

Health Professionals' continuing training needs for improving Home Care Services

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Abstract In this study we try to investigate the Health Professionals' (HPs) training needs in a sector of Primary Health Care which is the Long- term care services for oncology patients in Greece, in order to improve the care services provided as well as the cooperation with the carers and families. This qualitative study used semi-structured interviews and thematic analysis. In two major Oncology Hospitals of Athens - Greece seventeen HPs from the corresponding medical/nursing staff dedicated to oncology patients, were recruited. The transcripts were analyzed thematically. All HPs confirmed their need for further training in all areas such as new drugs and technologies, communication techniques for psychosocial support to patients, issues concerning the quality of life of oncology patients. The HPs underlined their need for information training, required particularly by younger HPs and for emotional support through group meetings. Some specific conclusions were related to learning grief management skills and health economics. A common request was the provision for training in the operation of a well-organised interdisciplinary team. Further and better targeted training has been recognized as essential in order to improve the quality home care services and this has been a common requirement expressed by both HPs and oncology patients who are the intended recipients of home nursing care.

Keywords: training needs, health professionals, home care services, information communication technology, interdisciplinary team.

1. Introduction

Health professionals (HPs) in Primary Health Care, and especially in Home care for oncology patients, aim at helping the suffering individual enhance its own ability for self-care. HPs intervene in the lives of patients in order to offer services which can help them with the consequences of their illness. Home care services for oncology patients have never been systematically organized in Greece, but instead it has rather developed thanks to the fragmented efforts of brave and dedicated individual entities. In the National Health System, home care for oncology patients is provided by specialized hospitals through Home care units, Day and Pain clinics.

Furthermore one of the basic conditions for the provision of quality home care services is the use of information and communication technologies (ICT). Given the need for provision of services by interdisciplinary teams there is a need of coordination, communication and direct transfer of information to all team members. The ICT is also the key to support administration processes and health care protocols. Even more, the Electronic Health Records (EHR) enable HPs to record epidemiological data, keep notes in order to create the patients profile and monitor patients' health. Finally there is a given opportunity to validate, transmit, and retrieve clinical documents and work on the evidence base health care [1,2]. Therefore it is important for HPs to assess training needs in the ITC sector.

The purpose of our study was to explore the views of HPs on their training needs so they can eventually improve the care services provided to their oncology patients as well as their cooperation with the carers and/or families of these patients. Investigating the training needs of HPs, is essential to prepare an appropriate training program for the improvement of home health care and the development of a self-care model at a later stage of the study.

1.1. Literature review

Given that there are few studies available in Greece aiming at identifying the training needs of HPs, we believe that this study contributes by bringing new knowledge towards this direction in order to improve care services. HPs have to improve their skills regardless of their experience, because it is important for improving the quality and efficiency of services which affects the performance of the Health Care System generally [3]. Despite major advantages in cancer treatment over recent decades, neoplastic diseases remain the leading cause of mortality in developed countries, accounting for approximately 13% of all deaths each year [4,5]. Heterogeneity of symptomatology, combined with the prolonged natural history of the disease, necessitates continuous care and support for patients. Globally, there is a growing concern for care of the dying, and similarly a rapid growth in the number of hospices and specialist palliative-care HPs, as well as development of specialized hospital units [6,7]. International requirements for health systems, regarding cost reductions and quality health care services provisions in the light of managed care and self care management, highlight the role of home health care both for the economic sustainability of health systems and for the improvement of user satisfaction with the services provided.

Self-care and empowerment of patients receiving home health care services as well as empowerment of their families are key objectives of the home health care program. The most comprehensive and integrated approach to the implementation of scientifically documented nursing care regarding self-care and empowerment of patients is the theory of Dorothea Orem [8], which states self-care as a human need.

The development of the quality model in health education, self-care and rehabilitation of patients with neoplasia, requires first of all an investigation of the training and support needs of HPs. The aim of this investigation is twofold: at first to evaluate the level of knowledge and professional skills of HPs [9, 10] and secondly, to identify the precise knowledge and skills that are missing there and thus need to be acquired from a training seminar [9,10,11].

In order for home care nurses to be able to provide optimum palliative care, they need easier access to available community resources, and better interdisciplinary coordination and cooperation [12].

Studies investigating the training needs of nurses (n = 227) in nursing homes, used both a structured questionnaire as well as open questions. These studies revealed and illustrated the need for staff training on palliative care and pain management as well as provision of support to mourning families [13]. Similar results were found in other studies carried out in nursing homes [14,15].

There is a necessity of smooth interdisciplinary cooperation, mainly among general practitioners and nurses in palliative home care [16]. The strengthening of communication and the cultivation of interdisciplinary cooperation as key methods to improve the quality of provided care. Additionally, a study aiming the training needs of palliative care nurses (88 hospital nurses and 109 home care nurses) in Quebec, was found that there were no significant differences between the two groups [17]. Their needs were focused on stress, crisis and emotion management and non-pharmacological pain management. The interrelation between training needs, psychological stress and self-efficacy was highlighted. The proposed training methods were lectures and working groups.

The literature on the training needs of HPs in palliative care services found the following categories of needs: clinical knowledge and technical skills, communication skills, skills of cultural and spiritual approach, knowledge of ethical, professional and legal issues, and finally organizational and administrative skills [18]. Additionally regarding the improving quality of home care services and in order to improve efficiency research found that it is important for HPs to be trained in ICT [19].

The National Consensus Project for Quality Palliative Care [20] distinguishes the following categories of HP training: the nature and process of care, issues related to the biological dimension of care, the psychological and psychiatric dimension of care, the social dimension of care, the spiritual / religious / existential dimension of care, the ethnic and cultural identity, care in the final stage and the ethical and legal aspects of care. The views of home care nurses on palliative care were highlighted four important dimensions / conditions for their involvement in health care: 1) communication network, 2) the family as a participant in the care process, 3) symptom management and 4) the personal costs of care [21].

2. Methods

This study is a qualitative research approach in which semi-structured interviews were used to explore the level of knowledge of the HPs target group who work in home care services for oncology patients with regard to the needs of self-care management and to identify the knowledge and skills that HPs need to improve the quality and efficiency of the services. For data analysis, it used the qualitative content analysis, a method based on open questions in the form of semi-structured interviews as in the table 1, in a holistic approach (bio-psycho-social and spiritual), [22,23,24].

2.1. *Sample and recruitment*

The target groups were selected in cooperation with the Laboratory of Community Health Nursing - National University of Athens. The sample came from two large Anti-cancer Hospital hospitals located in the region of Attiki (Athens region): Metaxas Anti-cancer Hospital and the Agioi Anargyroi Anti-cancer Hospital. The data were collected in July and August 2011. The abovementioned selected hospitals are specialized in oncology patients and they both have developed home care units. During the pilot phase of the study, seventeen interviews with HPs were carried out. In order to participate in the study, HPs had to be employed in the home health care services and brief-stay units of these two metropolitan hospitals and work in close cooperation with the other HPs (doctors, nurses, psychiatrists, social workers, dieticians) of these oncology hospitals. HPs were selected from a professional network of HPs for oncology patients using the snowball method. All HPs had specific knowledge in oncology, were experts and fully qualified, given their experience in general hospitals and specialized clinics. Ethical clearance was obtained from the Human Ethics Committee at the National and Kapodistrian University of Athens and from the Scientific Council of the two hospitals in question. Additionally, the HPs signed consent forms for participation in the research. Out of a total of twenty HPs, seventeen agreed to participate in the research. The selection criteria were as follows: 1) For nurses, they had to work at the home health care services and in day clinics of these anti-cancer hospitals and 2) for other HPs, including oncologists, psychiatrists, psychologists, social workers, dieticians, they had to work in close cooperation with the abovementioned services and clinics.

2.2. *Data collection*

The aim of the first stage of our study was to raise awareness and inform interested parties about the purpose of the research, and within this framework interviewees were selected to participate in the qualitative research. A visit to their workplace was organized. The HPs were informed about the aim of the study. Personal meetings and individual interviews were carried out.

Particular attention was paid to the following points:

- The main body of the interview was dedicated to giving the interviewee the opportunity to express his /her views.
- Notes were taken during the interview.
- Clarifications were provided when necessary.
- Open questions were used.
- General questions that allowed the interviewee to answer broadly and freely were also used.

The semi-structured interviews, which lasted from twelve minutes (the shortest) up to thirty-three minutes (the longest), were carried out and recorded by the

qualitative researchers. The two sides (researchers and HPs) were not acquainted prior to the research. The interviews took place at the premises of these hospitals, in the offices of the HPs. The interview forms covered socio-demographic information as in the table 1, HPs views on training needs related to home health care or brief-stay units, information concerning the provision of care and services to oncology patients, and observations on the relationship between patients and caregivers. In this phase, the researchers initiated data collection by conducting the necessary interviews, checking whether the questions were clear and understandable, in order to provide clarifications on unclear points, if any. Finally, at the end of the interviews, the participants were asked to confirm the comments as recorded in a summary.

Table 1. Interview questions

<p><u>Demographical Data:</u> Age Gender Field of Specialization Training Years of Activity / Past Professional Experience Years spent in Home Assistance, Short-Term Treatment or other Primary Care Structures</p> <p><u>Training needs</u> Taking into account your field of specialty in Health Care and more specifically your dealing with neoplastic patients as well as with care providers within the context of Care at Home and further on within the system of the extra-clinical care and rehabilitation of such patients:</p> <ol style="list-style-type: none"> 1. Please state on which issues would you like to acquire more knowledge in order to improve the care you provide to the patient as well as your cooperation with his caregiver-family 2. What skills you feel you need to develop most, in order to better cater to the needs that a patient's care implies? 3. Are there certain needs in training you acknowledge to have, in view of better assisting the patient and the patient's care providers, both emotionally and socially? Please specify. 4. Do you wish to be trained on Electronic and IT-related skills? 5. Do you wish to be trained in health care technical aids and appliances specific to your field? 6. What other needs in further training do you consider to have?

2.3. Data analysis

After a literature review, a qualitative analysis of six open questions was applied [11,25,26,27]. Qualitative research analysis was achieved by using the constant comparative method which consists of the constant comparison of answers, conclusions, processes and random events in order to integrate them into separate thematic categories. The interviews were transcribed into texts with the utmost precision, and detailed summaries were created for each interview covering the main points of every answer [28].

After interview transcription, a qualitative thematic analysis was carried out. Where conceptual similarities were observed, they were grouped by categories, and the themes from each group were identified as potential thematic units. The themes were revised and clarified through cross-processing performed by the two

researchers in order to count areas of disagreement and agreement [29]. Finally, relating the thematic categories to the research questions, a map of themes and sub-themes was developed. Next in our study came the final categorization of data. After reading the data several times, the two qualitative researchers copied the answers into a word processor in order to gain a comprehensive insight and deepen their understanding of the subject [30,31]. Six files were created, each one containing the responses for each one of the six open questions.

By so doing the two researchers created their thematic units working independently from each other and then they combined their findings. Then, in this step, the researchers decided which thematic category each response fitted into. For example, the file No1 "*answer one*" gathered all the answers of the respondents to the question "*Please state on which issues would you like to acquire more knowledge, in order to improve the quality of the care you provide to the patient as well as in order to enhance your cooperation with his/her family?*"

2.4. Research reliability

The reliability of our research was provided and guaranteed by the abovementioned way of working on the questionnaires. By operating independently from each other and then by comparing and merging their findings, the two researchers managed to decrease the subjectivity factor. As we have earlier described in order to create the thematic units, the second researcher, after random selection of a response (response 1), carefully read several times the responses that corresponded to "question 1" [32]. This made the common thematic units distinct. Each researcher registered his thematic units and then the units of the two researchers were mutually compared. For those categories encoded differently by each researcher, there was a discussion and the researchers agreed to create a number of new categories. Then the data were put into the categories agreed upon by both researchers.

The reliability of the analysis was reinforced by 10 selected interviews, which were encoded by the second researcher (T.P). At this point data completeness was obtained. This way a high level of agreement between the two researchers was achieved and some minor differences about the titles of the thematic categories were discussed and agreed upon.

The degree of agreement between the two researchers after the first attempt of categorization was 80%. This increased in the second stage where the coordinator - researcher (T.P) explained to the second researcher (G.T) concepts and terminology used in the research. Weber says that in order to reach reliable conclusions from the categories created, it is important that the categorization process ensures validity on issues of coherence, which means that different persons should reach similar results regarding the thematic units [33].

Participants were identified by codes indicating Nurse (N), Oncologist (O), Psychologist (Psg), Social worker (SW) and all interviews (I.). For example, [I.1N]

refers to the first interviewed nurse, where I. = interview and 1N = 1Interview Nurse and the answer(s) are quoted by "...".

3. Results

3.1. Sample characteristics

A total of eleven HPs from Metaxas hospital and six HPs from the Agioi Anargyroi hospital participated in the study. Before each interview, HPs were given the consent form for participation in the research in order to ensure reliability and interview confidentiality. The participants' demographic characteristics are presented in table 2.

Table 2. Participant demographics (N=17)

Characteristic		Sample (N)	%
Gender	Mean		
	Male	6	31.2
Age groups	Female	11	68.8
	43.7 (28-62)		
Specialisations	Nurses	8	46,9
	Oncologists	3	17,6
	Psychologists	2	11,9
	Social workers	4	23,6
Educational Level	University	12	70,5
	□Sc	5	29,4
Work experience	Years	15,8 (5-31)	

The study's findings are discussed around four main areas: 1) Necessary additional knowledge, 2) training needs focusing on psychological, emotional and social support as well as on ethical issues for patients, carers, and HPs, 3) skills in IT and data processing for better electronic communication with other services and units as well as skills in statistics and 4) familiarisation with technological health care aids and appliances.

3.2. Necessary additional knowledge (Need for continuous training)

In the early stages of the disease or right after, there is an immediate and ongoing need for information and teaching on resources for community support, symptom management, practical care, psychological support and encouragement and enhancement of self-care abilities. A common request from HPs was to get practical as well as theoretical training, specifically to receive continuous information on their subject area.

"The work place must definitely train you when you arrive, I studied a lot on my own but I wish I had a little more systematic, theoretical guidance from the House" [11N]

The issue of personal effort in theory acquisition and practical training is raised and the need to incorporate it in the daily curriculum is underlying by everyone. HPs

asked to be informed on new nursing methods and new drugs in order to relieve sufferers and inform cares about eventual side effects.

"We need extra knowledge on medical, psychiatric, administrative issues. We also need basic English knowledge in order to follow international literature and health economics for intelligent budget management (especially in times of financial crisis), and we absolutely need interdisciplinary meetings, lectures and workshops. Only this way can we reach a higher level of interdisciplinary cooperation and a desirable synergy effect. (I3N)

3.3. Training needs focusing on psychological, emotional and social support as well as on ethical issues for patients, caregivers, and HPs

HPs need the interdisciplinary cooperation of all other HPs as well, for patient's and carers' emotional and crisis management. HPs also talked about patient and family support techniques addressing both patients and family members and helping everybody deal with the upcoming death.

"It is possible that the patient is all alone or that sometimes the carer appears to be in a worse state of mind than the patient himself.so I cannot cope with his relatives, explain the gravity of the situation to them. I mean, I tell them that this situation is really serious ... and they reply: so when is he going to be o.k again? While in fact, what we are really trying to tell them is that the patient is in a terminal stage, he is dying, but they refuse to accept that there is not much we can do anymore. They don't get it...You cannot reach them...It's understandable. Therefore we need a trained health professional to help the patient psychologically and offer his family a systemic support which is of major importance. We need psychologists, social workers, doctors, psychiatrists to show sensitivity"[I12N].

Furthermore taking into serious consideration the cross-cultural and religious differences among patients, the HPs asked for further training in psycho – oncology.

"Support techniques for the patient and his family when dealing with an upcoming death. Death triggers different reactions to different cultures according to geographical, religious and ethnic differences and it is dealt differently (compared to us Greeks) by for example the Iraqis that have been sent here to work in order to sustain their family down there (Iraq). They die here alone and they don't tell anybody, not even their family in Iraq because for them death is a defeat, a shame. But if you see a West European or American die here, there is no family by his bed because they have learned to be self sufficient or maybe because they don't have anybody back home... I don't know... "[I 14 S.W]

Additionally, HPs underlined their own need for psychological support and emotional relief.

"As far as emotional relief is concerned, I believe that what we need is a systematic professional supervision in order to achieve emotional balance because year by year, day by day we are getting closer to burn out. I also have trouble sometimes, how can I say it... I leave the place and I feel very miserable. I give all my energy, and I feel

totally drained. I've been at the psychiatrist's so many times, because lately we have had many cases and they were the same age as me ... and they died on me one after the other ... and I got crazy. But I should also have a safety net around myself; I should have the skills to manage their pain as well as mine, because I also feel distressed, hey, I also lose a person, don't I? ... And I believe this is equally important for my colleagues...." » [I16N].

3.4. Skills in information communication technology (ICT) for better communication with other services and units as well as skills in statistics

At the same time HPs requested regular updating and training on ICT and closer cooperation with other units and highlighted difficulties due to personnel shortage and lack of time. Consequently HPs requested an electronic patient record.

"Here we are treating an average of 75 people per day and there are usually only 3 or 4 of us. Imagine 3-4 persons performing venipunctures, administering drugs, carrying out blood transfusions and treating whatever emergency may occur... too few nurses and too many patients. What we had decided to start doing but finally didn't, was to establish an electronic patient record which would show us at any time how many patients we have suffering from a certain disease, what their daily status is. This never happened. We also asked for more staff but they did not send us any so nothing changed.... We still have printed files and we hand-write everything on them, patient's medical history, the visits we made, what we did...I guess budget is tight, although ICT is very important tool for us to provide quality services." [I 13 S.W, I1N]

However Doctors and younger Nurses have access to ICT and successfully use the hospitals limited electronic data facilities.

"...I already be familiar with information and communication technology and not only do I consider it necessary but also indispensable, essential." [I9O], [I1 1N]

3.5. Familiarisation with technological aids and appliances

All HPs interviewed expressed the need to acquire extra theoretical knowledge on hospital technological aids and appliances. More specifically, nurses would like to be familiarized with new ventilators, pumps, ostomies, butterflies, catheters, electronic thermometers, blood pressure monitors, oxygen therapy, wheel chairs and lifts and general knowledge of psychosomatic issues.

"Well, anyhow nursing is always developing. New material, gadgets, red lamps, blue lamps and buttons show up everyday. You have to always be up to date if you want to continue in the branch." [I4N]

As a participant Oncologist put it: "... the patient with neoplasia should be treated with dignity. If there is no homecare, people are humiliated. The patient is sent from one emergency hospital to another, where he is hospitalized for one day or two, then he goes to the next hospital and his Insurance fund pays the bill...While he could be at home and the Insurance fund would save the money. Because one-day hospital stay costs the Fund around 300 Euros, the same as one night stay at the "Hilton hotel", you see how it is... The person is sent from one hospital to the other as if he were a "parcel" and if you don't have a cancer patient in your family, you cannot understand this".

These comments suggest that there was an obvious need for more attention and care for cancer patients from HPs which from their side, unfortunately lack the opportunity to be involved to a desirable degree in the patient ongoing care.

4. Discussion

Our research, focusing on the analysis of HPs interviews at the two major Anti-cancer Hospital of Athens-Greece, suggested a devastating lack of time due to the staff shortage in hospital short stay units as well as in hospital supervised home care units. There is no doubt that HPs love their job but face huge practical obstacles that make home nursing care difficult to implement, given the current socio-economical situation in Greece.

Nevertheless and in spite of the deteriorating socio-economical everyday life in Greece, HPs find the psychological strength to help improve shaky family relations, build bridges and strengthen weakened bonds between family members, suggest changes and improvements in home environment and furniture arrangement for a safer and more efficient provision of care. The HPs also introduce and train both patients and caregivers into handling technical devices the patient is depended on, e.g enteral nutrition devices, catheters, and ostomy pouch changing. These interventions generate minor and major changes in daily habits, both in the practical aspect of home care as well as create new realities in family members' social life and interrelations.

Our research has confirmed by a prior research, which in order to investigate the problems faced by Greek home caregivers for cancer patients (n=76), used the questionnaire "Problems and Needs in Palliative Care Questionnaire-Caregiver" form (PNPQ-C) and found that the most important problems were anxiety and stress management, pain management, financial problems, nutrition problems, depression and distress, emotional disturbance, bad patient behavior and patient personality change, inability to address the situation positively and hospitalization as such [34]. Our research is also confirmed by a previous study on a sample of 640 GPs who reported that their main training needs primarily laid on training in symptom control, opioid prescription, nausea and vomit control, and continuous drug infusion device control [35]. It is now commonly accepted that patients treated by HPs trained in palliative care benefit from improved symptom control, better quality of life, and longer survival rates [36,37,38].

In another study carried out in nursing homes, nurses underlined their needs in understanding and supporting the dying, improving communication skills, symptoms management, nutritional support, knowledge on basic motoric/bio-mechanical issues, the role of complementary therapies and management of continuous drug infusion pumps. At the same time, the needs of nurse assistants focused on the development of communication skills and the clarification and determination of their own role. Therefore, the researchers finally decided to create different training programs for each of the two groups that is to say RGNs and HCAs (Registered General Nurses and Health Care Assistants) [39]. Similar were the conclusions of other studies [40,41].

Our research pointed out that allHPs mainly identified the following needs 1) Necessary *additional knowledge* (Need for continuous training), 2) Training needs

focusing on psychological, emotional and social support as well as on ethical issues for patients, caregivers, and HPs, 3) Skills in electronics and IT for better electronic communication with other services and units as well as skills in statistics and 4) Familiarisation with technological aids and appliances, as we have already illustrated in our findings. The provision of online communication in order to get in touch with existing and potential patients and inform them can be further implemented in the health services [42].

In this way errors and omissions can be limited or ideally even prevented. Finally it has been remarkable that regardless of the main subject treated during our interview (technological, medical, methodological, financial, administrative matters), the HPs always found a way to repeat and interject moral, ethical, social, psychological and spiritual issues, that is to say the Human Parameter, since the main point here is the person in pain and our human to human interaction.

4.1. Limitations and Strengths

Our research has not been carried out in the whole of Greece; consequently it may not represent all hospital brief-stay care and home care professionals in the country. However, in the Athens region we have exhausted the sample of HPs working in the units and reached sufficient data saturation. The participating HPs possess key positions, expertise, and well respected professional status in the research topic. Respectively, the study findings are consistent with the relevant literature. What is left is to extend the findings to other care units in other areas of Greece in order to determine whether also they can be confirmed nationwide.

4.2. Recommendations for future research

Patients would undoubtedly benefit from a multidisciplinary and well organised care team. There is an obvious need to handle difficult psycho-socio-emotional issues concerning the patient in a more holistic way. We could suggest future research directed towards closer cooperation with general practitioners /family doctors / family members – caregivers, focusing on deeper knowledge of patient history in order to create better patient self management support, motivation and empowerment. We can equally recommend research in the field of National Health System Organization and Economics, given the current socio-political and economical situation of Greece.

5. Conclusion

This study explores the views of HPs in Primary health care in the sector of Home-care services for oncology patients of two major Anti-cancer Hospital in Athens-Greece, on the training needs of HPs in order to improve the quality and efficiency of care services. In Home care services for oncology patients HPs deal with the symptoms of pain, meet the spiritual needs and coping with grief especially with the terminal stage patients who are almost entirely dependent on the care services provided. HPs in their answers pointed out that there is a lack of both time and staff, as well as tremendous budget needs and needs in continuous training in all areas of cancer care. The findings of this study agree with those of previous researches which show that HPs were found to have the best intentions and great qualifications, but at the same time their role and effectiveness are seriously challenged within the everyday realities of cancer care services. Also HPs highlighted that ICT as tool has the potential improving the delivery of health services and communication between healthcare workers as well as enhancing the decision make

process. Further and better targeted training has been recognized as essential in order to improve the quality home care services for patients and this has been a common requirement expressed by both HPs.

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Acknowledgements

We wish to thank the Health Professionals in hospitals and home care units who shared their inner thoughts with us in a deep and sincere way.

Funding

This research project was the result of a collaboration between the European Social Fund and the Greek Ministry of Health in the framework of the E.P.A.N.A.D (Greek acronym for the Operational Program for the Development of Human Resources), Priority Axis 5 "Consolidation of Reforms in Mental Health, Development of Primary Health Care and Protection of Public Health in Greece". The title of this project was "Development of a standard quality model in health education, self-care and rehabilitation of the neoplasia patient", and has been realized by the Department of Business Administration, Division of Health and Welfare Management-Technological Educational Institute of Athens (TEI of Athens) and Faculty of Nursing – National University of Athens.

Ethical Approval

Ethical clearance was obtained from the Human Ethics Committee at the National University of Athens and from the Scientific Council of the two Anti-cancer hospitals in question. All participants were given written and oral information about the study and signed an informed consent form.