

## Marketing in Greek National Health System

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### ABSTRACT

**Introduction:** The international financial situation in combination with an aging population and the appropriation of health services imposes the management of hospital services as a necessity for the survival of hospitals.

**Aim:** To examine the perceptions of 450 upper administrative hospital executives (Nursing, Medicine and Administrative services) in the wider region of Attica, on marketing, communication, and public relations in health-care.

**Population study:** Four hundred and fifty (450) higher health executives from the three basic fields of services in health institutions (medical, nursing, administration) constituted the total sample of the research. These people are employed at 9 of the 36 hospitals in the 3 Health Regions of Attica (H.Re).

#### Materials and method:

The type of design that was chosen (to gather data) for the study of attitudes and perceptions of the health personnel of the health institutions of G.S.H (Greek System of Health) is a cross-sectional survey.

**Results:** The participating subjects, even though expressed some reservations at first, formed a favorable attitude towards marketing and its application in the field of health-care. Statistically important correlations emerged between the perceptions of executives and their socio-demographic background including age, sex, education, and profession, work experience in health-care and specifically in their current position in the services as well as statistically important differences between doctors, nurses and administrators as to their perceptions of some issues in marketing.

**Conclusions:** From the comments in the survey it appears there is a need to apply marketing correctly when providing quality care, respecting the patients' rights and using human and not financial criteria as a guide. Based on the results of the research, important proposals are being submitted in the areas of health-care research, education and clinical practice.

**Key words:** attitude, perception, marketing, strategy, health services.

## INTRODUCTION

One of the most misunderstood concepts in Greece is without a doubt the concept of marketing, where many believe it is mainly advertising. For a great number of businesses marketing at best is a “scientific” way to present a company’s products and to boost sales (Hooley et al, 1990). The inability in understanding what marketing really is, by executives that are asked to practice it, is by no means an accident. Even between the researchers in the field we observe great divergence in what they think marketing is (Kohli and Jaworski, 1990).

Nevertheless, renowned and accomplished researchers (Narver and Slater, 1989) in the field have pointed out that the direction towards marketing is part of the synthesis of a culture of business. The British professor M. Baker and the American professor Ph. Kotler, with extensive published work, are among those who express this opinion. However, these opinions have not been proven by scientific data which is part of a unified research trial.

In the beginning, marketing was established as a field in applied economics, devoted to the study of the networks of distribution. Later it evolved to an administrative method of increasing sales. Following this, it took on the character of an applied behavioral science that is interested in understanding systems of supply and demand in products and services (Papadimitriou, 1998). The concept of marketing has expanded so much, that it can now be used not just in companies but in every organization or social group that owns a product (material or intellectual) or service (Galazoudi, 2003; Gialamaki, 2003).

The important changes in the international economic chessboard in the 80’s decade did not leave the field of health unaffected. The USA as a pioneer started to develop dynamically a new trend in the area of marketing services, marketing health services. Twenty years later almost all of those involved in the field of health can indicate a marketing department in their flow charts. Europe and the rest of the world were late bloomers. The enactment and application of L.2889/01 that establishes belatedly the area of Greek hospitals and their function as an enterprise and health organization, resurfaces from its gamma of executive tools of logical and sophisticated management marketing. In a contemporary environment of modern executive applications, marketing and its distinguishable role contributes to the supply of complete health services, maintaining the quality, and monitoring the cost of health services (Velentza, 2004).

Tones of research (Klimis, 2002) till today on marketing in the field of health are focused on the private sector concerning the satisfaction of the patients and the services provided (Papanikolaou and Sigalas, 1994). Research is also made on attitudes towards marketing as to how it is perceived and the capabilities of the health professions that are related with the use of this enterprising tool. The results from international research (Papanikolaou and Sigalas, 1994; Chang and Chang 2008) have shown that it is possible to recognize the attitude that the health care personnel have towards marketing. The current study deals with the recognition and investigation of these attitudes of health executives in order to determine the necessity of modern marketing strategies in health services and to detect the main realistic Greek conclusions.

## AIM

The aim of this study is to first approach marketing conceptually and to specify it for a health environment and then to research the attitude of health executives, as to the use of entrepreneurial activities and marketing techniques in their sector. The health executives are administrative executives of the three services (administration, medicine, and nursing). Concern, contemplation and collaboration characterizes the current research attempt because the clarification of the concept of marketing, will not only benefit science, it will also be adopted and developed more readily by health organizations.

While evaluating the above mentioned, the following research hypotheses were made:

(i) There are numerous differences in perception between different groups offering health care pertaining to knowledge and the use of marketing for health care in each of the following: position, time spent in current employment, experience, education and sex.

(ii) There are numerous differences concerning the degree of importance (in order from most to least important) of the enterprise’s activities from the health executives’ point of view, in at least one of the following: position, time spent in current employment, experience, education and sex.

i) Are there any differences in perception between different teams offering health care pertaining to knowledge and use of marketing for health care in each of the following: position, time spent in current employment, experience, education and sex?

ii) Are there any differences in importance (in order from most important to least important) that are given to activities in the enterprise by the

health executives in one of the following: position, time spent in current employment, experience, education and sex?

## METHODOLOGY

The type of design that was chosen (to gather data) for the study of attitudes and perceptions of the health personnel of the health institutions of G.S.H (Greek System of Health) is a cross-sectional survey.

## PARTICIPANTS

Four hundred and fifty (450) upper health executives from the three basic fields of services in hospital institutions (medicine, nursing, administration) constitute the whole research sample. These people work at 9 out of the 36 hospitals of the Regions of Health Council (H.Re). It is recorded that H.Re. A consists of 17 hospitals, the H.Re. B has 10 and the H.Re. C has 9 (table 1).

The selection of the sample of the research was chosen randomly as a representative sample of whole population. All the executives from the administration, medical, nursing department were included in the study of 9 pre-chosen hospitals. What is ascertained from the collection of data, the executives were studied almost totally (total percentage 85 %) out of  $\frac{1}{4}$  of the hospital institutions of the three Health Regions. The 3 chosen hospitals of each Health Region in Attica were chosen by ballot.

The only criteria in selecting the sample was that every person that took place in the research had to have a permanent position in the executive hierarchy in the department. A total of 496 questionnaires were distributed, (159 at the hospitals of H.Re A, 161 at the hospitals of H.Re B and 176 at the hospitals of H.Re C). 27 questionnaires of these were not returned completed and 19 of the questionnaires that were answered were not included in the statistical analysis because they were half completed. So, from the 496 health executives that had initially consented to take part in the research, only 450 people took part (percentage 90, 7%).

## Research Tool

The research tool was a questionnaire that was titled "Attitudes and perceptions of health executives on marketing in health". The questionnaire had two sections.

The questionnaire (Health Marketing Questionnaire), that was used in this research was based on the research made by Donald Anderson, Dennis Elbert, Kevin Fickensher

(University of North Dakota, North Dakota Economic Studies, Number 46, 1987) and it was translated in Greek and back ("translation and back translation technique") to test its validity. A pilot study was done to test questionnaire's reliability.

Section I of questionnaire, included 8 questions (questions 1-8). 3 of them collected information on the sex, the age and the level of education of those questioned. The remaining 5 questions of the first section concerned the nursing institution in which they were employed and also the information concerning their work situation (department to which they belonged, exact position in the hierarchy, years worked in current position, years worked in healthcare).

Section II, consisted of 21 closed questions concerning the participants' attitudes and perceptions about marketing as an activity in the area of health. Hospital health executives were drawn to express their degree of agreement or disagreement with the specific proposals on a 5 point Likert-type scale. The 14 of the 21 conditions of the tool (questions Q1, Q2, Q3, Q6, Q7, Q9, Q10, Q15, Q16, Q17, Q18, Q19, Q20, Q21,) represent positive perceptions and were coded in this manner: 5 "completely agree", 4 "partly agree", 3 "neither agree nor disagree", 2 "partly disagree", 1 "completely disagree". In total opposition, the remaining 7 conditions (questions Q4, Q5, Q8, Q11, Q12, Q13, Q14) concerned negative perceptions and the code was: 1 "completely agree", 2 "partly agree", 3 "neither agree nor disagree", 4 "partly disagree", 5 "completely disagree". So, with the maximum and the minimum possible value of the total scale ranging from 105-21, the higher the score the more positive the attitude of the participating subjects about marketing. One more question, semi-open form, was used to record the opinion of the sample concerning the importance of specific entrepreneurial activities that take place usually in a health institution. An open type question was used in the end in an attempt to record the general opinions of executives in medicine, nursing and administrative service in marketing.

## DATA ANALYSIS AND CHOICE OF STATISTICAL TEST

The statistical analysis of data became with the Statistical Package for Social Sciences (SPSS, version 13).

The type of chosen research (for data selection) in order to study the attitudes and beliefs of health professionals employed working in nursing institutes of the Hellenic NHS, was a survey. A descriptive correlational design was adopted for data analysis and presentation of the

results. This type of design permitted the studying of the type of relations between variables.

### RESEARCH WEAKNESSES AND RESTRICTIONS

A careful and austere selection of the research sample, the use of a short and functional research tool as well as the personal relationship and communication of the researcher with higher ranking health professionals, secured the positive response of a major part of the sample. This consisted one of the research goals and as a result, provides the researchers with safer conclusions. However, following all sampling research, this one alike presents with restrictions and weaknesses which may be reflected in the results. These include:

1) the reliability of the results relies on how willing the higher ranking health professionals were to document their sincere thoughts and beliefs with regards to the application of marketing in the health system.

2) even though the sample may be considered satisfactory and may represent the targeted population for this survey, a generalization of the results may possibly be restricted only to higher ranking employees in the Attica region, taking into consideration various personal or environmental factors that may influence the stance of hospital employees in the urban regions.

3) the present research portrays the current opinion and attitude of the sample about marketing in the health care system at the time of data selection and does not provide with any information about changes in these attitudes and beliefs with regards to time and

4) even though the initial plan was to calculate the level of reliability, concerning the Greek version of the tool, using Cronbach's alpha, this was not done so due to various setbacks during data analysis, which caused a significant restriction to the available survey time.

### RESULTS

The sample of the study constituted of 450 higher administrative executives from 9 hospitals of 3 H.Re in Attica, in Greece (table 1).

These executives come from three services of hospitals that were included in the study: medicine, nursing and administrative. The selection of the sample of to research was made taking into account that it may be considered a random representative sample of whole population.

**Table 1. "Distribution of sample / H. Re. and Hospital (N=450)"**

<i>H. Re. A.-Hospitals</i>	<i>n</i>	<i>%</i>
Hospital A	54	39,1
Hospital B	48	34,8
Hospital C	36	26,1
<b>Total</b>	<b>138</b>	<b>100,0</b>
<i>H. Re. B.-Hospitals</i>	<i>n</i>	<i>%</i>
Hospital D	44	30,6
Hospital E	48	33,3
Hospital F	52	36,1
<b>total</b>	<b>144</b>	<b>100,0</b>
<b>H. Re. C- Hospital</b>	<b>n</b>	<b>%</b>
Hospital G	48	28,6
Hospital H	64	38,1
Hospital K	56	33,3
<b>total</b>	<b>168</b>	<b>100,0</b>

The only criteria in selecting the sample was that every person that took place in the research had to have a permanent position in the executive hierarchy in the department. A total of 496 questionnaires were distributed, (159 at the hospitals of H.Re A, 161 at the hospitals of H.Re B and 176 at the hospitals of H.Re C).

27 questionnaires of these were not returned completed and 19 of the questionnaires that were answered were not included in the statistical analysis because they were half completed.

So, from the 496 health executives that consented initially to take part in the research only 450 people took part (percentage 90, 7%).

Approximately 2/3 of higher executives that took part in the research were female (n=291, percentage 64,7%) and 1/3 male (n=159, percentage 34,7%). Most executives were under the age of 40 (n=267, percentage 59,3%). Most of them were 40-50 years old (n=154, percentage 34,2%) and some were 51 years and over (n=29, percentage 6,5%). As to the level of education of the sample, the college education was dominant,

but many executives possessed masters and doctorate diplomas (form 1).

**Form 1: educational level of sample**

PhD :	51 (11,3%)
MSc :	77 (17,1%)
University:	188 (41,8%)
Technological education:	116 (25,8%)
Other:	18 (4%)

Concerning the present position of the individuals in the sample (table 2), most executives belonged to the nursing service (n=198, percentage 44%), followed arithmetically by the executives in the administrative service (n=159, percentage 35,3%) and the executives of the medical service (n=93, percentage 20,7%). As to the number of years of work experience, 159 (percentage 35,3%) declared that they had less than 10 years, 125 mentioned they had 10-15 years (percentage 27,8%) and 166 had more than 15 years (percentage 36,9%). Finally, half of the professionals possessed the specific position in hierarchy between 6 to 10 years (n=227, percentage 50,5%), a smaller number of those up to 5 years (n=178, percentage 39,5%) and one even smaller number from 11 to 15 years or more from 15 years (n=24, percentage 5,3% και n=21, percentage, 7%, correspondingly).

**PERCEPTIONS OF THE SAMPLE ABOUT MARKETING**

Most executives (n=216, percentage 48%) had favorable perceptions about the applications of marketing in health services, whilst another number of executives (n=193, percentage 42,9%) had mediocre perceptions.

A relatively small number (n=41, percentage 9,1%) had negative perceptions about the applications of marketing in health services.

As is evident by the positive conditions (positive perceptions) of the scale, higher values gathered the acceptance illustrated in table 2.

“Those studying hospital administration have to learn marketing so they will be better prepared in their career”. “The use of marketing by health professionals will have as a result a more positive reaction to the wants and needs of the patients”. “Most of my co-workers need more knowledge in marketing” and “Marketing will play a very important role in the future in healthcare”.

In opposition, the positive statements about marketing that received the lowest values were: “Marketing is a field that I know” and “I am

using concepts of marketing in my practice, at the hospital or the organization where I work”.

**Table 2. “Distribution of sample per service and hierarchical place (N=450)”.**

<b>NURSING SERVICE</b>	<b>n = 198</b>	<b>44 %</b>
Director of Nursing Service	7	3,54%
Nurse in a sector	100	50,50%
Head	41	20,71%
Head Assistant	20	10,10%
Others		
<b>Total</b>	<b>198</b>	<b>100%</b>
<b>ADMINISTRATIVE SERVICE</b>	<b>n = 159</b>	<b>35,3 %</b>
Manager	5	3,15%
Administrative Director	7	4,40%
Head	90	56,60%
Head Assistant	45	28,30%
Others	12	7,55%
<b>Total</b>	<b>159</b>	<b>100%</b>
<b>MEDICAL SERVICE</b>	<b>n =93</b>	<b>20,7 %</b>
Director of Medical Service	6	6,45%
Service Αναπληρωτής Διευθυντής	8	8,60%
Διευθυντής	44	47,32%
Commissary A	25	26,88%
Commissary B	10	10,75%
others		
<b>Total</b>	<b>93</b>	<b>100%</b>

From the statements of the scale that did not have a favorable stance for the use of marketing in the health field, the lowest (most negative) values were observed in the following conditions: “I think it would be better if less emphasis was given to marketing by hospitals and health organizations”. “Marketing increases the bill that a patient has to pay for health care”. “Advertising and marketing is basically the same thing”.

**Table 3. “Mean values (x), Standard deviations (SD) and ranges (R) the conditions of the scale of perceptions in marketing (N=450)”.**

CONDITION (QUESTION) RANGE	x	SD	R
Q1 Marketing is a field that I know	2,9002	1,2965	1-5
Q2 I am using concepts of marketing in my practice, at the hospital or the organization were I work	2,7528	1,3039	1-5
Q3 It is necessary for health personnel to use contemporary marketing practices	4,0044	1,0885	1-5
Q4* In the bottom line marketing is sales.	2,8458	1,3463	1-5
Q5* I am familiar enough with marketing in order to be successful.	3,7405	1,1636	1-5
Q6 Nursing students need to know about marketing in order to be better trained for their career	3,9819	1,1637	1-5
Q7 Most of my co-workers need more knowledge in marketing	4,1556	1,0178	1-5
Q8* Advertising and marketing is basically the same thing	3,3221	1,3761	1-5
Q9 I would like to attend a marketing training programme that would give me more knowledge on the subject	4,0227	1,2879	1-5
Q10 Marketing is important for the success in my occupation	3,8904	1,1341	1-5
Q11* I think it would be better if less emphasis was given to marketing by hospitals and health organizations	3,0711	1,4390	1-5
Q12* Marketing increases the bill that a patient has to pay for health care.	3,2483	1,4280	1-5
Q13 I would have more difficulty in using the word client than the word patient .	3,7511	1,5342	1-5
Q14* It does not worth spending time in learning about marketing	4,0673	1,2030	1-5
Q15 Those studying hospital administration have to learn marketing so they will be better prepared in their career	4,5426	0,9028	1-5
Q16 The use of marketing by health professionals will have as a result a more positive reaction to the wants and needs of the patients.	4,1749	1,1321	1-5
Q17 Patients' satisfaction is related to the effective use of marketing	3,7372	1,1773	1-5
Q18 The result of using marketing methods is to diminish the domination of medical profession	3,0312	1,3072	1-5
Q19 Each hospital that uses marketing will end up to use it only to attract patients.	3,5902	1,0842	1-5
Q20 Marketing will play an important role in future healthcare	4,1091	1,0151	1-5
Q21 Medical students will have to learn about marketing in order to be better prepared for the practice of their occupation	3,9911	1,2284	1-5
*The conditions that were noted with an asterisk were coded inversely than the rest as stating a negative perception.			

**Table 4. “Classification of business transactions as to their importance to the health organization”.**

<b>BUSINESS TRANSACTIONS</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>n</b>	<b>%</b>
1. Strategic Planning	146	62	99	307	68,2
2 Personnel Management	90	141	60	291	64,7
3. Book Keeping	55	36	65	156	34,7
4. Public Relations	48	62	45	155	34,4
5. Financial Analysis	42	61	46	149	33,1
6. Advertising	20	29	64	113	25,1
7. Checks and balances	26	27	16	69	15,3
8. Office Administration	3	23	20	46	10,2
9. Sales	13	7	17	37	8,2
10. Pricing	3	10	6	19	4,2
11. Others	---	---	---	---	---
12. No response	4	12	12	28	6,2
<b>Total</b>	<b>450</b>	<b>450</b>	<b>450</b>	<b>---</b>	<b>---</b>

### **CORRELATIONS BETWEEN THE VARIABLES**

Chi-square tests and one-way analysis of variance-ANOVA, were used in order to identify statistically significant differences between groups and their sub-categories. More specifically, post- hoc test was used as it is more suitable for multiple comparisons between more than two population categories.

Correlations of variables as well as any differences between sample sub-categories were examined at the set degree of statistic significance of  $p \leq 0,05$ .

Content analysis was applied to the comments made by the participants at the opened question which involved their opinion on marketing. The emerging results were grouped accordingly. The multiple comparisons that were made between different sub-categories of the population researched, with the method Post Hoc Tests showed more statistical differences between perceptions about marketing and the other characteristics of the sample. According to the statistical analysis, the opinion of administrative executives that took part in the research about marketing became more positive as the educational level increased.

These differences were observed mainly between the four highest levels of education, e.g. Doctorate, Postgraduate study, Universities and Technological Institutes. (table 5)

The score of the whole scale of perceptions were divided by 3 in order to create 3 corresponding categories: 78-105 positive perceptions, 50-77 mediocre perceptions, 21-49 negative perceptions.

Next, based on the value that was produced and its answers, every individual in the sample

was classified in the corresponding group. This specific categorization showed that most executives ( $n=216$ , percentage 48%) had favorable perceptions on the application of marketing in health services, quite a few executives ( $n=193$ , percentage 42,9%) had mediocre perceptions whereas a comparatively small number of these ( $n=41$ , percentage 9,1%) recorded a negative opinion. With Maximum possible value of the total scale 105 and Minimum possible value 21, the Average value was found to be 77,8083 ( $SD=11,9039$ ,  $R=37-102$ ).

The Average values ( $\chi$ ), and the Standard deviations (SD) and the ranges (R) for every one of the conditions of the scale of the perceptions are described in table 3. The Maximum and the Minimum possible value for every condition of the scale ranged from 5 to 1. As you can see in the table 3, the positive conditions (positive perceptions) of the scale, the highest values were collected by the following declarations: “Students in hospital management should learn marketing in order to be better prepared in their career.” (question Q15), “The use of marketing by health professionals will have as a result a more positive response to the needs of the patients.” (question Q16), “Most colleagues require more knowledge on marketing” (question Q7) and “Marketing will play an important role in future healthcare”(question Q20). On the other hand, the positives declarations on marketing that received lower values were the following: “Marketing is a topic that I know” (question Q1) and “I use definitions of marketing in my work (question Q2).

**Table 5. “Statistically important cross-correlations between defining characteristics of sample and their perceptions for the marketing” using ANOVA one-way (post hoc tests)**

<b>Educative Level</b>		<b>mD*</b>	<b>SE**</b>	<b>P</b>
Doctorate	Technological Institutes	0,2900	9,650	0,003
Postgraduate study	University	0,1729	7,771	0,027
Postgraduate study	Technological Institutes	0,3884	8,443	0,000
University	Technological Institutes	0,2155	6,781	0,002
Technological Institutes	other	0,5199	0,240	0,031
<b>Professional Sector</b>		<b>mD*</b>	<b>SE**</b>	<b>P</b>
Administrative executives	Doctors	0,1065	6,138	0,001
Nurses	Doctors	0,1374	7,246	0,051
<b>Years of Previous experience in the Present Place</b>		<b>mD*</b>	<b>SE**</b>	<b>P</b>
< 10	11 – 15	0,3758	0,1296	0,004
<b>Years of Previous experience in Health</b>		<b>mD*</b>	<b>SE**</b>	<b>P</b>
< 10	> 15	0,1454	6,513	0,026
11 – 15	> 15	0,1775	6,962	0,011

\*mD= mean Difference \*\*SE= Standard Error

From the declarations of the scale that do not state a favorable attitude in the use of marketing in the area of health, the lowest negatives were observed in the following conditions (table 3): “I think that it would be better to give less emphasis on marketing by the hospitals and the health organizations” (question Q11), “Marketing increases the amounts that the patient has to pay for healthcare.” (question Q12) and “Advertising and marketing are essentially the same thing” (question Q8) The individuals in the sample were asked to pick and classify three activities that they felt were the most important for the successful function of a health organization and formed a catalogue of management activities which take place on a daily basis in various hospital institutions. (table 4). According to the perceptions of the sample, the first positions, in order of importance, were taken by activities that associated with planning and bureaucratic procedure like personnel management and book keeping. Activities that concern the economic management of a health organization and the promotion of available services and products that were deemed of mediocre or of low importance by the population in the study.

After processing the facts by using the method of ANOVA one-way (table 6) the differences that were located between

administration, medical and nursing executives in the partial conditions of the attitude measurement tool for marketing appear analytically in table 6. According to the facts in the specific table, the administration executives differed just as much to the doctors as they did to the nurses and declared that marketing is a field they know well. The administration executives also differed to medical executives as to the extent of the use of marketing concepts that they stated they do (Q2) even though similar differences were observed between nursing and medical executives. As to question Q3, the administration employees agreed more than the other professional groups that the health professionals should use modern marketing practices.

The perceptions of nurses and doctors on this issue were similar to each other. The representatives of the medical field had a more intense belief compared to the representatives of the nursing and administrative field in that they didn't need greater familiarity with marketing than what they already had, in order to be successful at work (Q5). The nurses supported that the nursing students had to have knowledge in marketing so that they would be better equipped for their career (Q6) in antithesis with the medical staff (who did not find it necessary for the medical students to have any marketing



knowledge). Compared to nurses and doctors, the administrators strongly believed that the use of marketing will contribute to professional success (Q10) and they also believed, to a lesser degree than the nurses, that the emphasis given to marketing by health professionals, should be decreased (Q11).

As to question Q12, which examined how much the application of marketing will increase the fees for patients, nursing and medical executives had the same opinion between them, which statistically differed in degree to that of administrators.

The response was the same concerning how easy or difficult it is to replace the word "patient" with the word "client" in their communication (Q13). The administrators seemed to believe more that one should invest his/her time to learn about more marketing (Q14).

The administration executives were found to believe more than the nursing executives that the application of marketing will have as a result a more whole coverage of the needs of patients (Q16) while they simultaneously stated, more intensely than nursing, their belief that marketing will increase the total level of satisfaction of the patients from health services provided (Q17).

Nursing management agreed more than medical and administration managements with the perception that supports that marketing will decrease the dominance of the medical profession in the field of health (Q18). Statistically significant differences were observed between the three professional groups concerning the opinion that was expressed and to the extent to which marketing will be used in health organizations simply to attract patients-clients (Q19). This position was stated more intensely by the nursing executives followed by the medical and then the administration executives. Compared to medical employees, administration employees had a more favorable opinion that marketing will play an important role in healthcare in the future (Q20).

## DISCUSSION

The study presented the perceptions of nursing, administration, and medical executives. By evaluating the results on the whole we conclude that the executives of administration, medicine, and nursing services that took part in the present study appeared to have a positive attitude on marketing and its implementation in the different health organizations (Sarafis, 2004). This becomes apparent by the fact that an extremely high percentage of the participants in the research agreed that marketing is an activity that needs to definitely be applied by health professionals. Also the majority of the people in

the sample agreed that marketing will play a major role in the future in the accomplishment of the health organization's goals. The positive opinion that the participants expressed is supported by the fact that there was no great agreement with the conditions that mentioned that marketing will decrease the dominance of the medical profession or that it will be used as a medium to attract patients (Bowers and Kiefe, 2002).

In a similar research that was done by Anderson and his associates (1987), the opinions of the upper health executives that participated on the benefits of marketing were not clear or homogenous. So, even though they agreed that marketing will definitely contribute in providing total health care to patients, and in the degree to which they are satisfied by the health care services, they recorded intensely their belief that marketing will increase the cost of healthcare.

A great problem that was mentioned by professionals was the extent to which marketing was used in their daily practice. Most of them admitted that their knowledge on marketing is not satisfactory, and they do not apply practices of entrepreneurial marketing in their work. This research finds itself in opposition to the research by Anderson and his associates (1987) in which their participants presented higher levels of familiarization with the concepts of marketing and a greater extent of application of its strategies. The difference between the two researches may be attributed to the fact that marketing had been introduced dynamically in the USA in the early 80's, whereas in Greece it has been implemented for a shorter period of time. The deficient knowledge on marketing and its insufficient application may explain the reasons why in the present study, we observed (a) great willingness of the executives in the sample to take part in seminars to increase their knowledge on the topic and (b) a significant degree of agreement to educate the students in the health profession on subjects in marketing (Mendelson, 2001; Zolkiewski 2002).

According to research findings, a more positive attitude involving the use of marketing in the health sector was adopted by the older participants of the sample as well as those with more years of service in the department of health provision and management. Such findings are expected since an increase in years of age most usually coincides with an increase in years of service and the probability of that individual being in a management position which could involve duties such as participating in committees and councils which dictate the policy and way of functioning of a health organisation.

**Table 6. “Statistically important differences between administrative, nurses and doctors’ perceptions in specific terms of tool of measurement on the marketing” using ANOVA one-way**

TERM OF TOOL	TEAM	TEAM	mD*	SE**	P
Q1 Marketing is a field that I know	Administrative	Nurses	0,6944	0,1283	0,000
	Administrative	Doctors	1,4345	0,1562	0,000
	Nurses	Doctors	0,7401	0,1497	0,000
Q2 I am using concepts of marketing in my practice, at the hospital or the organization were I work	Administrative	Doctors	0,7895	0,1675	0,000
	Nurses	Doctors	0,7434	0,1595	0,000
Q3 It is necessary for health personnel to use contemporary marketing practices	Administrative	Nurses	0,6272	0,1115	0,000
	Administrative	Doctors	0,6517	0,1367	0,000
Q4 In the bottom line marketing is sales	Administrative	Nurses	0,5262	0,1421	0,000
	Administrative	Doctors	0,4578	0,1776	0,010
Q5 I am familiar enough with marketing in order to be successful	Administrative	Doctors	0,3885	0,1527	0,011
	Nurses	Doctors	0,2990	0,1472	0,043
Q6 Nursing students need to know about marketing in order to be better trained for their career	Nurses	Doctors	0,3325	0,1478	0,025
Q7 Most of my co-workers need more knowledge in marketing	Administrative	Nurses	0,2790	0,1076	0,010
	Administrative	Doctors	0,2966	0,1320	0,025
Q9 I would like to attend a marketing training programme that would give me more knowledge on the subject	Administrative	Doctors	0,5235	0,1686	0,002
	Nurses	Doctors	0,5120	0,1623	0,004
Q10 Marketing is important for the success in my occupation	Administrative	Nurses	0,5029	0,1176	0,000
	Administrative	Doctors	0,6564	0,1456	0,000
Q11 I think it would be better if less emphasis was given to marketing by hospitals and health organizations	Administrative	Nurses	0,4874	0,1518	0,001
Q12 Marketing increases the bill that a patient has to pay for health care	Administrative	Nurses	0,6827	0,1487	0,000
	Administrative	Doctors	0,7304	0,1816	0,000
Q13 I would have more difficulty in using the word “client” than the word “patient”	Administrative	Nurses	0,9225	0,1576	0,000
	Administrative	Doctors	0,8628	0,1932	0,000
Q14 It does not worth spending time in learning about marketing	Administrative	Nurses	0,4403	0,1271	0,001
Q16 The use of marketing by health professionals will have as a result a more positive reaction to the wants and needs of the patients	Administrative	Nurses	0,3158	0,1202	0,009
	Administrative	Doctors	0,3121	0,1473	0,035
Q17 Patients’ satisfaction is related to the effective use of marketing	Administrative	Nurses	0,2693	0,1249	0,032
Q18 The result of using marketing methods is to diminish the domination of medical profession	Administrative	Nurses	0,4617	0,1358	0,001
	Nurses	Doctors	0,7507	0,1609	0,000
Q19 Each hospital that uses marketing will end up to use it only to attract patients	Administrative	Nurses	0,3308	0,1132	0,004
	Administrative	Doctors	0,6032	0,1393	0,000
	Nurses	Doctors	0,2724	0,1341	0,043
Q20 Marketing will play an important role in future healthcare	Administrative	Doctors	0,2996	0,1325	0,024

\*mD= mean Difference \*\*SE= Standard Error

In contrast to this, personnel younger of age and with less years of professional experience are more likely to be functioning under a different way, that is, executing higher personnel's decisions more (staff in management) or being restricted to the clinical sector, as is the case with nurses and doctors.

The level of education was yet another demographic factor which influenced the attitudes and opinions about marketing and the use thereof.

This finding was also expected since a higher level of education provides with a broad understanding of the professional role without necessarily restricting it to the supply of clinical services.

The higher the level of education one possesses the higher the possibilities of being allocated to a position which involves the execution of managerial- as well as clinical-duties.

The statistical processing of data and specifically the study of the differences between the perceptions of the three different professional groups that were tested highlighted some issues that are in consideration for further discussion. First, the executives of the administrative services appeared to be more familiar with marketing and had a favorable perception concerning it than the executives in medicine and nursing in health services. Second, the perceptions of medical and nursing services were found to be similar between them, even though nurses seemed to be more informed on the subject and apply marketing practices more often than doctors. Third, the general attitude of doctors and nurses on the issue at hand was distinctly influenced by a humanitarian approach to the executives of the administrative service whose opinion it was obvious had received influences by the entrepreneurial model. Fourth, the doctors were found to hold a greater distance and to harbor great apprehension towards marketing than the other two professional groups. This finding is derived –among other things- and from the perceptions of doctors on the benefits of marketing in their professional success but also in the need to educate medical students on issues of marketing. Fifth, it was obvious that the attitude of the participants on the whole mirrors the stereotypical perception according to which marketing is an activity that concerns the employees in administration and less those representing the medical and nursing sector of hospital services. Sixth, the perceptions of nurses were found to balance between the perceptions executives in administration and the perception of those in medical administration. This fact justifies what

Greek and international bibliography supports (Melleis, 1997; Patistea and Vardaki, 2001) that nursing services are trapped between the duality administration-medical services and bound by the power it exercises. This situation without a doubt comes at a great cost to the nurses professional autonomy and self-reliance and the recognition of their contribution to the society's health as a whole (Gronroos, 1994; Crigger et al, 2009)

The statistical analysis of Q10 put forward the need for strategic planning as the main business activity of marketing in the various health organizations.

Staff management and record keeping were also mentioned among the three most important activities as a possible result owing to a bureaucratic way of organizing, operating and managing a health industry, which is also true for today on a certain scale. Other marketing related activities (e.g advertising, sales) or the financial management (credit, payment, billing, financial analysis) of health services were considered as being less important or held lower positions on the list. This finding is not unexpected considering the lack of information, training and education provided to health professionals concerning marketing and financial health matters.

In conclusion, very interesting information emerged from the comments made by those who responded to the open-ended question, which provided with an insight about their general opinion of marketing.

Through these comments the prompt for the wise application of methods of marketing and not in exaggeration, is made plain to see. The need to secure the human rights of those involved and the protection of quality of service and treatment is expressed. Those who participated in the study noted without hesitation that it is their belief that in the sensitive nature of the health industry it is necessary for the humane and not the material or technocratic approach to prevail.

Conclusively and based on the responses of the sample, health is described as a gift that the state is obligated to offer freely and this position abides with the philosophy of social service and assistance on which the health system of our country has been based on until recently. The specific perception of health as a "social gift" for which the government is responsible, so that the processes of its efficiency and its availability keep up with the social and economic criteria, have been described and analyzed in detail by scientists concerned with the finances in health (Theodorou et al, 1998; Corbin, Kelley and Schwartz 2001).

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