported by nurses with a bachelor's degree [16] that are more qualified [12]. High competence though, attributed by higher education and increased responsibilities, that come with a managerial position tend to create a more dominant sense of one self and consequently may support a competitive style of conflict management as suggested by previous reports [5,12,17].

Almost three quarters of the participants (66.0%) choose their supervisors as the most appropriate person for resolving a conflict, followed by a peer (41.0%). Further analysis revealed that a peer was the person of choice for conflict resolution also for the less experienced and in no managerial position nurses and in addition the younger and less experienced nurses exhibited an increased preference for the managing doctors. Interpersonal conflict is usually best mediated by a third party and in most cases a more authoritative person of the group, like a supervisor, is usually considered more appropriate, since it might be less biased and can have prior knowledge of the group's needs and requirements. A peer can also be an appropriate conflict mediator in cases of more personal and less organizationally based reason for conflict and in some instances they can diffuse a situation in a more appropriate and quick manner, whereas new nurses young at age and inexperienced perceive the managing doctors as the appropriate authority figure for conflict resolution and sustain the dominance of doctors.

Additionally, this study revealed that problem resolution was the most utilised style of conflict management (47.0%), a strategy that was also reported by the majority of nurses without postgraduate studies. As far as the other styles are concerned, the strategy according to the rules and regulations, the peace-making strategy and the repressive style followed at moderate and almost similar percentages (29.0–20.0%). Problem solving coping strategy is a common strategy of choice for nurses dealing with work stressors [18] and has been also related to job satisfaction [19], since it properly addresses the issue in hand. An integrated management style is the best style for handling interpersonal conflict

Table 5. Management strategies for hospital conflict resolution in accordance to the nurses ($n = 100$) characteristics.

Conflicts management strategies (nursing leaders)	%	Gender	Age (years)	Educational level	Postgraduate studies	Work experience (years)	Managerial position	Education on conflicts management
Authoritarian	20.0	–	–	–	–	–	–	–
Peace making	21.0	–	–	–	–	–	–	–
Problem solving	47.0	–	–	–	$P = 0.003$	–	–	$P = 0.068$
According to rules and legislation	29.0	–	–	–	$P = 0.009$	–	–	–
Towards the majority	10.0	–	$P = 0.059$	–	–	$P = 0.065$	–	–

[20] it is perceived as the most appropriate and effective management style [21] by nurses and it comes to no surprise as it incorporates both parties' views and ideas about the situation in hand.

Certain limitations should be taken into account for the results of the presented study. The sample was not representative of all the hospital's departments and the limited collection time of the study and the fact that the study was conducted with a self-administrate questionnaire filled during working hours, does not allow generalization of the results especially for non-Greek nursing staff.

Conclusions

In conclusion, this survey suggests that nurses in public hospitals generally believe that they are more often in conflict with other professions and avoidance is their most commonly chosen strategy, although they recognize that collaboration is best. In addition, the person of preference for conflict resolution is their supervisor who, as reported, can address the issue in hand with a more integrating style of conflict management. Although, certain demographic and other work-related characteristics seemed to significantly affect the nurses' perception on conflict and its management strategies, most reported an appropriate management style employed by their supervisors. The lack of clarity on the impact of demographic and other characteristics on conflict management and resolution highlights the need for larger, more generalized cross sectional studies that may positively contribute to the better understanding and therefore handling of conflict perception and management and their implementation in the work environment of the Greek public hospitals.

Notes on contributors

Dr Eleni Lahana is an assistant professor at the nursing department of the Technological Educational Institute of Thessaly and an Academic Tutor at the Hellenic Open University. After receiving her BSc in Nursing, she completed her MSc and PhD degrees at the Hellenic Open University specializing in social sciences on the topic of health services management. Her main teaching fields are in social sciences together with administration and management of nursing services in a variety of undergraduate and postgraduate teaching programs within her faculty but also as an invited teaching staff. Dr Lahana is also an extensively experienced

administrator participating in numerous boards, organizing conference parties and round tables, with many memberships in scientific societies. Amongst her many research interests, health systems, social science and policy, development studies, social behavior, public health, social and cultural anthropology, qualitative social research are her major fields. She has numerous publications in national and international journals with many citations and over the past 20 years she has actively participated as a speaker in a number of national and international conferences.

Dr Konstantinos Tsaras is an Assistant Professor at the Nursing Department of the Technological Educational Institute of Thessaly in Greece. After receiving his BSc in Nursing, he completed his MSc and PhD degrees at the Nursing Department of the National and Kapodistrian University of Athens specializing in Public Health on the topic of Epidemiology. He has been working in the field of nursing and public health. He teaches courses on Epidemiology, Biostatistics, Research Methodology and Nursing adults. Dr Konstantinos Tsaras has numerous publications in national and international journals and he has participated as a speaker in several national and international conferences. His research interests are in the fields of public health, epidemiology, demography, biostatistics, community health nursing, health services management and nursing education.

Ms Aikaterini Kalaitzidou is a registered nurse in the private hemodialysis unit in Thessalonica and she is currently undertaking a postgraduate Masters program in Healthcare Management at the department of Business Administration at the University of Macedonia.

Dr Petros Galanis has a PhD degree at Public Health and since 2008 he has worked as a research fellow in Faculty of Nursing, University of Athens and in particular in the Center for Health Services Management and Evaluation. He is a registered nurse and he has a Master's degree in Public Health. During 2002–2007 he worked as a research fellow in Laboratory of Clinical Epidemiology, in Faculty of Nursing. He is teaching Epidemiology, Research Methodology, Medical Decisions Theory, Demography and Biostatistics in undergraduate and postgraduate programs. He is coauthor in over 100 publications in peer reviewed journals with over 400 citations on his work. Also, he has written 6 books in Greek (Epidemiology I, Essays in Epidemiology, Textbook of Epidemiology, Clinical and Epidemiological Research, Data analysis methodology in health sciences. Applications with IBM SPSS Statistics, Writing and publication of papers in health sciences).

Dr Daphne Kaitelidou since 1996 has worked as a Research Fellow, and after 2005, as academic staff, in the University of Athens (School of Health Sciences, Dept. of Nursing) and in Open University of Cyprus. Her research experience is in the fields of Health Services Management and Health Policy and Planning. She participated at more than 40 international and national projects in the Center of Health Services Management and Evaluation (CHESME) and have published

more than 60 articles in peer reviewed international and national (Greek) journals. During the last 5 years her work has focused on: (a) Barriers to healthcare access for specific vulnerable populations (migrants, elderly, Roma etc.) and socio-economic determinants of health. (b) Funding of the healthcare system and health inequalities and (c) Health services management and Human resources management in healthcare.

Dr Pavlos Sarafis has graduated from the School of Nursing Officers and served in the Greek Navy. He holds M.Sc. degrees in Management of Health Services, in Public Health, and in Management of Mass Destruction and Emergency Situations. He completed his PhD degree in Basic Research/Surgical Infections at the University of Athens, School of Medicine, with a scholarship from Alexander Onassis Public Benefit Foundation. He specialized in Travel Medicine at the Ludwig-Maximilians-Universität of Munich, where he assisted in the H5N1 vaccine production research (clinical phases I/II), as a postdoctoral student. He has delivered courses in Surgical Nursing, Travel Medicine, and Intercultural Nursing at the University of Peloponnese, Faculty of Nursing. He teaches Travel Medicine and Infections to undergraduate and postgraduate students at the University of Athens, Faculty of Nursing, as a research associate. He is part of the collaborating teaching staff of the Hellenic Open University, at the postgraduate programs of Health Care Management and National Health System Services Management. He participates in scientific committees of Greek and international journals. He has a wide range of publication and research activities, and he has participated in the writing process of books related to his professional and scientific interests.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Eleni Lahana  <http://orcid.org/0000-0001-7206-4423>

References

- [1] Almost J. Conflict within nursing work environments: concept analysis. *J Adv Nurs*. 2006;53(4):444–453.
- [2] Martinez-Tur V, Penarroja V, Serrano MA, et al. Intergroup conflict and rational decision making. *PLoS One*. 2014;9(12):e114013.
- [3] Nussbaum BB, Johnson JS. Integrating conflict situations, personal characteristics, and behavior in the workplace. 2008.
- [4] Chaudry TBSPA, Saif I, Ahmed M. Gender differentials in styles of organizational conflict management. *Int Rev Business Res Papers*. 2008;4(4):342–357.
- [5] Vivar CG. Putting conflict management into practice: a nursing case study. *J Nurs Manag*. 2006;14(3):201–206.
- [6] P D. Conflicts of nursing personnel in health services. *Sci Chron*. 2014;19(4):332–344.
- [7] Psilopanagioti A, Anagnostopoulos F, Mourtou E, et al. Emotional intelligence, emotional labor, and job satisfaction among physicians in Greece. *BMC Health Serv Res*. 2012;12:122.
- [8] Kaitelidou D, Kontogianni A, Galanis P, et al. Conflict management and job satisfaction in paediatric hospitals in Greece. *J Nurs Manag*. 2012;20(4):571–578.
- [9] Kontogianni AGP, Siskou O, Tsavalias K, et al. Conflict management and job satisfaction. Major challenges for nursing and medical staff in Greek public pediatric hospitals. *Nosileftiki*. 2011;50(3):320–331.
- [10] Silvetti M, Alexander W, Verguts T, et al. From conflict management to reward-based decision making: actors and critics in primate medial frontal cortex. *Neurosci Biobehav Rev*. 2014;46 Pt 1:44–57.
- [11] Brown J, Lewis L, Ellis K, et al. Conflict on interprofessional primary health care teams – can it be resolved? *J Interprof Care*. 2011;25(1):4–10.
- [12] Hendel T, Fish M, Berger O. Nurse/physician conflict management mode choices: implications for improved collaborative practice. *Nurs Adm Q*. 2007;31(3):244–253.
- [13] Nordhaug M, Nortvedt P. Mature care in professional relationships and health care prioritizations. *Nurs Ethics*. 2011;18(2):209–216.
- [14] Valentine PE. A gender perspective on conflict management strategies of nurses. *J Nurs Scholarship*. 2001;33(1):69–74.
- [15] Willmot M. The new ward manager: an evaluation of the changing role of the charge nurse. *J Adv Nurs*. 1998;28(2):419–427.
- [16] Baddar F, Salem OA, Vilagrancia HN. Conflict resolution strategies of nurses in a selected government tertiary hospital in the kingdom of Saudi Arabia. *J Nurs Educ Pract*. 2016;6(5):91–99.
- [17] Losa Iglesias ME, Becerro de Bengoa Vallejo R. Conflict resolution styles in the nursing profession. *Contemporary Nurse*. 2012;43(1):73–80.
- [18] Healy CM, McKay MF. Nursing stress: the effects of coping strategies and job satisfaction in a sample of Australian nurses. *J Adv Nurs*. 2000;31(3):681–688.
- [19] Bartram T, Joiner TA, Stanton P. Factors affecting the job stress and job satisfaction of Australian nurses: implications for recruitment and retention. *Contemporary Nurse*. 2004;17(3):293–304.
- [20] Vliert EVD. Complex interpersonal conflict behaviour: theoretical frontiers. East Sussex, Great Britain: Psychology Press Taylor & Francis Group Hove and New York; 1997.
- [21] Gross MA, Guerrero LK. Managing conflict appropriately and effectively: an application of the competence model to Rahim's organizational conflict styles. *Int J Conf Manage*. 2000;11(3):200–226.