

Are Greek nurses expected to play an educational role? Perceptions of nursing staff, medical doctors, health care students and patients about the nurses' educational role

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A I M S : To explore the perceptions of nursing staff, medical doctors, health care students and patients on whether nurses are expected to play an educational role in health issues, as well as to explore the factors that affect these perceptions. An additional aim is to evaluate the patient education offered by nurses.

M E T H O D O L O G Y : The sample consists of nurses, nursing assistants, medical doctors, and patients from 4 hospitals of the Central Macedonia region of Greece, and of nursing students, nursing assistant students and medical students. The data were collected with the help of a questionnaire designed especially for this study. The patients did not complete the questionnaires by themselves; instead the questionnaires were completed by a researcher while interviewing them.

R E S U L T S : The majority of the participants (80%, n=756) believe that nurses are expected to play an educational role. This belief was most common among patients (88.7%, n=181) and least common among medical doctors (60.3%, n=70). The factors that influence the perceptions about the nurses' educational role include: the perception about the profession, the perception about the work load (P=0.000), age (P= 0.002), work position (P= 0.000), post-graduate education (P= 0.002), and the level of undergraduate education of nurses and nursing assistants (P= 0.027).

The appreciation of the patient education offered by nurses is significantly different among different groups (P=0.000). Nursing staff evaluates it more positively (56.4%, n=193) while the majority of patients evaluate it negatively (56.2%, n=118). The patients' evaluation is influenced by the severity of their health problem (P=0.038) and is associated with their attitude towards the entire nursing care (P=0.011).

C O N C L U S I O N S : The present study revealed that even though there is a predominant perception that nurses are expected to play an educational role, the current patient education offered by nurses is evaluated positively only by nurses, nursing assistants, and nursing students.

K E Y - W O R D S : Nurse's role, educational role, patient education, Greek nurses



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INTRODUCTION

The term “professional role” refers to culturally defined behavioural models, which are focused around a societal function and correspond to societal expectations (Tsaousis 1985). The nursing role is multidimensional in its expressions, which are manifested according to the needs of each field and work position (Biddle & Thomas 1966). The nursing role includes clinical, administrative, educational, and research roles (Clifford 1996).

The International Council of Nurses (ICN) redefining the nursing field of action stated that “... Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles.” (ICN 2005). However, the traditional and accepted nursing role is the clinical one, because it refers to the role of providing health care which is predominant in all health care settings (Dimitriadou 2008).

Nurses as educators

Nurses’ educational role refers to the education of nursing students and especially to patient education, since nurses are considered health educators for patients, families, and communities (US Department of Labor - Bureau of Labor Statistics 2004).

Nurses evaluate the patients’ level of knowledge about their disease and determine their further needs. The purpose of patient education is to understand the reasons which led to the current health problems (Newbold 2004), to teach techniques needed for treatment, prevention, and control of side-effects, with the aim that the patients will regain control over their health and their lives (Latter et al. 1992).

Patient education aims at developing the ability for self-care, constitutes a vital ingredient of nursing care (Forrest 1989), and contributes significantly to the provision of nursing care (Styles 1986, Leininger 1988, Kruger 1991, Agency for Healthcare Research and Quality 2003), since it improves clinical outcomes (Kruger 1991, Renders et al 2001), contributes to minimizing mistakes (Agency for Healthcare Research and Quality 2003), and improves the results of care (Renders et al 2001).

A study conducted in 1976 (Winslow 1976) showed variations among nurses on their acceptance of patient education as part of the nursing role. However, newer studies support that nurses consider themselves able, and educationally prepared, to assume this part of the nursing role (Barrett et al 1990). In the study of Marcum et al (2002), a high percentage of nurses (92%) stated that patient education is a priority in their everyday work.

If the nursing community considers patient education essential (Barrett et al 1990, Devine & Frank 2000,

Marcum et al 2002), then there is a significant difference among the generally expressed opinion and the everyday practice at the work place (Winslow 1976, Dimitriadou et al 1991, Kloster 1997, Jinks & Hope 2000).

Some authors state that nurses evaluate the patients’ educational needs using their own criteria, which do not always concur with those that the patients consider important (Lauer, Murphy & Powers 1982). There is no specific time designated to patient education, instead it is done in an informal way and, to a great extent, on a volunteer basis while providing nursing care (Dimitriadou et al 1991, Kloster 1997). Very often the education provided by nurses is not documented and it is strongly related to the work load. When the work load is increasing, the educational process is sacrificed, because it is not regarded as a priority but as a secondary need (Kloster 1997).

Important factors that seem to undermine the nurses’ ability to effectively express their educational role are their professional socialization, the quality of their education (Moriarty & Stephens 1990, Reutter et al 1997, Turner, Wellard & Bethune 1999, Devine & Frank 2000, Howard 2001), the framework of their practice (Hatcher & Laschinger 1996, Jasper 1996, Kelly 1996, Severinsson 1998), the clarity and the acceptance of their role (Chang & Daly 2001), and their work conditions - most importantly nurse-staffing (Janiszewski Goodin 2003, Pearson 2004), since deficient staffing leads to conditions of insufficient time (Marcum et al 2002, Rungapadiachy, Madill & Gough 2006).

Greek Nurses as educators

The nurses’ educational role seems to be accepted by the Greek nursing community because nursing study programmes have been including courses on teaching methods since 1960 (Papamikrouli 1985) while the development of the nursing students’ educational role has been defined as an objective of the nursing study programs since that time (Dimitriadou 1993). Furthermore, with Presidential Decree 351/89, “education and provision of help to patients with the aim of self-care, and education and provision of help to patients’ relatives with the aim of continuation of care at home”, as well as the possibility to be involved in nursing education, were defined as professional rights of the graduates of Nursing Departments (Presidential Decree 1989).

In Greece, even though the need for patient education and for nurses to be involved in their own education are recognized (Dimitrellis & Aggelis 2003, Tzotis 2003), they haven’t particularly occupied the nursing literature. Some studies mention that patient education is practically nonexistent (Dimitrellis & Aggelis 2003) and whenever it takes place it is merely a provision of information (Dimitriadou et al 1991). However, there are no Greek studies aiming

specifically at investigating the expectations of the nurses' educational role.

The present study aims at:

1. Investigating the perceptions of nurses, nursing assistants, medical doctors, nursing students (studying at Technological Educational Institute), nursing assistant students (studying at Nursing Assistant Departments of Vocational High-Schools), medical students, and patients about whether nurses are expected to play an educational role in health topics.
2. Finding out what those groups think about the patient education that nurses currently offer to hospitalized patients.
3. Investigating and defining the factors that influence those groups' perceptions about the nurses' educational role and about the patient education offered by nurses.

METHODOLOGY

Participants

The study's total sample consists of convenience samples of the following populations:

- Nurses, nursing assistants, and medical doctors working in 4 hospitals of the Central Macedonia region of Greece
- Nursing students studying at the 6th and 7th semesters of the Nursing Department of the Technological Educational Institute of Thessaloniki
- Nursing assistant students studying at Nursing Assistant Department of Vocational High-School and are doing clinical practice at the 4 hospitals of the Central Macedonia region of Greece
- Medical students participating in the lab-course of clinical skills of the Faculty of Medicine of the University of Thessaloniki, and
- Patients who were hospitalized at the 4 hospitals of the Central Macedonia region of Greece.

We divided the participants into the following 4 groups:

Group 1: nursing staff (nurses and nursing assistants)

Group 2: medical doctors

Group 3: health care students (including nursing students, nursing assistant students, and medical students) and

Group 4: patients.

Instrument

The researchers developed a questionnaire specifically for this study. Its development was based on the nursing literature. The questionnaire consists of two parts. The first part includes questions that aim at collecting demo-

graphic data about the participants (such as age, gender, occupation, work experience, educational background).

The second part includes a 4-point Likert-type scale aiming at investigating the following parameters:

- The perceptions about the conditions that form the nursing and nursing assistant staffing (one question),
- The attitude towards the nursing profession (three questions)
- The perceptions about whether nurses are expected to play an educational role and perceptions about the patients' level of satisfaction from the patient education provided by nurses (two questions) and
- Two additional questions only for participant patients aiming at the self-evaluation of their health problem and at investigating what is their attitude towards the hospital.

Data collection

Potential participants were asked to anonymously answer the questionnaire, after they were informed about the purpose of the study and about the fact that participation is voluntary and confidentiality is ensured.

In total, 1450 questionnaires were distributed to nursing staff (nurses and nursing assistants), medical doctors, and health care students (including nursing students, nursing assistant students, and medical students) and 842 questionnaires were returned (response rate 58%). Out of those 842 questionnaires, 107 were not included in the analysis because they were not properly completed. So, we proceeded with analysing data from 735 questionnaires.

We also analysed an additional 210 questionnaires from patient interviews. Each interview took place on the day when the patient was getting released from the hospital. The inclusion criteria for a patient to participate in the study were the following: (a) being hospitalized for more than 5 days, so that the patient would have sufficient time to form an opinion about the nursing staff's work, (b) ability to communicate, and (c) accepting to participate in this study and providing oral consent (Law 2071/1992, Stone 1993).

Data analysis

The data analysis was performed using the statistical software package SPSS 11.0 for Windows. Descriptive statistics were used in order to analyze the demographic data. We calculated frequency distributions and means, with confidence intervals of 95%.

Because the variables are not normally distributed we used non-parametric tests. The comparison between distributions of two independent samples was conducted using Mann-Whitney test, and the comparison between distributions of three measurements independent of each

other was conducted using Kruskal-Wallis test. In order to check the correlations between the variables, we used the Spearman rank correlation coefficient.

RESULTS

Our sample consists of a total of 945 participants. It is divided into the 4 groups as follows: 342 nursing staff (269 nurses and 73 nursing assistants), 117 medical doctors, 276 health care students (118 nursing students, 72 nursing assistant students, and 86 medical students), and 210 patients.

The participants' mean age is 39.73 ± 16.08 (min 16 and max 92) years. The large variation in age is due to the fact that there are participants who are studying in Vocational High-School and participants who are hospitalized patients. Table 1 demonstrates the mean age and the gender distribution according to the 4 groups and Table 2 shows the characteristics of the nursing staff.

The majority of the participants (80.00%, n=756) believe that nurses are expected to play an educational role in health related topics with statistically significant differences among the 4 groups; this belief was most common among patients (88.7%, n=181) and least common among medical doctors (60.3%, n=70).

All 4 groups were asked to assess how the hospitalised patients would answer to the question "Nurses taught me and the person accompanying me the way to deal with my health problem at home" (Table 3). Half of the participants (50.8%) answered that the patients would answer "satisfied" to "very satisfied". The highest frequency of positive assessment was among the nursing assistants (65.20%, n=49) and the lowest among the medical students (41.50%, n=36).

Factors associated with the participants' perceptions about the nurses' educational role are: age (P= 0.002), work position (P= 0.000), level of nurses' undergraduate studies (P= 0.027), and having post-graduate education (P= 0.002). Therefore, those who agree that nurses play an educational role are older (mean age=42.37 years), head nurses (92.2%, n=47), or have some kind of post-graduate education (86.80%, n=105); while those disagreeing that nurses play an educational role have a mean age of 35.8 years, are nurses (83.5%, n=167) or nursing assistants (67.6%, n=48), or do not have any kind of post-graduate education (78.90%, n=168).

Nurses who have graduated from the Nursing Department of Technological Educational Institute accept more frequently their role as educators (88.10%, n=210), as opposed to those who have graduated from the University Nursing Department (65.50%, n=19) and those who have graduated from Nursing Assistant Departments of Vocational High-Schools (68.10%, n=49).

Table 1. Characteristics of all samples

Age according to groups	Mean	N	Variation
Nurses	41.22	267	7.73
Nursing assistants	40.96	73	4.73
Nursing students	22.5	118	3.62
Nursing assistant students	21.01	72	5.31
Medical students	21.34	86	2.07
Medical doctors	45.35	117	11.10
Patients	58.73	206	15.21
Total	40.73	935	16.08
Gender distribution by groups			
	Men N (%)	Women N (%)	
Nurses	36 (13.4)	233 (86.6)	
Nursing assistants	11 (15.1)	62 (84.9)	
Nursing students	20 (16.9)	98 (83.1)	
Nursing assistant students	10 (13.9)	62 (86.1)	
Medical students	48 (56.5)	37 (43.5)	
Medical doctors	82 (70.1)	35 (29.9)	
Patients	94 (47.5)	104 (52.5)	
Total	301 (33.0)	631 (67.0)	

Table 2. Characteristics of nursing staff

Undergraduate Education	N	(%)
University	30	8.8
Technological Education Institute	239	69.9
Secondary Education	73	21.3
Total	342	100.0
Any kind of post-graduate education		
Yes	124	36.5
No	216	63.5
Total	340	100.0
Work position		
Nursing assistant	72	22.0
Nurse	203	61.9
Head Nurse	53	16.2

The perceptions about the nurses' educational role seem to also be affected by the attitude towards the nursing profession and by the perception about the work conditions of nursing staff. This is based on the fact that those agreeing that nurses play an educational role have statistically significantly different opinions on the following issues: (a) whether nurses are merely carrying out instructions (P=0.005), (b) whether the profession requires critical

Table 3. Frequency distributions for: (1) perceptions about the nurses' educational role and (2) assessment of the patient education offered by nurses.

	Group 1		Group 2		Group 3		Group 4
	Nurses N (%)	Nursing Assistants N (%)	Medical doctors N (%)	Nursing students N (%)	Nursing assistant students N (%)	Medical students N (%)	Patients N (%)
1) Nurses are expected to consider themselves teachers of society on health related topics							
Disagree	40 (14.4)	23 (31.9)	46 (39.7)	21 (17.9)	19 (24.6)	13 (15.1)	23 (11.3)
Agree	226 (85.6)	50 (68.1)	71 (60.3)	97 (82.1)	53 (75.4)	73 (84.9)	181 (88.7)
Kruskal Wallis Test, $\chi^2 = 52.598, P=0.001$							
	Group 1		Group 2		Group 3		Group 4
	Nurses N (%)	Nursing Assistants N (%)	Medical doctors N (%)	Nursing students N (%)	Nursing assistant students N (%)	Medical students N (%)	Patients N (%)
2) Nurses taught me and the person accompanying me the way to deal with my health problem at home							
Disagree	123 (45.9)	25 (34.8)	63 (53.6)	53 (45.2)	31 (43.3)	50 (58.5)	118 (56.2)
Agree	146 (54.1)	49 (65.2)	54 (46.4)	65 (54.8)	41 (56.7)	36 (41.5)	92 (43.8)
Kruskal Wallis Test, $\chi^2 = 16.307, P=0.012$							

thinking (P=0.005), (g) whether nurses are always alert since they oversee, evaluate, and coordinate many things at the same time (P=0.000), and (d) whether they consider that health services have a sufficient number of nursing staff in order to cover the patients' needs or if a very large number of patients is assigned to each nurse (P=0.000) (Table 4).

On the other hand, a high percentage of patients (88.70%, n=184) expects that nurses should play an educational role and their expectation is not influenced by any of the above mentioned factors, nor by other factors such as ward in which they are hospitalized (P=0.880), profession (P=0.241), educational level (P=0.498), and severity of their health problem (P=0.804).

The evaluation of patient education offered by nurses is significantly different among the different groups of participants (r= 118, P=0,000). The majority of nursing staff, nursing students, and nursing assistant students believe that patients are satisfied by the patient education they receive, while on the contrary the majority of the rest (medical doctors, medical students, and patients) have a negative opinion (Table 3).

The patients' satisfaction from patient education is associated with the self-evaluation of the severity of their health problem, with the frequency of those not satisfied increasing when the severity is increasing (P=0.038) (Table 5). Another important result is that satisfaction from patient education offered by nurses is associated with the patients' overall attitude towards the hospital, when the frequency of satisfaction increases, the frequency of positive

answer to the question "Would you suggest to a beloved person hospitalization at this hospital?" is also increasing (P=0.011) (Figure 1).

DISCUSSION

The findings revealed that while the majority of all four groups expect nurses to play an educational role in health related issues, only those closely associated with the nursing profession (nursing staff and students) consider that this role is fulfilled (Table 3).

The patients are the group that most (88.7%, n=184) expects nurses to play an educational role compared to the rest of groups. They are also the group that is less satisfied with the patient education offered by nurses (56.2%, n=118). This finding is consistent with the study of Oermann & Templin (2000) who supported that patients, and especially those patients with less years of education and lower income, considered the patient education offered by nurses very important. Kloster (1997) showed that patients not only were not satisfied with patient education, but did not even realize that nurses were playing an educational role.

The present study revealed that factors which influence nurses' educational role are shaped by the attitude towards the profession and by working conditions (Table 5), illustrating that nurses know the profession's potential, as well as the adverse working conditions present in Greek hospitals.

Since age and post-graduate education affect positively the acceptance of the educational role we could assume

Table 4. Frequency distribution for the variable “Nurses are expected to consider themselves teachers of society on health related topics” and for the attitude towards the nursing profession.

	Nurses are expected to consider themselves teachers of society on health related topics		
	Disagree N (%)	Agree N (%)	Total N (%)
1. Nurses do not need to have special knowledge because they are merely carrying out instructions			
Disagree	143 (87.2)	526 (91.5)	669 (90.5)
Agree	21 (12.8)	49 (8.5)	70 (9.5)
Total	164 (100.0)	575 (100.0)	739 (100.0)
	$r=-103, P=0.005, \chi^2=8.869$		
2. Nursing is a profession that needs critical thinking			
Disagree	29 (17.5)	52 (9.0)	81 (10.9)
Agree	137 (82.5)	523 (91.0)	660 (89.1)
Total	166 (100.0)	575 (100.0)	741(100.0)
	$r=205, P=0.000, \chi^2=39.395$		
3. Nurses are always alert because they oversee, evaluate, and coordinates many things at the same time			
Disagree	22 (13.3)	28 (4.9)	50 (6.7)
Agree	143 (86.7)	548 (95.1)	691 (93.3)
Total	165 (100.0)	576 (100.0)	741 (100.0)
	$r=210, P=0.000, \chi^2=34.795$		
4. A very large number of patients is assigned to each nurse			
Disagree	20 (12.3)	43 (7.8)	63 (8.8)
Agree	142 (87.7)	509 (92.2)	651 (91.2)
Total	162 (100.0)	552 (100.0)	714 (100.0)
	$r=132, P=0.000, \chi^2=18.214$		

that, as they grow older, nursing staff get more work experience and gain better understanding of their role and of the problems that patients face. A previous study (Dimitriadou 2008) showed that when there is post-graduate education, no matter what kind of education that is, the nursing staff’s level of satisfaction from their performance as educators, administrators, and researchers is increasing.

The correlation with the level of education revealed interesting differences among the nursing staff. Nurses graduates of Technological Education Institute (TEI) show a lot higher frequency of agreeing that nurses play an educational role in health related topics. Nursing assistants have lower frequency and graduates of the University Nursing Department have the lowest frequency. We could assume that playing an educational role is a factor that differentiates TEI graduates from those graduating from Secondary Education (Nursing Assistant Departments of Vocational High-Schools). In addition, TEI graduates are probably receiving satisfaction from playing an educational role, since providing patient education is a chance for them to prove their level of knowledge and get recognition from patients.

It is surprising that University graduates, even though they are prepared to play an educational role by their study programme, which includes special courses to this

end (Study Programme of the Nursing Department of the University of Athens 2002), are the ones who least agree that nurses are expected to play an educational role; even less than medical students. Further research is needed in order to confirm whether this result is constant and to investigate the reasons behind it.

It is also surprising that medical students agree that nurses are expected to play an educational role in higher percentage (84.9%, n=73, Table 3) than any other group of students compared to 82.10% (n= 96) of nurses studying at TEI and 75.40% (n= 54) of nursing assistant students; while their percentage is also higher that the percentage of doctors (60.30%, n=71) and of nurses graduates of the University Nursing Department (65.5%, n=19). This result is probably due to the fact that our sample of medical students was drawn from students participating at the Medical Faculty’s lab-course of clinical skills in which teachers are experienced nurses. This finding suggest that when nurses are involved in medical doctors’ education it leads to medical students’ acceptance of nurses’ role, which may have a positive effect on future professional relations between medical doctors and nurses.

The nursing staff answered that patients would be satisfied with the level of patient education offered by nurses in higher percentage (56.4%, n=193) than patients themselves (43.8%, n=92) (Table 3). The majority of the patients

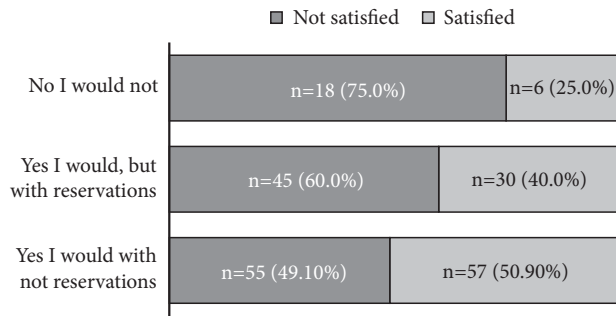


Figure 1. Frequency distribution of the variable “Would you suggest to a beloved person hospitalization at this hospital?”

(56.20%, n=118) answered that their patient education needs are not covered. This finding is consistent with findings of other studies (Winslow 1976, Lauer, Murphy, & Powers 1982, Kloster 1997, Hennessy & Hicks 1998, Devine & Frank 2000). The different perception between nursing staff and patients demonstrates that they have different evaluation criteria as has been shown in other studies conducted abroad (Lilley 1987, Lauri, Lepistö, & Käppeli 1997, Fagerström, Bergbom, & Eriksson 1998). In Greece, this result seems to be affected by the nurses’ working conditions (Dimitriadou 2008), as well as by the inherent problems in nursing education, where less emphasis is given to the nurse’s educational role (Markaki, Antonakis, Philalithis, & Lionis 2006).

The patients’ answer to the question “Would you suggest to a beloved person hospitalization at this hospital” was also an interesting result. Their answers are related to their satisfaction from the hospital care they received (Figure 1). The patients’ satisfaction from patient education offered by nurses seems to affects the patients’ general attitude towards hospital care. In Greece, the effect of quality of nursing care on a hospital’s reputation hasn’t been investigated. In other countries, studies conducted in the 1980’s, support that patient satisfaction from nursing care is a factor which contributes to the general quality of care offered by a hospital (Woodside, Frey, & Daly 1989, Carman 1990, Mahon 1996, Hill 1997).

CONCLUSIONS

A professional role expresses the total of expectations, that is of obligations and demands, which society directs to the “vehicles of the role” (Biddle & Thomas 1979, Gkotovos 1982, Xohellis 1994, Benson Linda & Ducanis 1995). The present study showed that participants expect nurses to play an educational role in health related topics. However, evaluation of patient education offered by nurses was negative. The fact that nurses do not fulfil the expectations, should mobilize responsible authorities, because important reconstruction of undergraduate and post-graduate nursing education and of the nursing framework of practice in contemporary health services are needed in order for the nurses to fulfil their educational role.

Furthermore, the finding that patients’ level of satisfaction from patient education offered by nurses contributes to the patients’ satisfaction from the overall hospital care illustrates the value of quality of nursing care for the hospitalized patients. This fact is very interesting for the nursing community, but also for the health care community in general.

REFERENCES

Agency for Healthcare Research and Quality (2003). “AHRQ’s Patient Safety Initiative: Building Foundations, Reducing Risk”, Interim Report to the Senate Committee on Appropriations, AHRQ. Publication No. 04-RG005, Rockville, MD. URL: <http://www.ahrq.gov/qual/pscongrpt> (Assessed: 8/5/2006)

Barrett C, Doyle M, Driscoll S, Flaherty K, Dombrowski M (1990). “Nurses’ perceptions of their health educator role”. *Journal of Nursing Staff Development*, 6: 283–286

Benson L, Ducanis A (1995). “Nurses’ perceptions of their role and role conflicts”. *Rehabilitation Nursing*, 20: 204– 211

Biddle BJ, Thomas EJ (eds) (1966). “Role Theory: Concepts and Research”, New York John Wiley & Sons

Carman JM (1990). “Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions”. *Journal of Retailing*, 66: 33–55

Chang E, Daly J (eds) (2001). “Transitions in Nursing: Preparing for Professional Practice”, MacLennan and Petty, Sydney, 1–14

Clifford C (1996). “Role: a concept explored in nursing education”. *Journal of Advanced Nursing*, 23:1135–1141

Devine SK, Frank DI (2000). “Nurses self-performing and teaching others breast self-examination: implications for advanced practice nurses”, *Clinical Excellence for Nurse Practitioners: The International Journal of NPACE*, 4:216–223

Table 5. Patients’ self-evaluation of their health problems and level of satisfaction from the patient education offered by nurses.

Nurses taught me and my accompanying person the way to deal with my health problem at home	Self evaluation of the health problem				
	Not at all important N (%)	Probably important N (%)	Important N (%)	Very important N (%)	Total N (%)
Not satisfied	9 (34.6)	31 (56.5)	52 (57.8)	25 (65.8)	117 (56.0)
Satisfied	17 (65.4)	24 (43.6)	38 (42.2)	13 (44.0)	92 (44.0)
Total	26 (100.0)	55 (100.0)	90 (100.0)	38 (100.0)	209 (100.0)

r=-0.144, P=0.038, Mann-Whitney, Z=-2.074

- Dimitrellis D, Aggeli G (2003). "Investigating the level of knowledge of patients with chronic cardiac deficiency" (in Greek). *Nosileytiki*, 42: 97-109
- Dimitriadou A (2008). "Epidemiological investigation of the perceptions about the contemporary nurses' identity and role in relation to their education" (in Greek), Doctoral Dissertation, Faculty of Medicine, Aristotle University of Thessaloniki, Greece
- Dimitriadou A, Lazaridis P, Papadopoulou A, Aslanidou V, Konstantinidou A, Samara A, Hatzimixail E (1991). "Opinions and attitudes of hospitalized patients that evaluate nursing services" (in Greek), Conference Proceedings of the 180 Panhellenic Nursing Conference, Athens, Greece, 71-87
- Dimitriadou A, Minasidou E, Kaykia Th, Sapountzi D, Mpenos A, Kiosses V (1993). "Investigation of the factors that are associated with the nursing personnel's attitude towards AIDS", Conference Proceedings of the 5th Panhellenic Conference on AIDS, Athens, Greece
- Fagerström L, Engberg IB, Eriksson K (1998). "A comparison between patients' experiences of how their caring needs have been met and the nurses' patient classification - An explorative study". *Journal of Nursing Management*, 6:369-376
- Forrest D (1989). "The experience of caring". *Journal of Advanced Nursing*, 14: 815-823
- Gkotovos Th (1982). "The necessity for continuing education and its role in the effectiveness of educational changes" (in Greek), *Syghroni Ekpaideysi* (Contemporary Education). *Issue*, 9:28-33
- Hatcher S, Laschinger HK (1996). "Staff nurses' perceptions of job empowerment and level of burnout: a test of Kanter's theory of structural power in organizations". *Canadian Journal of Nursing Administration*, 9:74-94
- Hennessy D, Hicks C (1998). "A cross-cultural tool to identify continuing education needs". *International Nursing Review*, 45:109-114
- Hill J (1997). "Patient satisfaction in a nurse-led rheumatology clinic". *Journal of Advanced Nursing*, 25:347-354
- Howard D. "Student nurses' experiences of Project 2000" (2001). *Nursing Standard*, 15:33-38
- International Council of Nurses (ICN) URL: www.icn.ch (Assessed 7/3/2005)
- Janiszewski GH (2003). "The Nursing Shortage in the United States of America: an integrative review of the literature". *Journal of Advanced Nursing*, 43: 335-343
- Jasper M (1996). "The first year as a staff-nurse: the experiences of a first cohort of Project 2000 nurses in a demonstration district". *Journal of Advanced Nursing*, 24: 779-790
- Jinks AM & Hope P (2000). "What do nurses do? An observational survey of the activities of nurses on acute surgical and rehabilitation wards". *Journal of Nursing Management*, 8:273-279
- Kelly B (1996). "Hospital nursing: It's a battle! A follow-up study of English graduate nurses". *Journal of Advanced Nursing*, 24:1063-1069
- Kloster T (1997). "How do nurses attend to their educational function and how do patients experience this? A field study in an orthopedic department" (Article in Norwegian, Abstract in English), *Vard Nord Utveckl Forsk*, 17:14-20
- Kruger S (1991). "The patient educator role in nursing". *Applied Nursing Research*, 4:19-24
- Latter S, Clark JM, Wilson-Barnett J, Maben J. "Health education in nursing: perceptions of practice in acute settings". *Journal of Advanced Nursing* 17:164-172
- Lauer P, Murphy SP, Powers MJ (1982). "Learning needs of cancer patients: a comparison of nurse and patient perceptions". *Nursing Research*, 31:11-16
- Lauri S, Lepistö M, Käppeli S (1997). "Patients' needs in hospital: nurses' and patients' views". *Journal of Advanced Nursing*, 25:339-346
- Law 2071/1992 (FEK Issue A' 123/15-7-1992) The rights of hospitalized patients (in Greek), Greece
- Leininger M (1988). "Leininger's theory of nursing: cultural care diversity and universality". *Nursing Science Quarterly*, 1:152-160
- Lilley LL (1987). "Human need fulfillment alteration in the client with uterine cancer. The registered nurses' perception versus the clients' perception". *Cancer Nursing*, 10:327-337
- Mahon PY (1996). "An analysis of the concept 'patient satisfaction' as it relates to contemporary nursing care". *Journal of Advanced Nursing*, 24:1241-1248
- Marcum J, Ridenour M, Shaff G, Hammons M, Taylor M (2002). "A study of professional nurses' perceptions of patient education". *The Journal of Continuing Education in Nursing*, 33:112-118
- Markaki A, Antonakis N, Philalithis A, Lionis C (2006). "Primary health care nursing staff in Crete: an emerging profile". *International Nursing Review*, 53:16-18
- Moriarty DR, Stephens LC (1990). "Factors that influence diabetes patient teaching performed by hospital staff nurses". *The Diabetes Educator*, 16:31-35
- Newbold D (2004). "Rival research programmes and their influence on nursing practice". *Journal of Nursing Management*, 12:97-104
- Oermann MH, Templin T (2000). "Important attributes of quality health care: Consumer perspectives". *Journal of Nursing Scholarship*, 32:167-172
- Papamikrouli S (1985). Opening speech: "Nursing in Greece-Prospects" (in Greek), Proceedings of 12th Panhellenic Conference Athens, Greece
- Pearson A (2004). "The shortage of nurses: is it 'man'-made?". *International Journal of Nursing Practice*, 10:143-144
- Presidential Decree No 351/ FEK 159/ Issue A/ 14.6.89 "Professional Rights of the Graduates of Nursing Departments of the School of Health and Welfare" (in Greek), Greece, 1989
- Renders CM, Valk GD, Griffin SJ, Wagner EH, Eijk Van JT, Assendelft WJ (2001). "Interventions to improve the management of diabetes in primary care, outpatient, and community settings: a systematic review". *Diabetes Care*, 24:1821-1833
- Reutter L, Filed PA, Campbell IE, Day R (1997). "Socialization into nursing: nursing students as learners". *The Journal of Nursing Education*, 36:149-155
- Rungapadiachy DM, Madill A, Gough B (2006). "How newly qualified mental health nurses perceive their role". *Journal of Psychiatric and Mental Health Nursing*, 13:533-542
- Severinsson EI (1998). "Bridging the gap between theory and practice: a supervision programme for nursing students". *Journal of Advanced Nursing*, 27:1269-1277
- Stone DH (1993). "Design a questionnaire". *British Medical Journal*, 307:1264-1266
- Study Programme of the Nursing Department of the University of Athens (2002). URL: <http://www.nurs.uoa.gr/> (Assessed 20/5/2002)
- Styles MM (1986). "The Report on the Regulation of Nursing: A report on the present, a position for the future", International Council of Nurses, Geneva, Switzerland
- Tsaousis D (1985). "The society of men: Introduction to sociology" (in Greek) (3rd Edition), Gutenberg Publications, Athens, Greece
- Turner S, Wellard S, Bethune E (1999). "Registered nurses' perceptions of teaching: constraints to the teaching moment". *International Journal of Nursing Practice*, 5:14-20
- Tzotis G (2003). "Nurse's contribution to psychosocial rehabilitation: New roles in intermediate structures in the framework of the programme PSYCHARGOS" (in Greek). URL: <http://www.edra-coop.gr/BoardItem.asp?id=98> (Assessed 1/11/2007)
- US Department of Labor-Bureau of Labor Statistics (2004) "Occupational outlook handbook OOH, 2004-2005 Edition". URL: <http://www.stats.bls.gov/oco/home.htm> (Assessed: 2/12/2004)
- Winslow EH (1976). "The role of the nurse in patient education. Focus: the cardiac patient". *The Nursing Clinics of North America*, 11:213-222
- Woodside AG, Frey LL, Daly RT (1989). "Linking Service Quality, Customer Satisfaction, and Behavioral Intention". *Journal of Health Care Marketing*, 9:5-17
- Xohellis P (1994). "The educational work as a social role" (in Greek), Kyriakidi Publications, Thessaloniki, Greece