MEASUREMENT OF THE SATISFACTION IN GREECE OUTPATIENTS DEPARTMENTS OF PUBLIC HOSPITALS

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OBJECTIVE: The objective of this study is to measure the satisfaction in primary health care services in Greece Outpatients departments of Public hospitals. This study is based on a funded project ARCHIMEDES III subproject 45 Methodology of Primary Health Care Services Evaluation in Local Community and Creation of a Manual Of Documented Know How conducted by the Department of Business Administration, Division: Health and Welfare Management, of the Technological Institute of Athens funded European Social Fund (E.S.F) Ministry of Education, Lifelong Learning and Religious Affairs 2012-2015.

METHOD: The sampling method used was the stratified random sampling. The sample of the study is outpatients from 7 Hospitals 437 total questionnaires. Four of them are specific disease hospitals and other is general hospitals. The sampling ratio was 1:5 that means that for the 5 patients that got out of the clinics we interviewed 1 and the response rate was 57% and 43%. In this study closed-ended questionnaires with 9 elements with 53 questions in two 2 pages which could be completed in 3-5 minutes by an interviewer who was trained and did not belonged in outpatients department staff.

RESULTS: Alpha Cronbach analysis assess the internal consistency of the questions showed reliability. Four models of factor analysis were undertaken for the final result concerning medical care (overall KMO= 0.919), nursing care (overall KMO= 0.938), administrative services (overall KMO= 0.914 ) and facilities of hospital (overall KMO= 0.911). From the fourth models the most important factors are: Concerning medical care: a) The interest of Physician which is valued 3.7 for the Afternoon outpatient clinics and 3.8 for the Morning outpatient clinics (no statistical significance), Concerning nursing care: a) the Confidence that gives which is valued 3.22 for the Afternoon outpatient clinics and 3.43 for the Morning outpatient clinics (no statistical significance) , Concerning administrative services: a) the Behaviour of the administrative staff which is valued 3.56 for the Afternoon outpatient clinics and 3.44 for the Morning outpatient clinics (no statistical significance) and Concerning facilities of the outpatient department: a) Comfort in waiting rooms which is valued 3.59 for the Afternoon outpatient clinics and 3.25 for the Morning outpatient clinics (no statistical significance).

CONCLUSIONS: By taking the above issues into consideration, quality healthcare outcomes depend upon: a) patients’ perception to recommended treatment regimens and communication they have with physician, professional nurse and behaviour. b) Procedures and waiting time and facilities. There is no difference in satisfaction between morning and afternoon admittance and cost is regardless of the valued of services.
Introduction

The assessment of satisfaction with health services is dynamic, multidisciplinary (Lovato et al. 2013). Patient satisfaction is the result of the comparison between the provided care and patients' expectations (Speight 2005). In order to assess and plan high-quality health care, patient satisfaction is one of the most important factors (Dzomeiku et al. 2013). Furthermore, the aspect of patient satisfaction is strongly related with cost of services (Fenton et al. 2012). A satisfied patient is more inclined to follow doctor's prescription, which in turn will affect patients' satisfaction with the service outcome (e.g., symptoms relief), (MackStravic 1991), avoids complaining and lawsuits (Ahorony and Strasser, 1993) is more loyal to and provides positive referrals about the service provider (Mekoth et al. 2011; Chang et al. 2013).

Primary health care is a major element of any health care system (Raposo et al. 2009), since it brings healthcare closer to citizens' place of residence and work, operating as their first level of contact with health care system (Cueto 2004; Souliotis and Lionis 2003). Primary Health Care in Greece (Noula et al. 2007), is still underperforming despite the efforts that have been made over the last decade. It is important to support research efforts towards the formulation of proposals for the development of policies which will upgrade the offered services, especially in the regional level. The demand for public free health services, particularly primary health Care Services in Greece increases exponentially, following the reduction of income and loss of insurance coverage of households (Benos 2012). Public hospitals and Outpatient Departments are the main providers of primary health care services, especially in urban areas, with low purchasing admittance in the morning and high purchasing admittance in the afternoon.

The objective of this study is to measure the satisfaction in primary health care services in Greece Outpatients departments of Public hospitals.

Methodology

It is a prospective study based on a funded project ARCHIMEDES III subproject 45 Methodology of Primary Health Care Services Evaluation in Local Community and Creation of a Manual Of Documented Know How conducted by the Department of Business Administration, Division: Health and Welfare Management, of the Technological Institute of Athens funded European Social Fund (E.S.F) Ministry of Education, Lifelong Learning and Religious Affairs 2012-2015. It is aimed to identify key determinants of patient satisfaction in Greece. Focuses on the satisfaction of group of patients who visited the outpatient departments of public hospitals and their demand for primary health care. Population research is a group of patients, users of primary health care public hospitals in Attica, 22% of public hospitals located in the capital region (NSSG, 2009).

The target population of this study was users of primary healthcare services who visited the outpatient departments of public hospitals in the district of Athens. Eight hospitals were selected for data collection. Four of them were specific disease hospitals and the others were general hospitals. The sampling method used was the stratified random sampling. The sample of the study is outpatients from 7 Hospitals. Four of them are specific disease hospitals and other is general hospitals. The sampling ratio was 1:5 that means that for the 5 patients that got out of the clinics we interviewed 1 and the response rate was 57% (372 out of 650 questionnaires distributed in Morning clinics) and 43% (65 out of 150 questionnaires distributed in Afternoon clinics).

Data were collected through a questionnaire developed to understand patients' perception about primary healthcare service quality. The questionnaire argues that patients perceive quality in 4 dimensions: interpersonal quality through interpersonal relationships between the patient and the provider of health services, technical quality where the effect referred to in perceived by the patient outcome, environmental quality of the facilities and the atmosphere in the space and administrative quality on waiting time functions etc.. The closed-ended questionnaire is with 9 elements with 53 questions in two 2 pages which could be completed in 3-5 minutes by an interviewer who was trained and did not belonged in outpatients department staff. The scales used to measure the four primary healthcare service attributes were adopted from the studies of Dagger et al. (2007), Raposo et al. (2009), Peltier et al. (2013), Rocha et al. (2013). The scale proposed by Oliver (1980) was used to measure patient satisfaction reflecting overall satisfaction, expectations disconfirmation and needs disconfirmation. All items were measured on 5-point Likert scales anchored at 1 (strongly disagree) and 5 (strongly agree).

The data were analyzed using the SPSS 19 (statistical pack for social sciences). The assessment of tool and in particular reliability was performed using the coefficient aCronbach. Categorical variables were compared using the chi-square (x2) test were used for continuous values and multifactor analysis was used to find the most important factors that explained a given variable.
Results

There were included 437 patients enrolled out of 800 questionnaires distributed of which 91.3% were Greek citizens, 58.7% were women. The mean age was 43.8 ± 16.5 and 48.8% majority of the sample had graduated from high school. 42.2% had a monthly household income of €501 - 1000 consisted of families with 3-4 members. 85.1% of the sample visited the morning outpatient clinics and 62.6% did not visit frequently the outpatient clinics.

Alpha Cronbach analysis assess the internal consistency of the questions showed reliability Medical Care evaluation 0.926, Nursing Care evaluation 0.962, administrative 0.928 and the facilities of Outpatients 0.842.

There was a need to establish the communalities of each question of four factors, so the multi factor analysis was used. Four models of factor analysis were undertaken for the final result concerning medical care (overall KMO= 0.919), nursing care (overall KMO= 0.938), administrative services (overall KMO= 0.914 ) and facilities of hospital (overall KMO= 0.911). From the fourth models the most important factors are:

Concerning medical care: a) The interest of Physician which is valued 3.7 for the Afternoon outpatient clinics and 3.8 for the Morning outpatient clinics (no statistical significance in 5 level Likert scale, b) The confidence that gives which is valued 3.86 for the Afternoon outpatient clinics and 3.88 for the Morning clinics (no statistical significance) and c) the communication they have with physician which is valued 3.84 for afternoon clinics and 3.87 for morning clinics with no statistical significance (figure 1).

Figure 1. Medical Care

Concerning nursing care: a) the Confidence that gives which is valued 3.22 for the Afternoon outpatient clinics and 3.43 for the Morning outpatient clinics (no statistical significance) in 5 level Likert scale , b) caring attitude which is valued 3.17 for the Afternoon outpatient clinics and 3.35 for the Morning clinics (no statistical significance) , c) Professional and ethical manner which is valued 3.27 for the Afternoon outpatient clinics and 3.37 for the Morning clinics (no statistical significance) (figure 2).
Concerning administrative services: a) the Behaviour of the administrative staff which is valued 3.56 for the Afternoon outpatient clinics and 3.44 for the Morning outpatient clinics (no statistical significance) in 5 level Likert scale, b) Smooth implementation of the procedure which is valued 3.38 for the Afternoon outpatient clinics and 3.23 for the Morning clinics (no statistical significance) (figure 3).

Figure 3. Administrative services
Concerning facilities of the outpatient department: a) Comfort in waiting rooms which is valued 3.59 for the Afternoon outpatient clinics and 3.25 for the Morning outpatient clinics (no statistical significance) in 5 level Likert scale, b) Adequacy of premises which is valued 3.58 for the Afternoon outpatient clinics and 3.26 for the Morning clinics (no statistical significance) (figure 4).

**Figure 4. Facilities of the outpatient department**

![Facilities of the outpatient department](image)

**Discussion**

By taking the above issues into consideration, quality healthcare outcomes depend upon: a) patients' perception to recommended treatment regimens and communication they have with physician, professional nurse and behaviour, b) Procedures and waiting time and facilities. There is no difference in satisfaction between morning and afternoon outpatient clinics. The hierarchical model of satisfaction (Dagger et al. 2007; Peltier et al. 2013; Rocha et al. 2013;) argues that patients perceive quality in 4 dimensions: interpersonal quality through interpersonal relationships between the patient and the provider of health services, technical quality where the effect referred to in perceived by the patient outcome, environmental quality of the facilities and the atmosphere in the space and administrative quality on waiting time functions etc. More contemporary studies (Chang et al. 2013; Hamilton et al. 2013; Schoenfelder et al. 2011) argue that patient satisfaction, patient participation in the process of diagnosis, and patient participation in treatment decision-making may have a significant impact on hospital loyalty.

Many previous studies have confirmed the patient-physician relationship as the most important indicator of patient satisfaction. Patients feel more satisfied when they have confidence to the doctor and they have established a constant communication with him (Ali and Ndubisi 2011). In accordance with the findings of Scardina (1994), highlights the importance for service providers to invest in the nursing personnel's development, in order to take advantage of the fact that nurses are much closer to the patient, than other members of the staff, and they can easier establish relationships with them.

More contemporary studies indicate that access to the secretariat services creates negative patient satisfaction. The waiting list, often encountered in urban public hospitals in Greece, has negative influence on satisfaction and hence creates dissatisfaction (Tountas et al. 2005). However, the majority of outpatients show understanding about the waiting list when they know the reason about the delays (Niakas and Mylonakis 2005). The attitude and interest of the nursing staff about the prediction of a disease and the reassurance of the patient
plays an important role in outpatients satisfaction and improvement in infrastructure is the most important for health services users (Papagianopoulou et al. 2008; Polizos et al. 2005; Pierrakos et al. 2013). Research measuring satisfaction with health care services in an Athens paediatric hospital showed that (Papagianopoulou et al. 2008). Another research concerning the Role of Patient Satisfaction in the Development of Health Care Services Marketing showed that people in Athens hospitals for outpatients services had high expectations of health services (Pierrakos and Tomaras 2009; Pierrakos et al. 2013). Objection to pay for physician services is found to be strongly related to the quality/access characteristics (Danyliv et al. 2013; Romé et al. 2010). However most elderly, don’t want to use private services due to limited income (Su et al. 2012).

**Conclusion**

According to the above results patient satisfaction is a complex concept that is related to patient’s needs and it seems that it is associated with the effectiveness of services provided to the patient (ie administrative services, facilities, organisational support) as well as the physical environment (cleanliness of the premises and room temperature). Moreover, patient satisfaction is related with the health professionals’ competence and the interpersonal relationships between the health care staff and the patient. As it clearly comes from the results quality healthcare outcomes depend upon patients’ adherence to recommended treatment regimens and communication they have with physician, professional nurse and the behaviour, professional manner and ethical approach of the latter to their patients. There is no difference in satisfaction between morning and afternoon admittance.

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**References**


Liu, S., Yam, C. H., Huang, O. H., & Griffiths, S. M. (2012). Willingness to pay for private primary care services in Hong Kong: are elderly ready to
National Statistical Service of Greece. (2009). Hospice - Capacity-Type Infirmary, Legal Status, Region.