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Acute Cholecystitis: From ER to Surgery

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ABSTRACT

Background: Biliary lithiasis is one of the most common diseases worldwide. Cholecystectomy is its main treatment. Laparoscopic cholecystectomy is considered as a first choice treatment in most cases.

Material and methods: One hundred and twelve patients were recruited for the present study, after visiting the emergency department of the University General Hospital of Larissa, where a diagnosis of biliary lithiasis was established. A questionnaire with both open and closed –type questions was used.

Results: Women represented 54,5% of our sample. Positive ultrasonography findings were present in the majority of patients, while leucocytosis was found in 52.7%. Almost all of the patients were admitted to the surgical department and most of them underwent a laparoscopic cholecystectomy. The vast majority of those patients, who had a similar attack in the past, had already undergone ultrasonography investigation, and a biochemistry test had been performed in half of them, in primary care settings.

Conclusions: The incidence of cholelithiasis and its dangerous complications warrant a thorough investigation of these patients.

Key words: Biliary lithiasis, Laparoscopy, Hospitalization, Emergency Department,

INTRODUCTION

Cholelithiasis is a surgical disease with important costs for public health (Schirmer 2005, Papadopoulos 2006). A spectacular progress has been made during last years in surgical treatment of this condition, with older techniques having been limited to certain indications and with laparoscopic approach to have become first choice treatment in most cases (Mulvihill 1994, Robertson 1998, Liguori 2003) However, the contribution of early diagnosis to avoid costs and further complications and discomfort of patients is still important. For this reason, prompt diagnosis of

cholelithiasis and proper guidance of the patients is the first step towards treatment (Venneman 2006). The diagnosis of this condition has rather been easy by modern imaging techniques, but clinicians have the responsibility to suspect diagnosis and connect symptoms with existing gallstones and to avoid a misdiagnosis (Festi 1999 Berger 2004, Gupta 2004). A comprehensive laboratory investigation is essential for the diagnosis of pancreatitis, a dreadful complication. The thorough investigation in primary health care level is expected to minimise complications and to lead patients to therapy as quick as possible. The

purpose of the present work was to record modern trends as well as possible flaws in the primary care of patients with biliary tract lithiasis. The objective was to collect information in the domain of primary health care of these patients, from time of their presentation in the Emergency Room (ER), to discharge, either having been operated or not.

Material and methods

Data were collected prospectively, using questionnaires administered to patients presenting to the Medical and Surgical ER of Larissa University Hospital between January 1 of 2007 and October 15 of 2007. Diagnosis of acute cholecystitis and/or biliary colic was made in 112 patients. (A total of 18,849 patients arrived in ER during this time period). A questionnaire comprised from 26 open- and closed-type questions, designed by our research team, was administered to the patients. All questionnaires were answered (100%).

Statistical analysis

Coding and Process:

Initially, variables were coded according to their order of appearance in the questionnaire. According to the requirements of analysis, derivative variables were also created. Descriptive statistics was applied and frequency tables for the epidemiologic and nosological characteristics of the sample were constructed. Student's t- test and chi-square test were used for comparisons among quantitative and qualitative data, respectively, and Yates correction was used for 2x2 contingency tables. Statistical significance was set to

TABLE 1. Demographic features of the participants

Sex	N	%	Mean± SD
Men	51	[45.5%]	
Women	61	[54.5%]	
Age		63,7 ± 16,5	
Place of residence			
Larissa	75	[67%]	
Rest of Thessaly	28	[25%]	
Out of Thessaly	4	[3.6%]	
Educational level			
Junior High School	89	[84.7%]	
High School	11	[10.5%]	
University/Technical institute	5	[4.8%]	

TABLE 2. Age difference between men and women

	N	Age (Mean ± SD)
Men	51	60.7 ± 15.8
Women	61	67.3 ± 16.8
P < 0.05		t-test

0,05. Analyses were performed by SPSS for Windows, version 13.0.

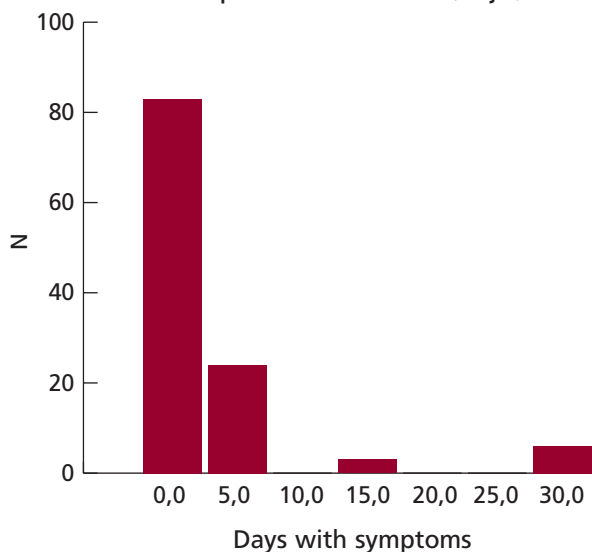
RESULTS

The percentage of patients with diagnosis of acute cholecystitis that were finally admitted to the hospital was 0.6% of the total of patients arrived in this time period. Demographic characteristics of the patients who participated in the study are shown in Table 1. The majority of them were women of older age, residents of Larissa. They were mainly graduates of elementary school (Table 1). A statistically significant difference regarding age was found between men and women, with women being older than men by one decade on average (Table 2). Symptoms had started during the 5 last days prior to their ER visit, almost in all of the patients - Fig. 1. The majority of patients was presented with the so-called biliary colic, with leukocytosis and rise in lactate dehydrogenase values (LDH). All patients reported pain during their examination in the ER (Table 3). Most patients with a relevant diagnosis had already been undergone an ultrasonography in the past, as well as biochemical testing, in a percentage that was significantly different from the respective percentage of those not having

TABLE 3. Clinical and laboratory features of patients with cholecystopathy

Diagnosis	N	(%)
Colic	62/112	[54.9%]
Cholecystitis	50/112	[44.2%]
Previous Diagnosis	35 /112	[31%]
<i>Previous laboratory testing</i>		
Biochemical	26/35	[74.2%]
Ultrasound	30/35	[85.7%]
Current laboratory findings		
Leucocyte count	59/112	[52.7%]
AST	39/112	[34.8%]
ALT	47/112	[42%]
LDH	72/112	[64,3%]
Direct Hyperbilirubinemia	38/112	[33.9%]

FIG 1. Duration of symptoms until patients visit to ER (days)



such a diagnosis (table 4). Doctor's offers to the patients diagnosed with "right upper abdominal quadrant attack" and cholelithiasis included hospitalisation in most cases, combination of medication and diet, and diet only in 8 cases. Choledocholithiasis was found in few patients. Almost half of the patients had thickening and oedema of the gallbladder wall, with or without lithiasis. Presence of biliary sludge was found in about 18% of cases (Table 7). After their evaluation in the ER, most patients were admitted in the surgical department (Table 8). Thence, either they underwent surgery, or they were discharged after hospitalisation. Only one patient left ER only with directions. Data are shown in Table 9.

DISCUSSION

Epidemiology

Cholelithiasis is among the commonest health conditions requiring surgical intervention. Its total prevalence in USA is estimated at 10-15%. According to epidemiological studies in Europe, the prevalence

TABLE 5. Previous diagnosis and biochemical testing in history

Biochemical testing in history			
Diagnosis in history	Yes	No	Total
Yes	24	11	35
No	2	75	77
Total	26	86	112
P < 0.05			X ²

ranges from 5,8% in Mediterranean countries to 21% in Norway (Schirmer 2005). It has been shown that the presence of stones in gallbladder increases with age. It is calculated that 20% of adults above 40 and 30% above 70 years of age, respectively, have gallstones (Schirmer 2005). The prevalence is generally estimated at 18,8% in women and 9,5% in men at the age of 30-69 years. Greek studies are consisted with the finding than in older ages the prevalence of gallstones is considerably increased, as well as with the numbers for morbidity and risks of complications (Papadopoulos 2006, Gourgiotis 2007). Prevalence differs by sex; during reproductive age, the ratio between men and women is ~1:4, while in older age, the ratio is roughly similar (Schirmer 2005, Barbara 1987). In the present study, the proportion of individuals with cholelithiasis requiring hospitalization reached 6 per thousand.

Clinical presentation of cholelithiasis

Despite many efforts to clarify the clinical presentations of cholelithiasis, the issue remains still open, while existence of specific symptoms is disputed (Schofield 1986, Gruber 1996, Yusoff 2003). Gallstones do not often cause symptoms, and sufferers usually ignore their existence.

In the present study it was found that the commonest symptom in all patients was pain. In a study from Italy including 30,000 individuals aged 30-60 years, it was found that epigastralgia and upper right quadrant pain, combined with intolerance to certain foods (e.g. fried or fatty foods) were positively related to the presence of gallstones. Several additional

TABLE 4. Previous diagnosis and ultrasound testing in history

Ultrasound testing in the past			
Diagnosis in history	Yes	No	Total
Yes	29	6	35
No	1	76	77
Total	30	82	112
P < 0.05			X ²

TABLE 6. Type of advise

Advise	N
Hospitalization	19 (54.3%)
Medical treatment	1 (2.8%)
Combination of medical treatment and diet	7 (20.0%)
Diet only	8 (22.9%)
Total	35 (100.0%)

TABLE 7. U/S findings of the patients (in hospital examination)

Findings	N	(%)
Cholelithiasis	37/112	33.0%
«Sludge»	20/112	17.9%
Thickening and oedema with lithiasis/sludge	51/112	45.5%
Choledocholithiasis	4/112	3.6%
Pancreatitis*	2 /112	1.7%

* *Independently of other findings*

characteristics of pain were confirmed in that study. These were pain radiation to the right shoulder, pain onset immediately after meal, absence of relief with intestinal mobilisation etc. (Festi 1999). Nevertheless, relation of pain with the presence of gallstones is disputed. It has been found that 61% of patients with cholelithiasis, as well as 45% of patients without lithiasis may report biliary colic. These findings show that neither gallstones exclusively responsible for the symptoms nor symptoms are always eased with removal of the former. The proportion of patients reporting lack of relief of their symptoms after cholecystectomy ranges from 6 to 27%, and not painful symptoms persist in 45% (Berger 2004).

Laboratory investigation

The method of first choice for gallstones detection is ultrasonography (U/S). It has a sensitivity and diagnostic accuracy of 90-95%. Endoscopic sonography sensitivity reaches 92% for cholelithiasis (Bortoff 2000). Ultrasonography is considered necessary for establishing diagnosis in order to proceed with therapeutic management. In the present study, only 6 patients with diagnosis of cholelithiasis had not already undergone an U/S. Twenty three percent of the sample had undergone biochemical testing, and 11 among those already diagnosed (31%) had not undergone biochemical testing. Ultrasonography is internationally recognised as prerequisite for cholelithiasis diagnosis. However, despite existence

TABLE 8. Department of admission

Department	N	%
Internal medicine	3	2.7
Gastroenterology	7	6.3
Surgical	100	89.3
Discharge after evaluation in ER	2	1.8
Total	112	100

of symptoms that cause suspicions of cholelithiasis, many false positive and false negative results exist, influencing sensitivity and specificity of physical examination and medical history in this disease entity, as it is proved by U/S (Connor 1998). In another study, general practitioners (GPs) were asked to complete a questionnaire before and after their U/S. Those who were found to suffer from cholelithiasis and in whom clinical suspicion of cholelithiasis had been arisen were defined as patients with expected gallstones. Those who were found to have cholelithiasis, but the doctor of primary care had not such a suspicion were defined as patients without expected gallstones. Gallstones were detected in 29% of those that presented with clinical suspicion and in 11% of those having no clear clinical picture. Patients with gallstones were mainly women, had symptoms (mainly pain) and had been referred to a specialized doctor. Patients with unexpected findings were mostly men, with less complaints of right upper quadrant pain and they did not have a history of cholecystectomy (Speets 2007). In the present study gallbladder sludge was detected in about 18% of patients, and stones in 33%. All patients had findings in U/S, mostly thickening and oedema of gallbladder wall.

Surgical treatment

Eventually only 20-30% of individuals with cholelithiasis will need surgical treatment in their lifetime, implying that cholelithiasis could be considered as a benign condition (Gupta 2004). Evaluation of the history of individuals with cholelithiasis in multiethnic studies shows that 20-35% of those diagnosed with untreated cholelithiasis will develop a complication (Schirmer 2005, Mulvihill 1994). Although general principles of cholelithiasis treatment remain unchanged, surgical methods did change. Laparoscopic surgery and ERCP play an important role in the treatment of cholelithiasis (Robertson 1998, Mulvihill 1994). In the present study, the majority of patients underwent laparoscopic cholecystectomy. The laparoscopic method is safe. The risk of iatrogenic biliary duct

TABLE 9. Hospitalization and type of surgical procedure

Total number of patients (N)	112
Hospitalized	107 (96%)
Surgical treatment	78 (73%)
Laparoscopic cholecystectomy	66 (59%)
Hospitalization, discharge and surgery scheduled	14 (12.5%)
No Hospitalization, surgery scheduled	4 (3.6%)
No Hospitalization (instructions only)	1 (0.9%)

traumatisation is reduced if a careful resection is made (Karvonen 2007). The method seems superior to the conventional methods in terms of rapid return to work and rapid mobilisation. It is considered as the method of choice for acute cholecystitis. (Gourgiotis 2007, Somasekar 2002, Liguori 2003). The main advantages of this method are: avoidance of surgical traumatisation, less invasive, reduced time of hospitalisation, less postoperative pain, lower cost, more rapid recovery, better aesthetic result, fast return to daily activities (Liguori 2003, Lublin 2004, Aspevik 2005). The progress in diagnostic and surgical strategies longitudinally has led to reduction of mortality in Greece, despite increase in admissions for cholecystopathy. (Papadopoulos 2006)

CONCLUSIONS

Pain is the main symptom of patients presenting at general hospitals with the indication of "right upper quadrant attack". Most of the patients have positive U/S findings at the same time. The treatment is surgical, with laparoscopic surgery being the method of choice in most cases. Old women constitute the majority of patients. A thorough investigation in primary health setting contributes to the proper therapeutic decisions and avoidance of complications. A full laboratory investigation is necessary. Technological advances in surgical interventions is expected to minimise discomfort of patients with lithiasis of gallbladder, in the future.

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The attitude of nurses and student nurses towards transplantations

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Abstract

Introduction: Despite its usefulness has been internationally recorded, transplantation disturbs physical, psychological and social activities of individuals and their families, requiring additional adaptive interventions. Consequently, a supporting and advisory role of nursing staff (which is a part of the basic nursing care) for individuals and mostly for their families, is deemed necessary during all transplantation stages (before, during and after transplantation).

Material and methods: The aim of the present research was to determine and compare nursing staff and student nurses opinions about organ transplantation. A questionnaire with 22 close and open-ended questions was used. Our sample consisted of 320 subjects (160 nurses, 160 students nurses). SPSS software package, version 17.0, was used for statistical analysis.

Results: Both staff nurses (62%) and student nurses (68%) agree to become organ-donors, because they believe that they may save the life of another person (nurses 42%, students 75%), while 38% of the nurses and 32% of the students disagreed, because, among other reasons, they do not trust the process of donor selection (32% of the nurses) or they are in fear (17% of the students). It is important to mention that the vast majority of both groups are not aware of the Greek legislation about organ transplantations (62,5% of the nurses, 82% of the students).

Limitations: The main limitation of the present study is its small sample size.

Conclusions: Although nurses and student nurses accept to become organs donors, it appears that state and health organisations should move towards drastic measures concerning public education about transplantation.

Key words: education, nursing staff, society, transplantation

1. INTRODUCTION

Transplantations are among the greatest conquests of medicine in the 20th century and they are established as a therapeutic option. Transplantations of kidney, liver, heart, and lungs are considered today as a widely acceptable therapeutic domain of medicine. A big part of this success is mainly based on people who realise that they can help to save the life of another person. They are also a supreme life gift, and a message of hope, empathy and solidarity. A transplantation, that is the replacement of a human organ functioning insufficiently by another, healthy one, constitutes a critical occasion in the life of individual and his family. Each illness has consequences and it influences individuals and their family with a unique way. In other words, it disturbs physical and social activities and it requires adaptations that they need to be continued after the transplantation, as well. As a result, the role of nursing is particularly important, in this group of patients.

1.1 Literature Review

Today, transplantations are considered as routine, not experimental processes that offer a hope of life and ensure a better quality of life. Despite the advances in science and technology, there are important problems in transplantations deriving from their complex nature, with a considerable influence on the procedure (Stauroula and Gkovina, 2003).

In detail, despite that surgical techniques and immunosuppressant therapy are improving, making transplantations more effective, an important obstacle in the development of transplantation programs in Greece is the lack of donors. Unfortunately, in Greece, the idea of organs donation is not promoted, so that not enough are taking place. For instance, Greece is last in the number of transplantations among countries of European Union, without any encouraging trend. In our country, only 4.6 individuals per million of the population are organ donors, while in Spain, for example, the corresponding number is 46 (Papadimitriou, 1998). The causes of this unwillingness should be sought in the lack of information, in the lack of trust in institutions and in doctors, in the fear for organs sale and in the various prejudices that accompany the end of life (Imbrios, 2004).

In order to invert this negative situation, it appears that a strong campaign should be undertaken about organ donation and transplantations, as well as development of infrastructure for transplantation processes, with priority in the establishment of central coordination of transplantations. Nevertheless, growth and spread of transplantations do not depend only on scientific and technological progress, but, possibly more importantly, on sensitization and use of social institutions, mobilisation of the medical and nursing

staff and through acceptance of the concept of organ donation after death.

National Organism of Transplantations (NOT), founded in 1999, is moving towards this direction, aiming to contribute in national strategic planning of transplantations and in a transplantation project that will focus on global developments matching them with particular needs of our country (NOT, 2009).

Historically, the concept of transplantation is as old as mythology. The myth of Achilles describes the replacement of his heel with a giant bone graft; the myth of Icarus and Daidalos is about an effort for utilisation of an allogenic graft (Michalopoulou, 1999). Church history describes the miracle of Saint Kosmas and Saint Damianos, regarding transplantation of the lower limb of a dead Aegyptian to a Byzantine noble (Papadimitriou 1994, Giannopoulou 2004). Gasparo Tagliacozzi, an Italian plastic surgeon of the 16th century, was famous for a rhinoplastic technic, during which he used a skin graft taken the arm. This is still well known as the "Italian method" (Michalopoulou, 1999). Furthermore, the work of Alexis Carrel, on anastomosis of blood vessels, led to improvements in blood flow to the transplanted organ (Giannopoulou, 2004).

Many years passed until organ transplantation became a reality in clinical practice. Clinical applications of transplantations essentially begin in 1953, when Murray performed successful kidney transplantations between twins (Papadimitriou, 1993). The long survival of the patients of Murray, who were tissue-compatible, proved the significance of immunobiologic reactions for the rejection of grafts and it led to the use of these techniques for other organs.

In Greece, the period of clinical transplantations begins in 1967, when professor Tountas performed the first successful kidney transplantation, in Thessaloniki. However, the great advance in our country was done in 1990, when a first successful liver transplantation was performed in Aretaiio Hospital. Since then, successful heart transplantation took place in Euaggelismos Hospital, and pancreatic transplantation in Laiko Hospital (Papadimitriou 1993, Michalopoulou 1999, Giannopoulou 2004, NOT 2009). In the same year, Greek government established the laws for the terms and conditions of transplantation surgeries (Papadimitriou, 1993).

In general, by the end of 2001, 940,563 organ transplantations had been performed worldwide, according to the International Registry of Transplantations. Today they exceed 1.000.000. Most transplantations regard kidneys (635,075), livers (200,179) and hearts (62,000) (Mavroforou, Giannoukas and Michalodimitrakis, 2004).

1.2 Low issues

For a transplantation, more than for any other medical

act, a legal frame is essential, where doctors will act in comfort, without dangers for prosecutions on possible illegal actions (Skalkeas, 1983).

In Greece, the most recent law (2737/99) accepts the concept of brain death, but responsibility for diagnosis is left on a team of doctors, including the doctor in charge of the patient, a neurosurgeon and an anaesthiologist (Papadimitriou, 1998). It is obvious that the law excludes even the exceptional case of an excessively eager doctor, protecting, in the same time, all doctors from malicious suspicions or accusations for premature or arbitrary acts. In Greece, transplantations from a living donor are allowed only for a therapeutic aim and there are explicit conditions on which they are performed; the essential condition for a cadaveric transplantation is the confirmation of brain death of the donor.

The operation for the organ removal is always performed in the hospital where the patient is admitted. This means that the surgical team for the organ removal should travel to the hospital where the donor is. The status of transplanted organs has a key role in the success of a transplantation.

1.3 The attitude of the nursing staff

Studies in Europe and Northern America have shown that managing the loss of a person, caring of a brain-dead donor and then asking the next of keens to agree to donate the organs of their beloved person is very stressful and it requires many emotional resources from the nurses (Imbrios, 2004). For this reason, nurses often hesitate to participate in the process of organ donation, because they are afraid to come in contact with the families (Tsakni, 2004). On the other hand, the more experienced they are, the more they are prone to be involved in the process of organ donation, having fewer problems during their participation (Imbrios, 2004). Personal attitude towards transplantations influences the way of communication with the patient and with the family. This is particularly important for the nursing staff, since the latter are the only health professionals who provide 24-hour bedside care to patients informing them about matters of prevention as well as management of their illness. The supporting role of the nursing staff is necessary in all stages of

transplantation (before, during and after the transplantation).

Nursing research in transplantations is limited in Greece. Consequently, the aim of the present research was to determine and compare the opinions of nursing staff and students' nurses about organ transplantation.

2. MATERIAL AND METHODS

2.1 Research Design

A descriptive design was used in order to determine and compare the opinions of nurses and student nurses about organ transplantation.

2.2 Sample

Sampling was done on a convenience basis, in two hospitals of Achaia Providence and in the University Hospital of the same area. The sample size was as large as possible to ensure reliability of the results (Burns, 2000). The sample included 320 individuals in total (160 nurses and 160 student nurses).

2.3 Research Tools

For data collection, a questionnaire was used which included 22 questions (closed and open-ended). The questions were designed to evaluate both the attitude of nurses and student nurses towards transplantation, and the causes for these answers. In other words, when a subject gave a positive or negative answer to a question, he was subsequently given an open-ended question regarding the reasons for this decision. In closed type questions, a 3-point scale was used (yes, no, I do not know).

2.4 Procedure

In the first page of the questionnaire, explanations were given regarding the aim of the research, anonymity and volunteer participating. The completion of the questionnaire took 10-15 minutes.

2.5 Statistical Analysis

The statistical software SPSS 17 was used to analyse data. A level of significance (p) <0.05 was used.

3. RESULTS

3.1 Nurses

Most nurses were 30-40 year-old ($X=34.6$ years),

TABLE 1: The attitude of nurses towards organ donation

ANSWER	NUMBER	PERCENTAGE	REASONS
YES I would agree to become an organ-donor	99	62	YES, because I believe that it can save a life (42%)
NO I would not become	61	38	NO, because I do not trust the process of organ removal (26%)

TABLE 2: Usefulness of transplantations

ANSWER	N	%
They save lives	53	33
They give life a chance	14	9
Useful and necessary	21	13
Undeniable, but with a lot of gaps	6	4
I do not know	8	5
A life gift	14	9
No comment	44	27

women (70%), and higher education graduates (60,5%). Sixty per cent of nurses were married, working for more than 10 years ($X=12.4$ years). It is important to report that 84% were not current or past employees in a department for kidney diseases. The vast majority of the nurses (95%) had not worked either as member of a team that performs organ removal for transplantation, or in an Intensive Care Unit (ICU) (85%).

Most nurses (62%) agreed to become organ donors because they believe that in this way they may save a life (42%). On the opposite, 38% hesitate because they do not trust the process of organ removal (26%).

Importantly, a large percentage of nurses (62,5%) are not aware of the Greek legislation about transplantations; from those aware, half of them believe that present legislation is not safe. Importantly, most nurses (55%) answered that they would give their consent for organ removal if they had a family member hospitalised in the ICU, while 45% answered negatively. Nurses prefer that organ removal be performed after brain dead (cadaveric donor) (53%), in comparison to organ removal from healthy volunteers (39%).

Most nurses answered that transplantations save lives (33%), they are useful and necessary (13%), they are a life gift (9%), and they give life a chance (9%).

In the hypothetical question, "what would you prefer if you suffered from a kidney disease", nurses answered that they would prefer to find quickly a graft and have a transplantation (92%), while 8% answered that they would prefer to be treated by chronic haemodialysis.

3.2 Student nurses

The majority of students were women (81%), not been placed (during their undergraduate years) in a renal department (90%) and had not attended a surgery of organ removal (99%).

Most student nurses (68%) would agree to become organ donors, because they believe that in this way they may save a life (75%), while 32% of them answered negatively because of fear (17%).

The vast majority of students (82%) are not aware of the Greek legislation about transplantations. Also, they would give their consent for organ removal for a transplantation (59%), if they had a family member in the ICU, while 41% answered negatively. Moreover, most students answered that organ removal from a brain-dead person (cadaveric donor) is preferable (72%), compared to removal from a healthy volunteer (23%). Most students nurses believe that transplantations save lives (40%), they are useful and necessary (18%), and they give life a chance (10%). Finally, in the hypothetical question, "what would you prefer if you suffered from a kidney disease", the vast majority of students answered that they wish they could readily find a graft for transplantation (98%).

Using the method of chi-square test (χ^2), to examine if there are statistical differences between the answers of both group, we did not found a significant difference in most questions ($p>0.05$). Only in two questions we found a significant difference; the reason for which they would agree or disagree to become an organ donor ($\chi^2=8.15$, $df=158$, $p<0.05$) and whether they were aware of the legislation on transplantations ($\chi^2=14$, $df=158$, $p<0.05$).

TABLE 3: The attitude of students nurses regarding organs donation

ANSWER	N	%	REASONS
YES I would agree to become an organ-donor	108	68	YES, because I believe that it can save a life (75%)
NO I would not become	52	32	NO, because I do not trust the process of organ removal (25%)

TABLE 4: Usefulness of transplantations

ANSWER	N	%
They save lives	64	40
They give life a chance	17	10
Useful and necessary	28	18
Undeniable, but with a lot of gaps	2	1
I do not know	4	2
A life gift	10	8
No comment	35	21

4. DISCUSSION

It is generally accepted that transplantations constitute an admirable medical and therapeutic practice, which saves a life or improves patients' health. Without them, certain diseases would lead to death, or to an unbearable life of the patients.

Despite that organ donation had been enthusiastically accepted in Greece at first place, presently the lack of grafts is an important barrier to the development of transplantation programs. Main points of criticism about transplantations in our country include the possibility of an unfaithful implementation of brain-death criteria, possible organ trade, uncontrollable and speculative promotion by the media of certain doctors and transplantation centres, unfair allocation of grafts, violation of the list of candidates and finally, the issue of "assumed consent" (Gerolouka-Kostopanagioutou, 2000).

Nursing research in Greece regarding transplantations is limited. Our research evaluated nurse's and student nurses' opinions about transplantations, and investigated the reasons for these opinions, as well as possible correlations of the opinions between nurses and students.

International literature shows that in western countries, the general population and health professionals have a positive opinion about transplantations from cadaveric donors. However, a negative finding is that even in Spain, the first country in cadaveric donors within European Union, where most people have a positive opinion about transplantations, a very small percentage is actually registered as cadaveric donors. In fact, Martinez, Martin and Lopez (1995), in their report, showed that in Spain, 65% of the general population is positive about transplantations. Among them, only 6,1% is registered as a cadaveric donor. The main reasons for not registering were 1) that they did not know how to do so (34%) and 2) the fear for a possible violation of death criteria (24%). Ninety three percent of them would donate for transplantation the organs of a dead relative of their own.

In Italy, a research by Pugliese et al (2001), on hospital

workers, showed that an overwhelming percentage (93,6%) was positive towards transplantations from cadaveric donors for humanitarian reasons. Their results are similar with those of the present study. A very interesting finding from a study of Begh et al (2005), in Denmark, is that the percentage of positive opinions (49%) about transplantations by cadaveric donors among ICU health care professionals of 15 hospitals, is considerably smaller than the respective percentage in the general population (74%). This finding, which has also been observed in France (Houssin, 1998), was investigated by Wamser et al (1994), in a study in ICUs of Austrian hospitals. It was found that negative attitudes among health care professionals in ICU is due to the additional work pressure that transplantations impose on them, the lack of staff and the lack of essential help through a coordination centre.

Nevertheless, the situation in Islamic countries seems different. Due to religious reasons, the attitude of Islamists towards transplantations is negative (Syed, 1998). In Tunisia, for example, the percentage of health care professionals who are positive about transplantations from cadaveric donors is 45%. The negative opinions are based on three main reasons: religious (26,4%), personal (20,9%) and moral (10%) (Tebourski et al, 2003).

In the present study, the largest percentage of nurses (62%) and students (68%) answered affirmatively that would agree to become an organ donor, because they believe that they may thus save a life (humanitarian reasons). This is also the main reason reported in international literature (Martinez, Martin and Lopez 1995, Pugliese et al 2001). Nevertheless, things are different in practice, since the number of donors (annually) is very small, while the needs for grafts are imperative. Indeed, while the majority of participants recognize the usefulness and necessity of transplantations, we noticed reservations regarding the safety and legislation of processes concerning diagnosis of brain death.

A small percentage of our sample (37,5% of nurses

and 18% of students) is aware of the legislation on transplantations. Consequently, we may assume that the level of public awareness is still smaller. It appears that the state and the official institutions should be sensitised and take effective measures about public education. We need to secure the prestige of transplantations against undermining processes, such as organ trade, violation of lists, conflict between personal interests, selfish behaviours, and violations by the media.

In addition, in nursing schools, there should be courses that focus on increasing students' awareness regarding transplantation. Growth and development of transplantations are not only depended on scientific and technological progress, but mainly on sensitization of social institutions, of the medical and nursing staff, as well as on every single citizen, through factual acceptance of organ donation.

5. LIMITATIONS

The first limitation of the present study is the small sample size. Although this study offers important results regarding the attitude of nurses and student nurses about transplantations, a larger sample should be used in future. In addition, the questionnaire was used in pilot way, and therefore it needs to be used in a larger sample.

6. CONCLUSIONS

The reasons for lack of grafts in Greece include not sufficient awareness regarding the meaning and importance of the concept of organ donation. We hope that our country will accomplish its target to achieve the rates of success of other countries in sensitization of their citizens in this project. Nevertheless, sensitization of society about transplantations should be cultivated in conditions excluding sentimental approaches or philosophical reflections, being certain that donors have full conscience of this initiative.

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The effect of individualized muscle strengthening and dietary assessment in quality of life in women with osteoporotic hip fractures

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Abstract

The purpose of this study was to evaluate the influence of a personal training program and dietary assessment on quality of life in women with osteoporotic hip fractures.

Fifty women with osteoporotic hip fractures, aged 57-89 years, were randomized in an experimental group (n=25) and a control group (n=25). The experimental group participated in a 12-week muscle strengthening training program. The controls were instructed to continue with their routine daily activities. Specific questionnaires (regarding osteoporosis and diet) were used to assess quality of life in both groups, before and after the intervention.

Both descriptive and inferential statistics were used for analyses. For descriptive analyses, mean values, standard deviations and occurrence frequencies were estimated and they are represented here. Our main investigational hypothesis was analyzed by 2-way ANOVA with repeated measures.

Our results show that the muscle strengthening program benefited the experimental group of women with osteoporotic hip fracture and improved their quality of life.

In conclusion, considering that women with osteoporotic fractures show a tendency for deterioration of their mobility and ambulatory ability starting from about the fourth decade of age, due to natural aging processes (decreased strength, endurance), and changes related to osteoporosis (fractures, reduced mobility, confidence, independence, social life, pain), participation in similar programs may considerably enhance them in their daily activities and prevent deterioration in body composition. Diet had a positive effect on these women using specific dietary instructions.

Key words: osteoporotic fractures, women, exercise, quality of life, diet, muscle strengthening program.

Introduction

In osteoporosis, bone density is decreased below a critical limit and then numerous consequences appear, such as reduction of height, back pain, increased fragility of the bones and fracture risk (Saag et al, 2005). Osteoporotic fractures lead to reduction of mobility, negative influence on social life, mood and cognition of the individual, pain, disability, depression, and loss of independence, sequelae that are all crucial components of quality of life (Picavet et al, 2004).

This impairment is commonly observed mostly in individuals with vertebral or hip fractures compared with fractures in other body areas and it is never completely restored (Hagino et al, 2008). Although physical activity and normal diet have positive effects on body function, research assessing both parameters is relatively scarce. Our results, using specific questionnaires of quality of life before the occurrence of any fracture, may have an important role in development of future prevention strategies aiming in crucial and considerable improvement of health in the aged (Rohde et al, 2008).

Methods

Fifty women aged 57-89 years participated in our study. All participants had been diagnosed with osteoporotic hip fracture, after their admission to the Orthopaedic Department of Hippokraton General Hospital of Thessaloniki. Subjects were randomly allocated in 2 groups; experimental group and control group. The experimental (n=25) and control (n=25) groups had a mean age and weight of 77.04 years, 78.36 Kg, 80.56 years and 78.64 kg, respectively. All subjects provided an informed consent for their participation in this study. The quality of life was assessed twice, preoperatively and postoperatively for their hip fracture, by specifically designed questionnaires (for osteoporosis and for diet), in both groups. The experimental group participated in a muscle strengthening program. The osteoporosis questionnaire included 41 items and it was based on the relative literature review and on the judgment of the experts that created it. For convenient use, its items are grouped in 7 domains (pain, activities of daily life, domestic work, mobility, leisure time, perception of health and cognitive function). Each activity is scored with 3-5 points (1-2-3-4-5) using a Likert-type scale (Adachi et al, 2001, Lips P et al, 1997, Lips P et al, 2005, Tsauo et al, 2005). This questionnaire has been widely used and it has been evaluated for its reliability and validity by the International Osteoporosis Foundation. The diet questionnaire included 55 items grouped in 6 domains (consumption of meat, breakfast, fruits, vegetables, various foods and cereals including bread). Each food category is scored with 0-7 points (0-1-2-3-4-5-6-7), representing the weekly frequency of consumption of each food, using a Likert-type scale (From Aston University, WHO 2005, WHO 2007, IOF 2008).

An individual muscle strengthening program was

initially implemented to both groups but after their discharge from hospital (15 days) only the experimental group continued it, while the control group continued with routine daily activities and use of low intensity exercises (mild walking, dish-washing, cooking).

The muscle strengthening program was based on various studies and guidelines from international societies (Chan et al, 2003, Hauer et al, 2002, Gardner et al, 2005, Malliou et al, 2004, Sherrington et al, 2003, Fleck et al, 2006, Young et al, 2005, ACSM, 1998). It includes recording of the exercise type that was applied (weight-bearing, resistance, warm up and full recovery) the frequency in days per week, the duration of each exercise in minutes, the intensity (always moderate) and sets, repetitions and relax time in every type of exercise. At the end of the total duration of the program, the progress in frequency and duration of each exercise was recorded as well. The program of the experimental group was completed in 8-12 weeks, depending on case, with active participation of all women. In some cases, it was interrupted earlier (before completion of 12 weeks) due to pain intensity or fatigue. It included weight-bearing exercises (stairs climbing, vigorous walking) and resistance exercises (light weight lifting, own body elevation by elastic bandage). The frequency was 4-5 days/week either initially, increasing gradually to 6-7 days/week or constantly, depending on case. The duration of exercises varied between 10-15min per exercise with a progressive increase to 15-30min per exercise, depending on case. The intensity of all exercises was invariably moderate, because of the osteoporosis. Resistance exercises included 2 sets of 6-8 repetitions per case with a resting interval of 2-3min. Warming up and full recovery was implemented before and after the main program, respectively, including circles with the hands, initially in sitting and subsequently in standing position. The duration was 10-15s with a progressive increase to 20-25s. The intensity included 5 repetitions with a progressive increase to 10-15 repetitions. Finally, the intensity of pain was recorded three times, by measurements at the start, at the middle and at the end

TABLE 1. Mean values (SD) of weight-bearing and resistance exercises

	Pre-interventional	Post-interventional
WB Duration	25.00 (2.04)	38.40 (3.74)1*
WB Frequency	2.60 (.58)	3.24 (.43)2*
RE Duration	17.60 (2.55)	27.60 (2.54)1*
RE Intensity	13.12 (1.83)	14.56 (1.96)1*
RE Frequency	2.12 (.33)	2.96 (.20)2*

1. Comparison is based on the paired t-test. 2. This difference is based on Wilcoxon Signed Ranks test.

* $p < 0.01$

WB, weight-bearing; RE, resistance.

TABLE 2. Osteoporosis Questionnaire

Mean values (SD) of groups and measurements				
	Experimental group		Control group	
	1st measurement	2nd measurement	1st measurement	2nd measurement
Pain	17.24 (1.64)	13.84 (1.34)	18.76 (1.87)	18.04 (.93)
Activities	12.28 (1.99)	10.24 (1.92)	14.64 (1.29)	12.76 (1.01)
Household activity	17.84 (2.62)	15.04 (2.37)	20.40 (2.02)	18.68 (1.21)
Mobility	31.88 (3.87)	27.52 (2.96)	32.64 (3.01)	30.60 (2.02)
Leisure time	21.24 (1.94)	18.40 (2.16)	21.23 (1.74)	20.28 (1.54)
Health perception	12.28 (.84)	11.12 (1.27)	12.54 (.88)	11.72 (1.06)
Cognitive function	29.16 (2.44)	30.20 (1.50)	30.32 (1.55)	30.44 (1.56)

of the program. The control group program included routine daily activities (shopping, floor-sweeping, dish-washing clothes-washing, ironing and gardening) with exercises of low intensity (slow walking, stairs-climbing or stairs-descending 2-3 times/week, and physiotherapy with mainly passive exercises of the lower body).

Statistical Analysis

Both descriptive and inferential statistics were used for analyses. For descriptive analyses, mean values, standard deviations and occurrence frequencies were estimated and they are represented here. Our main investigational hypothesis was analyzed by 2-way ANOVA with repeated measures. The seven domains of the osteoporosis questionnaire and the six domains of the diet questionnaire were dependent variables. The assigned group, with two levels, experimental and control, was our independent variable. The measurement, with two levels, initial and final, was the second factor. Differences in a level for p below 0.05 were considered as significant. In case where a significant interaction was found, we proceeded in simple main effect analysis. The advantage of this method is that all possible comparisons are performed under the same type I error.

Results

Effectiveness of the intervention program

According to the paired t-test, all parameters of the exercise program were significantly improved. The changes were noticed in the duration of weight-bearing exercises as well as in the duration and intensity of resistance exercises. In table 1, mean values and standard

deviations of those variables are shown. Wilcoxon Singed Ranks test revealed that both the frequency of the weight-bearing exercises and the frequency of resistance exercises were significantly increased (p<0.05) (Table 1).

Discussion

An individual muscle-strengthening program improved strength and resistance in women with osteoporotic hip fractures. This improvement is very important because of the tendency these women show for a progressive worsening in their mobility status and in their ambulation, due to the lack of sufficient mobilisation and physical activity. It has been reported that the consequent complications lead to institutionalization and social isolation (Bakas E, 2001). The role of specific exercises (weight-bearing or strengthening) is important in increasing bone mass and maintaining bone strength. The benefits from exercising are not limited only to muscular strengthening but they extend to a normal resocialisation and de-institutionalization (Iwamoto et al, 2001). Previous research especially in women with hip fractures as showed that the role of exercise after surgery is imperative regarding the level of rehabilitation (Malmros et al, 1998). Our study confirms the benefits of exercise and the effectiveness of a well-planned personal training program, in women with osteoporotic hip fracture. All women in both groups showed improvement, which was significant in the experimental group.

A combination of physical exercise and proper diet in children and adolescents is essential for a better quality of life in older age (Khan et al, 2000, Swanenburg et al, 2007). Our results are very encouraging and they confirm

TABLE 3. Effect of dietary directions

Meat - protein consumption	Increase in both groups
Breakfast consumption	No essential change in both groups
Vegetables consumption	Trend for increase in the experimental group
Fruits consumption	Trend for increase in the experimental group
Other foods consumption	Trend for increase in the experimental group
Cereals and bread consumption	Reduction in the experimental group by the end of intervention

TABLE 4. Intervention Program

Type of Exercise	Frequency	Duration	Intensity	Progress
Weight-bearing exercises (climbing – descending stairs, vigorous walking)	Days per week			Increase in days per week
Resistance exercises	Days per week		Sets Repetitions Rest	
Warm up/Full recovery (circles with the hands in sitting position)				

ACSM's position stand on osteoporosis and exercise. Med Sc Sp Ex, 1998, 27: 4.

all previous studies on the role of diet. We showed explicit both physical and mental improvement, increase in energy, and faster healing of the surgical trauma without serious complications or additional disease burden. This improvement was a result of many factors; well designed intervention program; constant adherence of the patients; exercising in a familiar place; keeping a pleasant atmosphere; attention and devotion of all of the members of our scientific team; right behaviour and understanding of the specific problems of osteoporotic women with precise implementing of dietary recommendations.

Conclusions

A muscle-strengthening program in combination with appropriate dietary recommendations in osteoporotic women can improve both their muscle strength and endurance and their general quality of life. Given the important role of daily physical activity starting from younger age and of the understanding of the ideal features of exercising for increase of bone density; prevention programs could be designed to substantially improve quality of life in postmenopausal women. Acknowledgments I would like to thank Mr. Christos Dimitriou, Director of Orthopaedic Department in Hippokraton Hospital of Thessaloniki, Greece,, for his precious help in the research process.

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The patient's right to information and consent in the execution of medical procedures: The legal and sociological dimension

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ABSTRACT

The increasing penetration of medical science in the everyday life of modern man presents a particular need to maintain an ethical framework (program), which places high priority on the protection of patients and efforts to codify their rights and obligations.

The laws that fortify and safeguard the rights of patients are concrete actions that incorporate specific measures and clear provisions and afford patients - who feel as if they are being ignored or that their rights are being violated - legal rights and legal remedies.

Rights such as the safeguarding of their health, respectful treatment in the provision of health services, the prohibition of discrimination, the right to information, the right to informed consent, the right to confidentiality and privacy, the right to freedom of choice and the right of access to medical confidentiality affect critical issues of our age, while protecting the sensitive aspects of each citizen's personal data.

These rights constitute fundamental ethical questions in the establishment of an equal doctor-patient relationship, which is regarded as a prerequisite for effective communication on both sides, with the main objective being the success of the therapeutic process, the maximisation of patient satisfaction, compliance with the proposed treatment, the reduction of anxiety and faster recovery.

This paper aims to outline the patient's rights and analyze the patient's right to information and consent to medical treatment.

Key words: health, patient, right, patient's rights, medical responsibility, informed consent, doctor-patient relationship.

INTRODUCTION

In recent years, the patient's rights increasingly offer considerable scope for the development of legislative initiatives in many countries. Their application is directly linked to ensuring the highest possible quality of service in the field of healthcare and maximum

user satisfaction in relation to these services.

Inspired by universal human values and ideals, they keep pace with the modern-day needs of the patient who is better informed and often more categorical when it comes to decisions that affect their medical care.

The patient, no matter how uninformed, has the right to have their opinion heard, to be informed on all relevant parameters relating to their health, to make choices, to feel secure when it comes to matters that affect their medical care and to receive assurances that the therapy they are undertaking is appropriate and affective. When they feel that the care they are receiving is not the best, they do not hesitate to choose another doctor or, in the case of medical mistakes, take legal action.

The doctor is obliged to assist the patient in taking the correct decision, fully informing them of the nature, risks and benefits of the specific medical procedure.

The right to health – a constitutional foundation

The “right” is a legislative institution through which justice systemised the private relationship between members of society. It is the power that the justice system provides to an individual or categories of individuals in order to serve an interest, to which a legal foundation is afforded (D. Tsatsos, 1988).

One of the most basic rights is the right to health, a right that constitutes a basic fundamental principle and duty which the state is obliged to provide to its citizens through an effective and efficient healthcare system that reflects human values, is socially just and offers universal coverage to the population. According to Article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), the right to health is defined as “the right of everyone to the highest possible standard of physical and mental health”. It primarily concerns the right to healthcare and individuals’ free access to healthcare while it incorporates a special interest in “disadvantaged” individuals and those living in poverty (Universal Declaration of Human Rights, 1948).

Nevertheless, although significant advances in this direction have been achieved in recent years, health cannot yet be considered a vested good that is provided without discrimination.

Reference must be made to the applicable constitutional provisions. A simple reading of the provisions relating to the rights of citizens convinces one of their absolute power in the field of healthcare service provision, be they of a public or private nature.

The Constitution offers objective protection of one’s health in Articles 5§5, 7§2 and 2§3. Health is guaranteed not only as a good but as a right. Article 4, paragraph 1 states that “the Greeks are equal before the law”. Article 9A states that “everyone has the right to protection against the collection, processing and use of personal data, particularly by electronic media, as defined by the law” (2472/1997).

If, however, we consider the state’s entrenched constitutional obligations to take measures to safeguard

life and health (Article 5 paragraphs 2 and 21, paragraph 3 Abbr.) in relation to the constitutional principles of protecting human dignity and the free development of one’s personality (article 2 paragraph 1 and 5, paragraph 1 Abbr.), we could characterise it as a fundamental and social right. (G. Papadimitriou, 2005). In order to ensure a high quality level of health for all, countries must enforce the right to healthcare and the safeguarding of health through the formation of a national plan within the framework of available resources with the aim of ensuring this right is common to all individuals and does not discriminate (BMA, 2006)

The existing legal framework

The Hippocratic Oath (460-370 BC) could be considered the first charter of patient rights in the history of civilized humanity. “Whatever I see or hear in the lives of my patients, whether in connection with my professional practice or not, which ought not to be spoken of outside, I will keep secret, as considering all such things to be private.”

No progress was made in this particular matter between Hippocrates’ era and the mid-20th century. On the contrary, the patient’s rights had the same fate of all other human rights throughout the millennia of barbarity that followed the demise of the ancient Greek world (A. Koutselinis, 1999).

This state of affairs continued until the end of World War II. In 1948 the Geneva Declaration set out the obligation of doctors to provide services to patients regardless of gender, nationality, social or political position, race or illness and to respect the patient’s confidentiality and safeguard all of the patient’s confidentiality, even after their death (The Geneva Declaration, 1948).

A year later the International Code of Medical Ethics spelled out the need to respect the patient’s confidential information, the patient’s right to be informed and the right to a humane and dignified life.

Political and social processes initially resulted in the adoption of the Code of Patient Rights by the American Hospital Association in 1973.

France proved to be the pioneer in Europe with the introduction of the Charter of Rights and Obligations of Patients in 1974. The same year the European Communities Hospital Committee adopted the European Charter of Patients’ Rights.

The Lisbon Declaration was announced several years later, in 1981. Greece was the first country in Europe to introduce the law (L. 2071/92, article 47) on the “Rights of Hospital Patients”, followed by Ireland. The law was clearly influenced by the Lisbon Declaration (C. Spyraiki, E. Fragiadaki, 2006)

The regulations of Law 2071/1992 on the “modernization and organization of the healthcare system” replaced

a series of legal provisions which established the National Healthcare System and altered the general approach and ideological direction of legal canons that were rooted in the Constitution and safeguarded the right to good health.

In 1997 Law 2519 established the Patient Right Protection Agencies, which led to the promotion and dissemination of the institution.

In accordance with this law, a recommendation is made to the Health and Welfare Ministry for:

- a) The Independent Patient Rights Protection Unit which is administered directly by the ministry's General Secretary and
- b) The Protection of Patient Rights Audit Committee, which possesses the main responsibility for monitoring and developing the institution

An important step in the regulation was the Greek Parliament's ratification (Law 2619/98) of the Council of Europe Convention on Human Rights and Biomedicine (Oviedo, 1997).

In 1999, via Law 2716/99, the following were introduced to hospitals and began operating:

- a) A Citizen Communication Office and
- b) A Citizens Rights Protection Committee

If we attempt to evaluate the establishment of these agencies at hospital level, we will see that they played an important role in the change of attitude among healthcare professionals.

The creation of these agencies meant that the patient was no longer weak and all were made aware of this. The result was the right to good health, the respect of this right and the observance of the law and eradication of poor management. Hospital administration and organization gradually improved in qualitative terms (X. Kontiadis, 1995)

An initial approach to the problem

One of the basic operational problems faced by hospitals in the past was the lack of a bill of hospital patient rights and the protection of these rights. As previously noted, the matter of patient rights was of serious concern to all societies. However, they tried to fill this gap via operating regulations relating to healthcare service personnel and, in this way, the fundamental rights of hospital patients were adopted in a direct manner.

The lack of these rights had caused serious problems of dysfunction in healthcare services due to the fact that the patient raised concerns relating to matters that affected them and the healthcare services could not solve these problems. This occurred due to the lack of a specific legal framework of patients' rights and obligations and led to conflict and friction in the

healthcare field. This situation created a climate of insecurity among patients at hospitals and other healthcare units and a consistent upheaval at hospitals (A.D. Alexiadis, 1999).

No official at these institutions knew how far the demands of hospitalized patients should be met and what their rights were in terms of healthcare matters. Meanwhile, patients, who were unaware of their rights, often made excessive demands, insisting they be met immediately, which created serious problems. The State considered it was necessary to examine the particularly sensitive field of health and establish a framework of principles that would constitute the bill of hospital patient rights.

A legal framework of rights was adopted so that all hospital patients could address the appropriate department, where necessary, and seek protection and a solution to their problem. In this way a solution was found for a problem facing the healthcare sector. It was deemed that, in the long term, there was a need for legislation to guarantee these rights, to solve all the unclear elements, to educate and raise awareness of all medical personnel and to improve the level of our society by improving the level of education and awareness of citizens so that citizens and patients were aware of their rights and demanded the necessary respect from all medical personnel in the provision of healthcare services (Akinosoglou et al 2007).

The rights of hospital patients (L.2071/1992)

- 1 The patient has the right of access to hospital services most suited to the nature of their illness
- 2 The patient has the right to care with due respect for human dignity. This care includes not only the general practice of medicine and nursing and paramedical services but also suitable accommodation, adequate treatment and effective administrative and technical support
- 3 The patient has the right to consent to or refuse any diagnostic or therapeutic procedure. In the case of a patient with reduced or total mental incapacity, this right is exercised by an individual legally entitled to act on their behalf.
- 4 The patient may request to be informed on their state of health
- 5 The patient's interests are crucial and depend on the completeness and accuracy of the information provided. The patient should be presented with the full picture of the medical, social and economic aspects of their state of health in order to be able to take decisions or participate in decisions that may affect their life.
- 6 The patient or their representative, in the event of the application of paragraph 3, has the right to be fully informed and in advance of the risks that may arise or occur in the case of the application of unusual

or experimental diagnostic or therapeutic procedures. Such procedures may only be applied if the patient approves of them. The patient may withdraw their consent at any time.

7 The patient should feel completely free in making a decision to accept or reject any cooperation whose purpose is research or training. Consent to participation is a right and may be withdrawn at any time.

8 The patient has the right to safeguard their personal life. The confidential nature of the information contained in documents that concern them and their medical file and findings must be guaranteed.

9 The patient's religious and ideological beliefs must be respected

10 The patient has the right to present and lodge complaints and objections and be fully informed of the actions taken and consequences

THE PATIENT'S RIGHT TO INFORMED CONSENT TO MEDICAL PROCEDURES

The concept of prior informed consent

The patient's right to consent to a medical procedure constitutes the basic tenet of the ethics of medicine, legitimizing every possible intervention to the patient (K. Fountedaki, 2007).

The term "consent" in medical procure refers to the agreement and acceptance on the part of the patient to the therapy proposed by the doctor, which aims to improve their health and quality of life.

Up until the mid-20th century, the concept of concept was unknown. In medical procedure influenced by Hippocratic tradition, the doctor was in power and, at the same time, had the ethical obligation to define the interests of the uneducated patient and decide on the course of their health and quality of life.

It was not until the 1960s that serious concerns were raised in terms of the ethical and legal implications of the doctor's super-powers which transgresses the autonomy and self-determination of the human personality (Varka-Adami, 2008).

Following the Lisbon Declaration in 1981, the patient's right to information on their health as a condition of their consent to or disagreement with proposed therapy was institutionalized.

In Greece, this right was established by the provisions of articles 2, paragraphs 1, 5 and 7, paragraph 2 of the Constitution which protects human dignity and the freedom to develop one's personality and prohibit any form of bodily harm or harm to one's health and, generally, any affront to one's dignity.

For the first time, via paragraph 4 of Law 2071/92, the law makes reference to the right of the hospital patient to be informed by hospital doctors on the state of their health as well as the possible risks to their health posed by the application of experimental

diagnostic or therapeutic procedures (Voultsos, Hatzitolios, 2008).

The right to information was extended to all individuals and not just hospital patients via Law 2619/98, through which the Council of Europe Charter for the protection of human rights and the dignity of the individual with relation to the application of biology and medicine was ratified. Article 10 of this law defines the rights of all individuals to be informed on the state of their health while it also incorporates the obligation of respect for the wishes of those who choose not to be informed (Varka-Adami, 2008).

Additionally, article 5 of Law 2619/98 strictly defines the free consent of the patient as a condition of every procedure and the informing of the individual who will undergo the procedure as to its aim and nature, as well as the consequences and risks involved. If the full revelation of the truth may have a negative impact on the psychology of the patient and family members, that may adversely affect therapy or the procedure, then the doctor may not be so clear and may not disclose certain cases (I. Androulidaki-Dimitriadi, 1993).

In emergency situations, the doctor can carry out a therapy or procedure without prior consent. These cases refer to the patient's probable will.

The persons who consent are: the patient themselves, their close family members only in the case that the patient themselves cannot take such a decision due to the state of their health. In the absence of family members and in emergency cases, the doctor is obliged to act in accordance with probable will.

Apart from Laws 2071/92 and 2619/98, the obligation for sound and timely information is also established by article 8 of Law 2251/94. Based on these provisions, the doctor providing their services is liable for all harm caused to the patient where the patient has not been legally informed in a timely manner (M. Mitrosyli, 2000). The new Code of Ethics of Medicine (Law 3418/2005) is fully harmonized with these abovementioned provisions. Articles 11 and 12 refer to the obligation to inform the patient and for the informed patient's consent as a condition for the application of any form of medical procedure.

Apart from the abovementioned provisions, the right to be informed as a condition of consent in the carrying out of medical procedures is foreseen by specific laws that regulate specialized operations such as transplants of human tissue and organs or medical assistance in human reproduction.

The industrialisation of information

Aware of the fact that informing patients about therapy is one of their basic obligations, doctors are concerned about the content and extent of this information. The generalized consent forms that the patient – or a

family member - signs in a panicked state when their health, physical state or life is at risk do not constitute documents of irrefutable presumption in the courts. The "industrialization" of information, which is most commonly observed in major hospitals and justified by their operating conditions, does not make up for the possible lack of information nor the verbal briefing that the patient may have received and prompted them to provide their written consent.

The doctor is obliged to inform the patient on:

- The diagnostic methods, the results of the diagnosis, the type of illness, the means used, the course and stages of the therapy
- The need for the proposed therapeutic procedure and the consequences in the case of its possible delay [Kanellopoulou-Boti, 1999]
- The risks and possible implications of the medical procedure (E. Anaplioutou-Vazeou, 1993)
- The cost of the therapy and financial implications of the illness

Complete, objective information should be provided using simple, comprehensible words, without omitting basic medical terms, without excess, without the alteration of the truth, in a calm manner and a certainty that arises from the doctor's scientific training and experience.

The obligation to inform the patient and the obligation to obtain their consent constitute independent provisions fully harmonized with contemporary international perspectives and they further contribute to the sovereignty of forensic support relating to failure to inform the patient (P. Manti, 2000).

Most likely, it will reinforce judicial disputes concerning failure to inform or the incorrect informing of the patient. On the other hand, it will act as a safety valve in the case of unjust claims leveled by patients against doctors, while it seeks to protect the doctor throughout the course of a civil, criminal or disciplinary procedure.

The right of prior informed consent within the doctor-patient relationship. Ethical dimensions

The nature of the doctor-patient relationship lies at the heart of modern-day medicine and involves the upgrading of the patient's role to ensure they are more active participants in decision-making that affects their health.

The creation of an equal relationship is considered a vital prerequisite for substantive communication between the two sides. The ultimate goal is to ensure the therapeutic process is successful. This relationship contributes to the maximization of the patient's satisfaction, better adaptation to the proposed therapy, a reduction in anxiety and faster recovery.

On the other hand, a problematic relationship will most likely have a negative impact on the therapeutic

process and, as a result, the patient will not reap the greatest possible benefits.

The ties that develop between the doctor and their patients are influenced by the theoretical model relating to health matters which each patient adopts. The biomedical model, on which contemporary medical practice is primarily based, places emphasis on the biological status of the patient, who does not bear social and psychological characteristics but is considered a biological case.

The relationship between doctor and patient could be characterized as impersonal and unequal as the patient is being called upon to follow the instructions of an individual receiving therapy without participating in the taking of decisions that affect them (G.K. Tountas, 2007). At the other end is the biopsychosocial model within the framework of which the patient is able to actively participate in all procedures and decisions that affect their health. The doctor not only places emphasis on the biological characteristics but also the social and psychological elements. The biopsychosocial model is based on a holistic approach to health. According to this model the doctor considers their relationship with the patient as equal as willingness exists for effective cooperation (G.K. Tountas, 2007).

The key elements of the ideal doctor-patient relationship

The doctor-patient relationship is an unequal one. Despite that, many theorists believe that a reciprocal relationship can exist if each party respects the rights of the other and recognizes their obligations.

On a theoretical level there are some conditions that fulfil the prerequisites of what could be considered an "ideal" doctor-patient relationship.

In reality, an ideal relationship cannot exist as its nature and quality is influenced by a series of factors that are different in every case, such as the doctor's personality, the patient's ability to comprehend, the level of education etc.

Initially, each medical procedure and the doctor-patient relationship, as a result, should be governed by the principles of Bioethics which can be summarized as follows: the principle of benefit, the principle of autonomy, the principle of justice, the principle of parity (Akinosoglou, 2007).

Additionally, the basic elements of the ideal doctor-patient relationship could be summarized in the following way:

- A lack of conflicting interests
- The doctor's ability to communicate
- The patient's ability to choose
- Medical capability
- Compassion
- The duration of the relationship

The doctor's personal sensitivities and theoretical

training in bioethics matters, the patient's personality and the type of relationship they have combined with the environment in which this relationship develops can influence the form and quality of this relationship and the strength of each party in this relationship, which impacts on the patient's level of autonomy in decision-making.

The personal awareness of the physician, the theoretical education in bioethics, the personality of the patient, the type of relationship which, in conjunction with the environment in which this relationship develops can affect the type and quality of relationship and strength of each side in this relationship, affecting the degree of patient autonomy in decision-making.

The doctor-patient relationship in the 21st century

At the start of the 21st century, the doctor-patient relationship lay at the heart of contemporary medicine. The changes that have occurred in the medical field and outside it, the appearance of new medical technology, the internet, the increase in chronic illnesses, the ever-increasing costs and the changing social models are constantly reshaping the behaviour of the doctor and patients, making their relationship ever more complex while defining its essential elements at the same time. The two basic models we see in the doctor-patient relationship are the paternalistic and informative models.

According to the model in which the doctor is in power, the doctor is the one who takes decision on behalf of the patient as the doctor is the only person who knows what is good or bad for the person receiving treatment (P. Ziroyiannis, 2009)

This paternalistic model dominated the course and evolution of medicine up until the occurrence of social developments that led to the appearance of new models in the doctor-patient relationship.

The "partnership" or shared model is considered easier to implement. According to this model, the patient participates in medical decision-making so that a relationship based on equal partnership can develop between the patient and doctor and not a relationship of dependence (EJ Emanuel, 1992). The deep-seated changes that have occurred the doctor-patient relationship in recent decades, whose aim is to ensure respect of the patient's rights, resulted in the distancing of the doctor from their paternalistic role and the patient's participation in the healing process. Today's doctor offers their knowledge of the latest information concerning diagnostic techniques, the causes, prognosis, therapeutic choices and prevention strategies relating to the health problem faced by the patient.

The patient, for their part, provides their personal experience of the illness, their position on the various risks and, finally, their personal values and preferences.

The doctor-patient relationship must be a relationship of autonomy. This means that both parties must have rights and obligations and that when ethical values conflict, they should resolve any issues in the relationship on the condition that a new, more favourable one will be established (Papadimitriou, Papakostas, 2002). While science verifies the strength of a therapeutic relationship of this kind, other powers conspire to undermine it. The existing healthcare system causes both doctors and patients to feel a sense of anxiety and isolated from one another.

Human relationships need time and time is never sufficient in the world of organised care. Today's healthcare system, in the worst-case scenario, can turn the contact between doctor and patient into a purely commercial relationship (E. Panagopoulou, A. Benos, 2004).

To conclude, the relationship between doctor and patient is experiencing a transitional period and change is anticipated arising from the increased use of technology in medical procedures and the emphasis which is being given to the promotion of healthcare at the collective rather than individual level, among other factors. The value of the doctor-patient relationship cannot easily be measured but it is, nevertheless, invaluable.

Conclusions and Proposals

The transition to a model that places the patient at the centre of contemporary medical practice and aims for their active participation in decision-making demands a new way of thinking on both the part of the patient and the doctor.

In Greece patient's rights is a relatively new matter in terms of guaranteeing them via the Greek justice system while the obligation to inform the patient is a concept virtually unknown in the medical world and among patients.

The patient's informed consent is chiefly limited to procedures that are considered serious and, oftentimes, pose a risk to the patient's life. The main reason consent is sought derives mainly from doctors who do not wish to carry out the procedures, rather than allowing the patient to exercise the right to self-determination. Clearly, effort is required on the part of both doctors as well as the state and patients themselves in order to secure their rights at the level of day-to-day practice.

The training of young doctors in medical ethics and etiquette and the organisation of awareness-raising seminars are considered necessary to the comprehension and solution of problems faced by patients.

Promoting awareness among citizens of their rights as patients and their ability to demand respect from any medical professional in the course of their use of healthcare services are also considered essential. All of the abovementioned should be founded in the

principles that relate to respect for the individuality of each patient as well as the evaluation of their ability to manage their health, thereby establishing new bases for the practice of medicine and the position of patients at the start of the 21st century.

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Ischemic stroke and prevention

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ABSTRACT

Vascular cerebral episodes or strokes not only they are the third cause of death (10% worldwide, following cardiovascular diseases (13%) and cancer (12%), but they also affect younger people, according to statistics, with a huge social and financial impact. (Dokoutsidou et Antoniou, 2009) The Objective of this study was to review the literature regarding both risk factors and prevention issues about stroke. (Dokoutsidou et Antoniou, 2009)

Methods followed included review of the literature and research for investigational studies and reviews on ischemic stroke, in Greek and international databases. (Dokoutsidou et Antoniou, 2009)

Results: According to the literature, risk factors for ischemic stroke are categorized in not modifiable (sex, age, nationality – race, inherited traits) and modifiable, such as arterial hypertension, smoking, alcohol misuse, malnutrition, atrial fibrillation, hyperlipidemia, diabetes mellitus, obesity etc. (Dokoutsidou et Antoniou, 2009)

Conclusions: According to the literature, the most crucial factor in the prevention of ischemic stroke is modification of risk factors. (Dokoutsidou et Antoniou, 2009)

Stroke was recognized as a disease entity since thousands years before, in ancient Greece. Hippocrates used the term “apoplexy” to describe the sudden loss of senses and paralysis. The term “stroke” is used to describe the event of sudden and dramatic development of neurological deficit, as a result of acute obstruction or bleeding in one or more blood vessels of the brain leading to necrosis of brain areas fed by those vessels. (Dionysiotis, 2006)

Today we are aware that stroke often leads to death or permanent disability with functional and neurological deficits. It is the third cause of mortality in developed countries and it is also the first cause of disability in man. In Greece, according to statistics of World Health Organization, 25,000 incidents of stroke occur annually. (Dionysiotis, 2006)

KEY – WORDS: Stroke, prevention, risk factors.

INTRODUCTION

Stroke has evolved to a major threat for health and life. The numbers related with strokes are disappointingly large. Stroke is the third cause of mortality worldwide and the second in ages >65 years. (InCardiology) It is also the most widespread causal factor for neurological dysfunction and the second for dementia. Fifteen million people suffer from new-onset stroke each year, and hardly 25% of them recover fully. In the first three months following acute stroke, mortality reaches to 25% of the total incidents, while in ages >85-years the respective number is 40%. Among survivors, 25- 50% develops disability or dependency, 50% is unable to walk, 50% is aphasic, and 30% suffers from depression. (InCardiology)

In 2002, stroke was the third cause of mortality worldwide (10% of deaths), following coronary heart disease (13%) and cancer (12%). Despite that fact that stroke may occur at any age, the elderly have a much greater risk. Two thirds of the incidents happen in persons >65-years old, and risk for a stroke is doubled each decade after 55 year of age. (InCardiology) According to epidemiological findings from U.S.A., it is estimated that more than 500.000 to 600.000 Americans present with ischemic stroke annually and furthermore, almost 150.000 of them will die during the first month. Consequently, ischemic stroke is the third cause of death in general population and the first in people >75 years of age. Forty-three percent of strokes occur in individuals over 65-years old. (InCardiology)

Men have a higher incidence of ischemic strokes compared to women. According to those findings, more than 2.000.000 survivors of ischemic stroke suffer from a wide range of deficits and disabilities. (InCardiology)

In Greece, the burden is higher; according to World Health Organization for the period 1990–1992, mortality from strokes was much higher than the average in Western countries. In fact, mortality in Greece is estimated to 130 cases per 100.000 of population per year, while in Italy and U.S.A. is estimated to only 80 and 50, respectively. (Panas et al, 1999)

Even more worrisome is the fact that Greece is one of the few countries where mortality had an increase between 1985–1989 in comparison to 1960–1964, according to World Health Organization. (Vassilopoulos et al, 1996)

These facts underline an imperative need for early diagnosis, treatment and mainly prevention of stroke, in more effective ways. (Vassilopoulos et al, 1996) Due to the permanent disability as a result of an ischemic stroke, prevention has particular importance. All healthy adults should have an annual routine evaluation of their health, including neurological and cardiological examination, blood pressure measure and blood laboratory testing (blood lipids, blood glucose etc.). Of course, smoking and alcohol should be avoided or quitted. Particular attention must be given to the appearance of any symptom indicating a possible transient ischemic attack (most often, weakness or numbness of a limb, blurred vision in one eye, dysarthria). (Kaparos, 2007)

Treatment should be better defined by a specialized neurologist, given that every patient is an individual case of the disease (for example, severity and clinical course may differ). (Kaparos, 2007)

Therefore, especially health professionals (doctors, nurses etc), should be aware of the risk factors for a stroke. These are summarized at table 1.

These data show that there is an imperative need for early and effective prevention of stroke. (Dionysiotis, 2006)

Prevention should be addressed, in fact, to the entire world population. Risk factors may be distinguished in two categories: modifiable and not modifiable. Not modifiable are factors that their effect may not be altered by any intervention. Not modifiable factors include sex, age, inheritance, and race – ethnicity. (Panas et al, 1999).

Modifiable factors, are those on which we may intervene and potentially alter, such as:

CONTROL OF BLOOD PRESSURE

Control of blood pressure is a powerful measure of prevention. It is estimated that control of blood

Table 1. Risk factors for a stroke

NOT MODIFIABLE	POTENTIALLY MODIFIABLE	MODIFIABLE
AGE	OBESITY	HYPERTENSION
SEX	LACK OF PHYSICAL ACTIVITIES	ATRIAL FIBRILLATION
GENETIC PREDISPOSITION	ALCOHOL	DIABETES
RACE/NATIONALITY	HORMONAL SUBSTITUTION TREATMENT	LIPIDS
	CONTRACEPTIVES	SMOKING
		CAROTID STENOSIS

(Dionysiotis, 2006)

pressure (systolic less than 160mmHg and diastolic less than 90mmHg), may decrease the incidence of stroke at least by 40%. Blood pressure values may be decreased with a proper diet and physical exercise, of course. In a person with hypertension where the effort to manage through diet, weight loss and exercise is unsuccessful, antihypertensive medication should be used. Reduction of blood pressure to its normal level is one of the most important prevention measures against stroke. (Healthvisitor, Wolf PA, 1998, Cardiological Rostrum , 2008)

SMOKING

Smoking is one of the most important risk factors. It is estimated that smokers have a greater risk for stroke and in particular, their risk is higher if smoking is combined with high blood pressure. Smoking causes vasoconstriction of blood vessels which results to decrease of blood flow. Smoking should be quitted by all means. The risk of individuals smoking 10 cigarettes per day is double than non-smokers', while for heavy smokers (more than 40 cigarettes daily) this risk is 4 times higher. (Healthvisitor, Bronner, et al, 1995)

ALCOHOL ABUSE

The risk of stroke related to alcohol abuse has not been established. On the contrary, in cases of chronic alcohol abuse the risk is higher because the heavy consumption of alcohol may affect blood pressure. It is therefore important to limit alcohol consumption to a reasonable level. Nevertheless, what is apparently certain is that routine consumption of small quantities of alcohol (10gr or 1 glass of wine daily) has a protective effect, decreasing the risk of stroke. (Lai, et al, 1994, Healthvisitor)

DIET – EXERCISE

A healthy diet may considerably decrease the risk of stroke. On the contrary, high consumption of salt is related to high blood pressure. Additionally, high consumption of saturated fat (red meat, fried foods, chips) lead to increased blood cholesterol (mainly LDL-cholesterol, known as 'bad cholesterol') and to a high probability for stroke. Individuals consuming fruits, vegetables and virgin olive oil have a lower risk. The role of omega-3 fatty acids is very important, as they are necessary for human health and they may be found in fatty fish (salmon, tuna, sardines, mackerel), walnuts (rich in alpha linolenic acid, which is a type of omega-3 fatty acids). American Heart Association recommends eating fatty fish at least 2 times per week. Omega-3 fatty acids play a crucial role in brain function and they reduce triglyceride levels and risk of heart diseases. (University of Maryland Medical Center)

Diet containing high concentrations of antioxidants also reduces the risk. Vitamin C has a protective effect. It is contained in fresh fruits and vegetables. Green tea, moderate consumption of red wine, berries, and cocoa, with their high concentration in flavonoids, decrease the risk, helping prevention atherosclerotic plaque formation. (University of Maryland Medical Center)

Physical training: regular physical exercise decreases the risk of stroke. Exercise improves collateral circulation. Increase of physical activity and starting a program of physical exercising guided by doctor is important for everyone. (Healthvisitor)

HEART DISEASES

The risk of stroke is increased in the presence of several heart diseases (atrial fibrillation, heart failure, myocardial infarction, heart valve disease, coronary heart disease etc). For example, in atrial fibrillation, clots are formed within the heart, which is not operating satisfactorily and embolization of coronary arteries or brain vessels is possible. Other heart diseases include heart failure, coronary heart disease, heart valve disease and myocardial infarction, which is mainly related to atrial fibrillation and it is common cause for cardiogenic embolism. (Vassilopoulos et al, 1996 , Dokoutsidou et Antoniou, 2009)

DIABETES MELLITUS

The probability of stroke in a diabetic patient is two times higher than in general population, regardless of the presence of hypertension or other risk factors. Diabetes mellitus is therefore an independent risk factor, causing microvasculopathy and accelerating atherosclerosis in vessels of intermediate and large diameter, while hyperglycemia seems to aggravate an ischemic episode increasing the size of the infarct. Effective treatment of diabetes mellitus (by diet, oral hypoglycemic medication or insulin) does not decrease all risk. However, it is very important to control diabetes under expert guidelines. (Panas et al, 1999, Healthvisitor)

HYPERLIPIDEMIA

Increased level of serum cholesterol is a risk factor for ischemic stroke. A correlation with arteriosclerosis of large-diameter blood vessels has been showed. A similar relationship also exists for LDL-cholesterol, but the inverse for HDL-cholesterol. The role of triglycerides has not been completely clarified, but in post-mortem studies there is a relation with arteriosclerosis of small-diameter blood vessels. (Kalfakis et al, 2002)

Other risk factors are: vascular diseases, blood diseases, oral contraceptives, and coagulopathies. Stress and depression have been implicated as well

as obesity (mainly of central type), that tends to perceive an epidemic size. Lack of physical exercise, migraine, drug use (mainly cocaine) and intense physical and mental stress increase the risk for a stroke. (Panas et al, 1999, *Cardiological Rostrum*, 2008)

All of the above highlight the fact that prevention should be attempted on a long term basis. For certain risk factors, such as obesity, prevention should begin in childhood; for others, such as arterial hypertension, it should last in lifetime. (*Cardiological Rostrum*, 2008)

We all should understand the importance of prevention and take measures to improve and promote it, as well as measures to avoid and discourage all unhealthy ways of life, for example, smoking and alcohol abuse. (Dokoutsidou et Antoniou, 2009, *Cardiological Rostrum*, 2008)

Health professionals, and especially nurses, should have as their main aim to prevent diseases and educate individuals and their families. (Healthvisitor) Although prevention of stroke is a challenge, it is not impossible. It includes health education of the population about aforementioned risk factors of stroke, such as hypertension, transient ischemic attacks, diabetes mellitus, heart diseases, obesity, smoking and contraceptive medicines. (Healthvisitor) During this process, nurses should recruit and develop all their mental, physical and social reserves, mainly

in order to make individuals that belong in high risk groups to quit unhealthy habits (smoking, alcohol, malnutrition) which are predisposing factors for stroke. (Healthvisitor)

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The Hellenic Journal of Nursing Science (HJNS) is the official journal of the Hellenic Regulatory Body of Nurses HRBoN. It is a peer-reviewed, cross-disciplinary journal with the purpose of promoting nursing science in Greece.

The Hellenic Journal of Nursing Science provides opportunity for the publication of academic articles presenting research conclusions, research based reviews, discussion articles and commentaries of interest to an international readership of professionals, educators, administrators and researchers in all the fields of nursing, and health care professionals.

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HJNS publishes articles which fall into three main categories:

- Editorial articles
 - Editorial articles which are relatively brief (200 words maximum)
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 - book reviews
 - political reviews
 - other type (e.g. socio-economic)
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Use the medical title thesaurus (MeSH®) and (CINAHL) where possible.

Text: The text introduction must refer to what is already known on the topic and what this article has to add to nursing science. Depending on the type of article, it should be set out as follows:

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THE EPITOME OF USEFUL INFORMATION

INCORPORATION OF THE HELLENIC REGULATORY BODY OF NURSES

The Hellenic Regulatory Body of Nurses was constituted by the law 3252/2004 as a form of a Public Body and functions as the official professional body representing the nurses. The enrolment of all nurses is compulsory as is done in corresponding chambers overseeing other professions and functions as a regulatory body and the official counselor of the state (Pan-Hellenic Medical Association, Legal Association of Athens, Technical Chamber of Greece etc.)

MAIN GOALS OF HRBN

In an effort to make the reasons that all nurses should be subscribed to HRBN clear, shown below are the basic goals as presented by the law 3252/2004 and these should be implemented by HRBN:

- The promotion and development of nursing as an independent and autonomous science and art.
- The research, analysis and study of nursing matters and the formulation and submission of scientifically documented studies of the various nursing problems in the country.
- The construction of proposals on nursing matters.
- The continuous training and educating of nursing staff and the materialization and utilization of training programmes.
- The participation in materializing programmes which are funded by the European Union or other international organizations.
- The editing of certificates which are necessary for obtaining a license to practice the nursing profession.
- The evaluation of the nursing care provided.
- The representation of our country at international organizations regarding the nursing department.
- The publication of a journal, an informative bulletin, text books and leaflets so as to inform its members and the public.
- The study of Medicaid matters and the organization of scientific congresses that are independent or in cooperation with other bodies.
- The creation of an ethics committee for the nursing profession.
- The definition and cost assessment of nursing activities.

- The protection and enhancement of the level of health of the Greek population.

MEMBERS OF HRBN

It is compulsory for members of HRBN to be nurses, in other words they should be graduates of the following:

- a) University level nursing schools
- b) Technical level nursing schools
- c) Former higher school for nursing, visiting nurses belonging to the ministry of health, welfare and social security
- d) Former nursing school "KATEE"
- e) Foreign nursing schools with degrees that are accepted as equivalent to the corresponding Greek schools
- f) Military supreme nursing schools

STRUCTURE OF HRBN

HRBN is composed of a central administration, which is located in Athens, and seven peripheral sections, one in each health district of the country.

CENTRAL ADMINISTRATION

The central administration is made up of a 15 member executive council and has its central office in Athens. The address is 47 Vasilisis Sofias Avenue p.c. 10676, tel: 210 3648044-048 and fax: 2103617859 and 210 3648049. HRBN's website is www.enne.gr and email: info@enne.gr.

PERIPHERAL SECTIONS

The peripheral sections correspond to the number of health districts in the country and include:

1. 1st P.S. Attica: 47 Vasilisis Sofias Avenue, p.c. 10676, tel: 210 3648044-048 and fax: 2103617859 and 2103648049
2. 2nd P.S. Piraeus and Aegean: 47 Vasilisis Sofias Avenue, p.c. 10676, tel:210 3648044-048 and fax: 2103617859 and 2103648049
3. 3rd P.S. Macedonia: 11 Mavili St., Thessalonika p.c. 54630, tel: 2310 522229 and fax: 2310 522219
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5. 5th P.S. Thessaly and Mainland Greece: 2 Navarinou St., Larissa p.c. 41223 tel: 2410 284866 and fax: 2410 284871

6. 6th P.S. Peloponnese, Ionian Islands, Epirus, and Western Greece: 1 Ipatis and N.E.O Patra-Athens, Patra p.c. 26441 tel. and fax: 2610 423830
7. 7th P.S. Crete: 116 Menelaou Parlama St., Irakleio p.c. 73105 tel: 2810 310366, 2810 311684 and fax: 2810 310014

MEMBER REGISTRATION AND SUBSCRIPTION

All nurses are obliged to apply for registration at the nearest peripheral section. The application form requires a certified copy of the nurse's degree and official identification, two coloured photographs, the receipt from the bank statement for the amount of 65 €, a simple copy of the license to practice the nursing profession and other titles that the applicant might have are optional (postgraduate degrees, certificates for foreign languages, social activities etc.).

All nurses are obliged to renew their subscription annually, in person or by post (not by fax) till the end of February, by handing in the appropriate statement to the nearest peripheral section. The statement should be handed in simultaneously with the annual subscription fee, which has been assigned to the amount of 45 € by the law 3252/2004.

All nurses who register or renew their subscription to HRBN are given a Nursing Identity Card.

LICENSE TO PRACTICE THE NURSING PROFESSION

The license to practice the nursing profession can be administered at the local prefecture by presenting the necessary documents and certification of registration at their HRBN peripheral section. When receiving the license to practice it is compulsory to present a copy to the peripheral section to which they belong. According to the law 3252/2004, whoever practices the nursing profession without a license to practice will be prosecuted according to the article 458 of the Greek penal code.

Any individual of the peripheral council or the board of directors can file a complaint for illegal practice of the nursing profession and thereafter must notify the judiciary authorities.

In the case of a temporary disciplinary sentence or final disqualification from HRBN the license to practice is automatically suspended.

ADMINISTRATIVE BODIES

HRBN is administered by the assembly of representatives and the executive council. The peripheral sections are administered by the general assembly and the peripheral council.

HRBN'S INTERNATIONAL REPRESENTATION

HRBN is a member of FEPI and has one of the seven positions on the board of directors. England, Italy,

Spain, Ireland, Poland, Croatia, Romania and Portugal participate in this European federation. France, Cyprus and Belgium are under consideration for participation. For more information the website is www.fepi.org.

SELECTION AND SERVICE OF ADMINISTRATIVE BODIES

HRBN's board of directors is elected by the assembly of representatives. The representatives are elected separately for each peripheral section by the members of the department's General Assembly. The peripheral councils are elected in a similar way by the members of the peripheral department's General Assembly. These elections take place every 3 years and Nurses that take part are members in good standing (subscription payed).

DISCIPLINARY CHECK

The members of HRBN are initially submitted to a disciplinary check by the peripheral section, which also functions as a disciplinary council. The secondary disciplinary check, as well as the disciplinary check of the members of the board and the peripheral councils is executed by the supreme disciplinary council, whose president is the supreme court judge.

SCIENTIFIC JOURNAL

HRBN created the "Hellenic Journal of Nursing Science" in 2008 which is its official journal. It is a multidimensional journal with an editorial committee which aims at the promotion of the nursing science in Greece.

The "Hellenic Journal of the Nursing Science" is a reliable, modern, quarterly scientific journal which is published in Greek and English and is available in electronic and printed form. A nominal fee is offered to all interested researchers, university teaching staff, students and the entire nursing community in general as well as the tertiary university and technical level schools (Greek or foreign).

Simultaneously it offers young scientists easy access to knowledge and the chance for nursing to progress, as well as a scientific step for the nurses who work in the academic area and the clinical area to publish their work and undergo some constructive criticism. The journal publishes research studies, reviews, original dissertations and book reviews.

The papers that are published, are credited in a manner that is regulated and certified by the Greek legislation according to international standards.

INFORMATIVE JOURNAL

HRBN created a monthly informative journal in 2008 "Rhythm of Health – Ρυθμός της Υγείας", aiming at promoting and demonstrating each nurse as a unified



psychosomatic and professional personality. The nurses in Greece have the need to solve primary issues that concern their profession as well as the need to express themselves, to communicate, to enjoy themselves and to demonstrate the diverse aspects of their social purpose.

“Rhythm of Health - Ρυθμός της Υγείας” aims at uniting the voice of all nurses in the country and becoming an immediate and dependable form of communication, giving a chance to all voices of the professional community to be heard.

GOALS FOR THE FUTURE

With the collaboration of all its members HRBN aims at materializing and completing some important projects that are requested by the nursing community, some of which have already started being carried out:

- The definition and cost assessment of nursing activities.
- The creation of an open line of communication so as to record and solve the nursing problems.
- The enhancement of international relations between Greek nurses and organizations, for and international institutes.
- The creation of an electronic digital library which can be used free of charge by members of HRBN and to which the whole country will have access.

- Will offer specific training and postgraduate courses.
- The organizing of scientific congresses and day meetings with formal accreditation.
- The formation of specific project committees such as a training committee, a documentation committee, a foreign affairs committee and an informative committee.
- The creation of a network of experts on nursing issues and the provision of legal advice.
- The creation and function of specialization programmes.
- The certification of nursing specialties and nursing adequacy.

CONTACTS

Nurses can contact us:

Tel: 2103648044, 210 3648048 (8:00-15:00)

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- For professional matters
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- For positions in the health sector