

The Quality of Health Services Provided to Patients Undergoing Myocardial Perfusion Imaging by a Nuclear Medicine Department

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ABSTRACT

Background: Nuclear medicine procedures can be delivered in different healthcare settings, such as outpatient centers, medical clinics, mobile units, and hospitals. The process of providing care to the patient can be modified according to the provision arrangement; however, the basic level of quality of service should be maintained, and continuous improvement should be pursued. **Objective:** The objective of this research study is to investigate the quality of health services provided to patients undergoing myocardial perfusion imaging by a nuclear medicine department. **Methods:** The data collected through the questionnaires were saved in an Excel sheet, and then, they were analyzed by using the SPSS 24 statistical software platform. Firstly, the demographic data of the sample are presented by using a frequency table. In terms of the main questions, for those of them that were not answered in the Likert scale, frequency charts were used to present their results. **Results:** From the analysis, it emerged that 75% (n=75) of the sample was composed of male patients, and 25% (n=25) was composed of female patients. Regarding the age distribution of the patients of the survey, it was observed that 39% (n=39) were between 45 and 64 years old, 35% (n=35) were over 65 years old, and 26% (n=26) were between 18 and 44 years old. Moreover, it was observed that 17% (n=17) of the sample were Secondary School graduates, 17% (n=17) were Technological Education graduates, 16% (n=16) were Primary School graduates, 16% (n=16) were High School graduates, and 14% (n=14) were University graduates. **Conclusion:** The levels of satisfaction ranged were moderate regarding access to the clinics, and were lower regarding the time required between the date of making the appointment and the date of performing the examination.

Keywords: quality, health services, myocardial perfusion imaging, nuclear medicine department.

1. BACKGROUND

Nuclear medicine procedures can be delivered in different healthcare settings, such as outpatient centers, medical clinics, mobile units, and hospitals (1, 2). The process of providing care to the patient can be modified according to the provision arrangement; however, the basic level of quality of service should be maintained, and continuous improvement should be pursued (3, 4).

The procedures for the preparation of the patient should be identified within the protocols, for all the tests and examinations that are performed in a nuclear medicine department (5, but not limited to, clin-

ical practice, management, operations, and services. The QUANUM program, which includes quality standards detailed in relevant checklists, aims at introducing a culture of comprehensive quality audit processes that are patient oriented, systematic, and outcome based. This paper will focus on the impact of the implementation of QUANUM on daily routine practices in audited centers. Thirty-seven centers, which had been externally audited by experts under IAEA auspices at least 1 year earlier, were invited to run an internal audit using the QUANUM checklists. The external audits also served as training in quality man-

agement and the use of QUANUM for the local teams, which were responsible of conducting the internal audits. Twenty-five out of the 37 centers provided their internal audit report, which was compared with the previous external audit. The program requires that auditors score each requirement within the QUANUM checklists on a scale of 0-4, where 0-2 means nonconformance and 3-4 means conformance to international regulations and standards on which QUANUM is based. Our analysis covering both general and clinical areas assessed changes on the conformance status on a binary manner and the level of conformance scores. Statistical analysis was performed using nonparametric statistical tests.

The evaluation of the general checklists showed a global improvement on both the status and the levels of conformances ($P < 0.016$). Although protocols illustrate imaging procedures in a standard way, it is important, nevertheless, where appropriate, that a protocol is adapted according to the medical condition of each patient, or according to the requirements of the requesting physicians (7).

Moreover, the guidelines of national and international organizations set the purpose of tests, as well as the type of tests and frequency of conducting them, for any instrument or other equipment used in nuclear medicine (8, 9).

In fact, the quality of services in a nuclear medicine department is assessed according to the views of patients who undergo myocardial perfusion imaging, both overall, and in individual dimensions, such as, in specific, the arrangement of appointments, arrival and waiting to be examined, the examination process itself, and departure from the clinic (10).

2. OBJECTIVE

The aim of this research study is to investigate the quality of health services provided to patients undergoing myocardial perfusion imaging by a nuclear medicine department.

3. MATERIALS AND METHODS

Study Design and Participants

It was a descriptive cross-sectional study conducted among adult population in Greece, during January-May 2020. The adult participants from the general population who are able to read and willing to participate were included in the study.

The research conducted is primary and based on quantitative data collection and analysis methods. Primary research refers to research that is original, and in which, data are collected firsthand, for an in-depth investigation of a subject of interest. Primary research is conducted to collect new data on a subject, validate the findings of secondary research, i.e. literature review, as well as find data that are not readily available through secondary research (14).

In this study, a quantitative approach was selected, given its suitability to study a large sample, in a short period of time, and because, in the field of assessment of the quality of services, there are numerous standardized data collection tools, which can produce reliable results.

Procedure and ethical considerations

The study was conducted after review and written approval by the Administrative and Scientific Society of the Diagnostic Medical Center. The researchers informed each participant about the purpose of the study. Furthermore, all participants were informed of their rights to refuse or to discontinue their participation, according to the ethical standards of the Helsinki Declaration of 1983. Participation in the study was contingent on individual verbal and consent.

Measures

Sample size and sampling method

The research sample is composed of 100 individual patients, and during its selection, not any limitations were set, in terms of their demographic or other characteristics of the patients. All of the patients who took part in the survey, provided their verbal consent and were informed about the purpose of the survey and the context, within which, it is conducted. Participation in the survey was voluntary and anonymous.

Data Collection- Survey Instrument

The anonymous data was collected through a structured questionnaire, which is composed of thirty-six (36) questions, excluding the questions that referred to the collection of demographic data of the participants.

The questionnaire was drawn from the survey of Aletras, Zaharaki and Niakas (2007), who had investigated the satisfaction of patients at the outpatient clinics of the Ophthalmology Clinic of the University Hospital of Larisa. In that survey, the reliability of the questionnaire was investigated through the “two way random for absolute agreement” model, and it was found to be high (>0.50). In order to be able to use the questionnaire, permission was taken by its compiler. The questionnaire was adjusted, in order to meet the requirements of the present research study.

In the end of the questionnaire, there were questions about the collection of demographic data of the participants. All of the questions were closed-ended, and a Likert scale was used to classify the responses and state the level of agreement or disagreement of the participants with all of the statements that were provided to them. The scale was graded from 1-5, with 1 = Totally Agree, 2 = Agree, 3 = Neither agree, nor disagree, 4 = Disagree, 5 = Totally disagree. An additional possible response “I don’t know/I don’t answer” was available for questions in the Likert scale. The time of completion of the questionnaire was 8-10 minutes.

Data analysis

The data that were collected through the questionnaires were saved in an Excel sheet, and then, they were analyzed by using the SPSS 24 statistical package. First, the demographic data of the sample are presented by using a frequency table. In terms of the main questions, for those of them that were not answered in the Likert scale, frequency charts were used to present their results. To present the responses to questions that were answered in the Likert scale, descriptive statistics measures were used, and more specifically, the mean (M) and standard deviation (SD). The investigation of any possible correla-

tions between the demographic data and satisfaction of patients about the different dimensions of the questionnaire, was investigated by using a t-test for 2 independent samples, and through variance analysis (one-way ANOVA) for more than 2 independent samples. To investigate the satisfaction of patients according to their age, multiple comparisons were conducted by using the Bonferroni criterion. After that, the determinants of the satisfaction of patients with the services of the nuclear medicine department were studied, through multiple linear regression analysis by using a forward introduction of variables. The results are presented in the section that follows.

4. RESULTS

Socio-demographic Information of the Sample

From the analysis, it emerged that 75% (n=75) of the sample was composed of male patients, and 25% (n=25) was composed of female patients. Regarding the age distribution of the patients of the survey, it was observed that 39% (n=39) were between 45 and 64 years old, 35% (n=35) were over 65 years old, and 26% (n=26) were between 18 and 44 years old. Moreover, it was observed that 17% (n=17) of the sample were Secondary School graduates, 17% (n=17) were TEI graduates, 16% (n=16) were Primary School graduates, 16% (n=16) were High School graduates, and 14% (n=14) were HEI graduates. A lower participation was observed by IEK graduates (n=10, 10%), postgraduate degree holders (n=8, 8%), and patients who were illiterate.

Finally, the findings of the analysis showed that 45% (n=45) of the patients stated that they have an average health state, and 55% (n=55) stated that they have a good or very good health state.

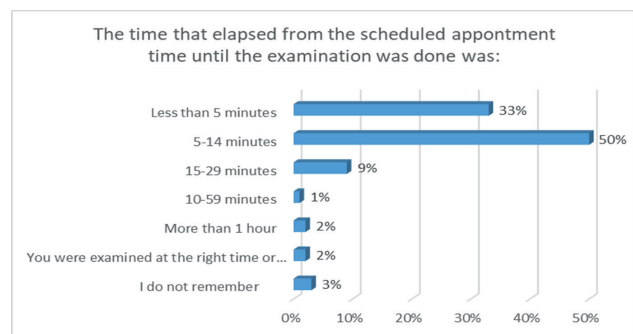
Satisfaction of Patients with the Services Provided

The first section of the questions aimed at recording the satisfaction of patients with the process of making an appointment. Out of 94% (n=94) of the patients made an appointment over the phone. Only 4% (n=4) made an appointment after visiting the clinic, and 2% (n=2) stated that they made an appointment in another way. 98% (n=98) of the patients had to wait less than 1 month from the time that they made the appointment to the day that they visited the clinic.

The patients agreed that making an appointment through the secretary was easy and fast (M=4.92, SD=0.27), and that the secretarial staff that they contacted for the appointment was polite and willing to serve them (M=4.80, SD=0.45). Furthermore, their waiting time from the moment they wanted to be examined for the first time until the day that they visited the clinic was long (M=4.52, SD=0.88).

On the contrary, the patients disagreed to some extent with the fact that it was difficult to choose themselves the examination day and time (M=2.69, SD=1.40). The overall mean for the dimension of satisfaction with the appointment process was equal to 3.63 (SD=0.42), showing a moderate level of satisfaction. The dissatisfaction of the patients with the waiting time until the actual appointment had a significant contribution to this.

The second section of the questions aimed at recording the satisfaction of the patients with the arrival process



Graph 1. Results about how long it took from the arrival until the examination

at the clinic. Out of 74% (n=74) of the patients arrived at the area of the clinic by car, while 26% (n=26) arrived by public transport (bus) or taxi.

The patients totally agreed with the fact that the staff at the information office was polite and willing to serve them (M=4.84, SD=0.37), while they fairly agreed with the fact that access was easy (M=4.30, SD=0.93). They also stated that they were neutral regarding whether finding a parking space was difficult (M=2.84, SD=1.34), and whether outdoor direction signage was insufficient (M=2.97, SD=1.36).

The overall mean for the dimension of satisfaction with the arrival process at the premises was equal to 3.86 (M=0.46), showing a moderate to high level of satisfaction. The difficulty of finding a parking space and insufficient outdoor direction signage seem to have a major contribution to this lower level of satisfaction in this field.

The third section of the questions aimed at recording the satisfaction of the patients with their waiting time until the examination, as well as their possible experience from visiting the toilets of the clinic. Out of 50% (n=50) of the patients waited approximately 5 to 14 minutes until they were examined. In addition, a percentage rate in the region of 33% (n=33) stated that their waiting time was less than 5 minutes. The other 17% (n=17) of the patients stated a waiting time of more than 15 minutes (Graph 1).

The patients totally agreed with the fact that the waiting room was clean (M=4.93, SD=0.26), and fairly agreed with the fact that it was easy to find a seat to wait (M=4.44, SD=0.88).

On the contrary, the patients disagreed with the fact that the waiting room was uncomfortable (M=2.07, SD=0.82), and the fact that the temperature in the waiting room was uncomfortable (M=2.32, SD=1.31).

Moreover, 56% (n=56) of the patients visited the toilets.

Besides, the patients agreed to a large extent with the fact that the toilets were cleaned and looked after (M=4.66, SD=0.58), while they disagreed with the fact that the time that they waited in the waiting room was extremely long (M=2.27, SD=1.12). Overall, the patients were very satisfied with their experience while waiting, from the moment they arrived at the clinic until the examination (M=4.27, SD=0.58).

The fourth section of the questions aimed at recording the satisfaction of the patients with the premises of the clinic, the physician, and the nurses.

	Gender				t	p
	Male		Female			
	M	SD	M	SD		
Appointment	3.62	.44	3.64	.35	-0.211	0.834
Access	3.86	.62	3.83	.65	0.214	0.831
Waiting to be examined	4.21	.63	4.43	.33	-2.225	0.029
Clinic	4.49	.46	4.46	.40	0.289	0.773
Physician	4.32	.46	4.35	.49	-0.294	0.770
Nurses	4.38	.75	4.24	.61	0.841	0.403
Departure	4.66	.47	4.58	.40	0.803	0.424
Overall satisfaction	4.65	.56	4.08	.76	4.050	0.000

Table 1. Comparison of the levels of satisfaction according to the gender of the patients

Out of 45% (n=45) of the patients stated that the examination lasted more than 40 minutes. 19% (n=19) stated that the examination lasted between 21 and 30 minutes, and 14% (n=14) stated that the examination lasted between 31 and 40 minutes.

The patients agreed to a large extent with the fact that the premises of the clinic were clean (M=4.69, SD=0.68), while they disagreed to a large extent with the fact that the examination room was narrow and uncomfortable (M=1.85, SD=0.66). Overall, the patients were very satisfied with the premises of the clinic (M=4.48, SD=0.45). The patients agreed to a large extent with the fact that the physician treated them with respect (M=4.69, SD=0.49), and the fact that the physician was willing to listen to what they had to tell him about their health (M=4.63, SD=0.70). Furthermore, the patients fairly agreed with the fact that they have trust in the correctness and suitability of the diagnosis and the treatment medication that the physician prescribed to them (M=4.60, SD=0.55). Similarly, a high degree of agreement was observed on whether the physician spent enough time on the examination (M=4.49, SD=0.71). On the contrary, the patients disagreed with the fact that the physician showed indifference in their appropriate isolation during the examination, in order to prevent other people from seeing or hearing them, who should not (M=1.87, SD=1.31), and the fact that the physician provided them with insufficient or incomprehensible information about their condition (M=1.86, SD=1.08). Finally, the patients disagreed with the fact that the explanations and instructions that they received from the physician about their treatment were insufficient or confusing (M=2.35, SD=1.34), while they strongly disagreed with the fact that the physicians seemed to be incompetent and had insufficient training (M=1.55, SD=0.68). Overall, the patients were highly satisfied with the medical staff (M=4.33, SD=0.46).

On top of that, the patients agreed to a large extent with the fact that the nurses were polite to them (M=4.35, SD=0.72).

The fifth section of the questions aimed at investigating the opinion of the patients about how satisfied they were with the departure procedures from the clinic.

The patients totally agreed with the fact that the Secretarial staff was polite and willing to serve them (M=4.85, SD=0.36), while they strongly disagreed with the fact that the payment / validation procedures were unnecessary long (M=1.56, SD=0.83). Overall, the participating pa-

tients showed very high levels of satisfaction with the departure procedure (M=4.64, SD=0.36).

The sixth section of the questions aimed at investigating the opinion of the patients about their overall satisfaction with the services provided.

From the analysis, it emerged that 98% (n=98) of the patients disagreed or totally disagreed with the fact that they were dissatisfied with the level of the services provided. These results show that nearly all of the patients were satisfied with their experience from visiting the clinics. For ease of reference next in the analysis, this specific question was inversely coded, in order to denote the overall level of satisfaction.

Differentiation in Terms of the Characteristics of the Patients

In order to investigate the presence of any differences in the levels of satisfaction of the patients according to the demographic characteristics of the latter, t-tests on 2 independent samples were used, as well as variance analysis (one-way ANOVA) on more than 2 independent samples.

From the analysis, a significant difference was observed in the gender of the patients regarding their satisfaction with their waiting time until the examination (t=-2.225, p=0.029<0.05) and overall satisfaction (t=4.050, p=0.000<0.05). In more detail, it was observed that females (M=4.43, SD=0.33) showed a higher level of satisfaction with their waiting time until the examination compared to males (M=4.21, SD=0.63). On the contrary, males (M=4.65, SD=0.56) showed a higher level of overall satisfaction compared to females (M=4.08, SD=0.76) (Table 1).

Besides, a significant difference was observed in the age group of the patients regarding their satisfaction with the appointment making process (F=4.792, p=0.010<0.05), arrival at the clinic/access (F=3.996, p=0.022<0.05), medical staff (F=7.431, p=0.001<0.05), nursing staff (F=4.778, p=0.010<0.05), and overall satisfaction (F=3.457, p=0.035<0.05). In order to investigate between which age groups there is a significant difference, multiple comparisons were conducted by using the Bonferroni criterion. The results showed that the patients aged from 18 to 44 years old showed a lower level of satisfaction with the appointment making process (3.45 versus 3.76, p=0.008<0.05) and the nursing staff (4.06 versus 4.59, p=0.009<0.05) compared to patients aged from 45 to 64 years old. Moreover, patients aged over 65 years old showed a lower level of satisfaction with the arrival at the clinic/access (3.68

	Age						F	p
	18-44		45-64		65 and over			
	M	SD	M	SD	M	SD		
Appointment	3.45	.29	3.76	.42	3.60	.45	4.792	0.010
Access	3.78	.46	4.06	.70	3.68	.58	3.996	0.022
Waiting to be examined	4.08	.56	4.39	.63	4.26	.50	2.374	0.098
Clinic	4.32	.37	4.58	.51	4.50	.40	2.768	0.068
Physician	4.28	.41	4.53	.46	4.14	.43	7.431	0.001
Nurses	4.06	.84	4.59	.57	4.29	.70	4.778	0.010
Departure	4.21	.27	4.52	.36	3.67	.81	0.245	0.784
Overall satisfaction	4.42	.50	4.72	.46	4.34	.87	3.457	0.035

Table 2. Comparison of the levels of satisfaction according to the age group of the patients

	Level of health						F	p
	Average		Good		Very good			
	M	SD	M	SD	M	SD		
Appointment	3.66	.31	3.69	.48	3.38	.41	3.755	0.027
Access	3.90	.59	3.87	.67	3.72	.63	0.499	0.609
Waiting to be examined	4.15	.52	4.37	.65	4.34	.51	1.654	0.197
Clinic	4.43	.41	4.46	.51	4.69	.31	2.109	0.127
Physician	4.18	.51	4.48	.36	4.36	.44	4.973	0.009
Nurses	3.98	.75	4.72	.48	4.47	.64	14.37	0.000
Departure	3.93	.73	4.52	.40	3.92	.76	6.418	0.003
Overall satisfaction	4.24	.77	4.67	.48	4.87	.34	2.523	0.086

Table 3. Comparison of the level of satisfaction according to the level of health of the patients

versus 4.06, $p=0.023<0.05$) and the medical staff (4.14 versus 4.53, $p=0.001<0.05$) compared to patients aged from 45 to 64 years old. Finally, it was observed that patients aged over 65 years old showed a lower overall level of satisfaction compared to patients aged from 45 to 64 years old (4.34 versus 4.72, $p=0.042<0.05$) (Table 2).

Moreover, a significant difference was observed in the health state of the patients regarding their satisfaction with the appointment making process ($F=3.755$, $p=0.027<0.05$), medical staff ($F=4.973$, $p=0.009<0.05$), nursing staff ($F=14.37$, $p=0.000<0.05$), and departure process ($F=6.418$, $p=0.003<0.05$). In order to investigate between which levels of health there is a significant difference, multiple comparisons were conducted by using the Bonferroni criterion. The results showed that the patients with a very good state of health were less satisfied with the appointment making process than those with a good state of health (3.38 versus 3.69, $p=0.029<0.05$). The patients with an average state of health were less satisfied than those a good state of health, with the medical staff (4.18 versus 4.48, $p=0.007<0.05$) and the departure process (3.93 versus 4.52, $p=0.046<0.05$). Additionally, the patients with an average state of health were less satisfied with the nursing staff than those with a good (3.98 versus 4.72, $p=0.000<0.05$) and very good state of health (3.98 versus 4.47, $p=0.029<0.05$) (Table 3).

Determinants of Overall Satisfaction

In order to record the factors that affect the overall level of satisfaction of the patients, multiple linear regression analysis was used through the method of forward intro-

		Non-standardized coefficients		Standardized coefficients		t	p
		B	Std. Error	Beta			
		1	(Constant)	4.220	.538		
	Physician	.642	.121	.597		5.316	.000
2	(Constant)	4.800	.508			9.456	.000
	Physician	.470	.118	.437		3.982	.000
	Nurses	.297	.081	.402		3.658	.001
3	(Constant)	6.058	.646			9.374	.000
	Physician	.455	.111	.423		4.117	.000
	Nurses	.331	.077	.447		4.303	.000
	Appointment	.316	.110	.273		2.868	.006
4	(Constant)	7.076	.633			11.180	.000
	Physician	.445	.098	.414		4.539	.000
	Nurses	.265	.070	.358		3.771	.000
	Appointment	.445	.103	.385		4.304	.000
	How would you describe your state of health	.227	.060	.352		3.786	.000

Table 4. Multiple linear regression results with overall satisfaction as the dependent variable and the individual conditions and demographic characteristics of the patients as independent variables

duction of variables. According to this method, from the total set of variables, in each step, the most important one is introduced to the multiple linear regression model. In the analysis, the overall level of satisfaction of the patients was set as the dependent variable, whereas the satisfaction with the individual conditions and demographic characteristics of the patients were set as independent predictive factors (Table 4).

The final resulting model is comprised of four significant predictive factors of the overall level of satisfaction: satisfaction with the medical staff ($b=0.445$,

$p=0.000<0.05$), satisfaction with the nursing staff ($b=0.265$, $p=0.000<0.05$), satisfaction with the appointment process ($b=0.445$, $p=0.000<0.05$), and the overall level of health of the patients ($b=0.227$, $p=0.000<0.05$). The four variables interpret 66.5% of the overall level of satisfaction of the patients ($R^2=0.665$, $F=28.26$, $p=0.000<0.05$). These results show that an increase in the satisfaction of patients with the medical-nursing staff and the appointment process contributes to an increase in the overall level of satisfaction.

5. DISCUSSION

Patient satisfaction with the appointment making process was at moderate level, and patients' dissatisfaction with the waiting time until the appointment had a significant contribution to the level of satisfaction. However, as it was stated by the patients, the waiting time for the examination was less than 1 month. The level of satisfaction in this specific dimension with the ease of making an appointment and the politeness and willingness of the staff to serve them was high. The waiting time, as it has already been shown in earlier research, is a key determinant of the satisfaction of the patients in the health sector, and long waiting times can contribute to the dissatisfaction of the patients, since the fact that patients are already burdened with a health problem causes discomfort or stress to them regarding the diagnosis, as they wait for the examination day (15).

Gavriil, Theodorou and Middleton, (2012), who had studied patient satisfaction from visiting outpatient clinics in Cyprus, had also found a low level of satisfaction with patient access. Access difficulties tend to cause discomfort to patients who already find it difficult to move due to health problems (16). However, on the other hand, in the present survey, the politeness and willingness of staff to serve the patients upon their arrival was rated quite positively.

Patient satisfaction with the waiting time for the examination ranged at high levels, since the time required from their arrival at the clinic until the examination was relatively short. Earlier research has shown that the waiting time until the examination was a significant factor of dissatisfaction of patients both in nuclear medicine departments (17) using a systematic random sampling method. Descriptive and inferential statistics were used to analyse the data. Results - of the users of the outpatient services 61.8% were satisfied with the services they had received. The level of satisfaction was higher the greater the age ($p<0.01$ and in outpatient clinics of hospitals (17, 18) "1", "13"]];,"author":{["dropping-particle":",,"family":,"Pini A., Sarafis P, Malliarou M., Bamidis P.",,"given":,"Niakas D.",,"non-dropping-particle":",,"parse-names":false,"suffix":",,"}],,"container-title":,"Hellenic Journal of Nursing Science (HJNS). However, in the present survey, the patients stated a high level of satisfaction with the time required between the arrival and their examination at the nuclear medicine clinic.

In terms of the waiting area, in the present survey, the patients rated the cleanliness, comfort, and temperature of their waiting area at the nuclear medicine clinic very

positively, as well as the cleanliness of the toilets. Gavriil et al. (2012) had also found that the satisfaction of patients with the cleanliness of the areas of outpatient clinics in public hospitals in Cyprus was high.

The levels of Patient satisfaction with the cleanliness and comfort of the examination room were also high, as well as with their treatment by the medical staff. In terms of the latter, most patients agreed with the fact that they were treated with respect, the physician was willing to listen to what they had to tell him about their health, and they have trust in the correctness and suitability of the diagnosis and treatment medication that the physician prescribed to them. The level of satisfaction of the patients with the nursing staff also ranged at high levels, since they believed that they were treated with politeness and the staff was willing to answer their questions. Pini et al. (2012) had also found that patients who arrive at the outpatient clinics of the E.A.N.P. "METAXA" stated a high level of satisfaction with the way they were treated by the medical staff. Similar findings are also reported by Adamakidou (2009) regarding the satisfaction of patients with the morning and afternoon Outpatient Clinics of the "Agios Savvas" Hospital.

In terms of the departure from the nuclear medicine clinic, the patients were also very satisfied with the politeness of the staff and the fast validation/payment procedures. Overall, all of the patients were satisfied with their experience from visiting the nuclear medicine clinic. The multiple linear regression analysis also indicated that the most significant factors that contributed to the satisfaction of the patients were the medical staff, nursing staff, appointment making procedures, and overall level of patients' health. It was found that the above four variables interpret 66.5% of the overall level of satisfaction of the patients.

A number of demographic differences were also observed, in terms of the level of satisfaction of the patients. Although females stated a higher level of satisfaction with the waiting time until the examination, compared to males, on the other hand, males stated a higher level of overall satisfaction, compared to females. Differences were also observed according to the age of the patients, since individuals between 18-44 years old stated lower levels of satisfaction with the appointment making procedure and the nursing staff, compared to patients aged 45-64 years old. What is more, patients aged over 65 years old showed a lower level of satisfaction with the arrival at the clinic/access and the medical staff, and a lower overall level of satisfaction compared to patients aged from 45 to 64 years old.

Actually, given that the level of requirements of users and their interest in quality keep growing, the future of the provision of healthcare services will belong to those who will be able to adapt their provisions to the needs of patients (19).

6. CONCLUSION

The level Patient satisfaction with the nuclear medicine department was high, regarding the factors that are associated with the waiting time for the examination, sur-

