

Cancer Outpatients' Self-Care Deficit in Greece, Based on Orem's Theory

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Abstract

Introduction and Aim: The purpose of study was to investigate the self-care deficit of cancer patients receiving outpatient health care in Greece based on Orem's Self-Care deficit Nursing Theory.

Methods: The sample consisted of 113 patients from home care unit and outpatient unit from 2 public oncology hospitals in Athens. The questionnaire developed by researchers based on modes of intervention according to Orem's nursing theory which are acting or doing for others, guiding physical and psychological support, maintaining an appropriate environment and teaching. The questionnaire had dichotomy answers. Statistical analysis was done with SPSS using student's t-test analysis and statistical significance level was set to $p < 0.05$.

Results: The 61.9% ($n = 70$) of sample were female, 36.3% were aged more than 70 years, while 66.3% ($n = 75$) were patients of day care unit. Functional status was 39.8% stage ECOG I. Home Care's patients focused support needs for self-care in reporting issues such as information about the treatment ($p = 0.021$), economic issues ($p = 0.000$), and practical issues such as supply of medicine ($p = 0.01$), rights and insurance coverage ($p = 0.000$). Day care unit patients had greater self-care ability, focus on meeting emotional needs such as respect ($p = 0.000$), attention and care by the family ($p = 0.010$) and teaching for changes in the environment ($p = 0.028$), skills development for handling O₂ ($p = 0.014$), lymphedema care ($p = 0.045$) and caring for wounds ($p = 0.013$).

Conclusions: Awareness of patients self-care different needs by nurses, could guide the care provided, in the context of individualized and holistic approach for greatest satisfaction.

Keywords: cancer patient, day care unit, Greece, home care nursing unit, nursing care

Introduction

The home health nursing care is the nursing care provided to patients and their families in the area where patients live in their home (American Nurses Association, 2008, p. 2–3). The care must be based on the needs of each patient and caregiver (Marrelli, 2012, p. 2–3, p. 77) and one of its objectives is to maximize the self-care ability of the patient (Marrelli, 2012, p. 91–92) or the reduction of self-care deficit (Orem, 2001). The literature review reveals a wide range of care needs of cancer patients (Fernsler, 1986; Molassiotis et al., 2010; Akechi et al., 2011; McCorkle et al., 2011; Puts et al., 2012). Wingate and Lacey (1989) mentioned six types of cancer patient's needs; the information needs, the household management, physical needs, and psychological, spiritual, economic and respective needs of caregivers. In the study by Longman et al. (1992) patients have described as very important

needs are: a) personal care (safe care techniques, application of treatment guidelines, relieve stress with information on symptoms), b) the involvement their care (honestly inform, information in understandable language) and c) interaction (respect, courtesy, friendliness, hearing problems). Potter et al. (2010) in their study designed to test the skills required for the care and education needs of cancer patients and their caregivers, came and ranking 16 major activities for patients are: bath, meal, movement, monitored for infections, the symptoms management, cooking, management of cancer emotions, managing finances, treatment of wounds, the changes of bandages, aid to non-medical issues, the urinary catheter, the administration of intravenous therapy, oxygen, changing panels and feeding by tube. Tamburini et al. (2000) in their study of 392 inpatients for the synthesis of a questionnaire for the assessment of cancer patient's needs, found that the participants were most concerned for the need for information on the way forward (74%), for diagnosis (56%), diagnostic tests (52%), for the treatment (51%) better communication with their caregivers (57%) and better care in hospital (56%). Wong et al. (2002) who investigated educational needs of outpatients receiving radiation for structuring the content of an educational program, found that more important issues was the management of pain, fatigue and availability of palliative homecare. According to Polat et al. (2014) the learning needs of hospitalized non-cancer patients concerning of drugs, activities of living, community and follow up, treatment and complications, feelings related to their condition, and skin care.

The research of Osse et al. (2005) about met and unmet needs and problems of cancer patients revealed that the most important were difficult households, fatigue, disappointment about the decreased stamina, anxiety about the future and fear of metastasis, informational needs, the physical suffering. It is interesting to mention that the problems that patients experienced were not similarly to the patients unmet needs for professional care. The systematic review of Harrison et al. (2009) about the unmet needs of cancer patients revealed that the most prevalence needs concerned domains of physical functioning, psychosocial, information, spiritual, communication, sexuality. In another research referred that the higher number of needs expressed by patients the greater interest of supportive services expressed (Janda et al., 2008).

The purpose of this study is to investigate the self-care deficit patients with cancer receiving outpatient health care in Greece, the home care service compared with patients of the day care unit.

The theoretical framework

The theory of Orem of self-care deficit, is nowadays one of the most widely applied theories in nursing practice (Taylor et al., 2000), in patients with a wide range of diagnoses, including pediatric patients (Moore and Beckwitt, 2006), primary health care (Geden et al., 2001), cancer patients (Rehwaltdt et al., 2009), elderly patients with ostomy (Sampaio et al., 2008), patients with AIDS (Barroso et al., 2010), heart failure, patients with diabetes, and other. According to this theory, patients and their families are urged and encouraged to take their self-care according to their abilities. Nurses compensate the patient's self-care deficit when needed, according to the total, the partial and the educational/supportive compensatory support. Therefore, nursing (nursing agency) refers to the actions of specially trained people capable of dealing with the actual or potential self-care deficit and help to maintain or to change themselves or their environment (Orem, 2001, p. 518). Orem

considers nursing (nursing system) as an empowerment service and support of the individual, which achieves the goal with five methods of helping: a) acting or doing for others, b) guiding c) physical and psychological support, d) maintaining an appropriate environment, and e) teaching (Orem, 2001, p. 58).

Methods

Sample

In total 113 patients with cancer were enrolled in the present study, which was conducted in two anticancer hospitals: "Metaxa Hospital" and "Agiol Anargyroi Hospital". The research was conducted during the period July 2011 – August 2011. Criteria for participation in the study were: the positive diagnosis of cancer, the ability to read and speak Greek and consent to participate in the study.

Questionnaire

The questionnaire included demographic (age, sex, education, work, income, cohabitation, caregiver, access to community services) and clinical characteristics of patient (diagnosis, metastasis, past treatments, health assessment). The performance status of patients was assessed using the tool of Eastern Cooperative Oncology Group (ECOG). The performance status is rated from 0 which means full activity to 5 when patient dies (Oken et al., 1982).

Researchers sought to create a questionnaire evaluation of the patients self-care deficit which is based on Orem's Self-Care Deficit Nursing Theory. Considering that nursing capacity in Orem's nursing theory, achieves the objective of measures a) acting or doing for others, b) guiding, c) physical psychological support d) maintaining an appropriate environment e) teaching, researchers agreed to creating a questionnaire, which will be grouped according to the types of interventions into five groups according by Orem's theory. Questions of each group were result of the literature review and researchers' experience in the field of home health care. Answers of the questions were dichotomy "Yes" and "No". In each group of questions was provided the opportunity to complete and other needs of the patient, which are not included in the questionnaire.

Procedure

A total 147 cancer patients met the inclusion criteria and were followed by the home care service and the day care unit of both hospitals. Out of the 147 patients 113 agreed to complete questionnaires, 8 home care patients (6.14%) refused to participate because the study was not interested in them, 5 home care patients (3.84%) were negative receive to visit of a person (researcher) other than nurse at home, 12 patients (9.22%) by the day care unit refused to participate because the study was not interested in them, and 9 patients (6.9%) from the day care unit refused to participate without mentioning any specific reason. The researcher took interview from patient at home care for completing the questionnaire. During the interview present was only the patient. The patients of day care unit completed the questionnaire alone during the waiting section. The researcher was in place to provide clarification when needed.

Statistical analysis

After pilot testing of patients' self-care needs investigation questionnaire in 20 patients was found to be understood, it is short, and patients responded to all questions without

difficulty. It was checking the reliability coefficient Cronbach alpha and found to be 0.73 which is acceptable in accordance with the literature. Followed correlations of demographic and clinical characteristics of patients with self-care needs of the questionnaire items. We used a standard parametric statistical technique, t-test for statistical analysis of independent data. Tables were made with means, standard deviations, p-values, which present the correlation between the two means of patients, those who receiving care from home care unit with those from day care unit. The statistical significance level was set at $p < 0.05$.

Results

The final sample consisting of 113 patients. Most of the patients were women, 70 women (61.9%). Of these 38 patients (33.6%) were from the home care unit and 75 (66.4%) from the day care unit. The demographic and clinical characteristics of the patients are shown in Table 1.

Tab. 1 Demographic and clinical characteristics of the patients

Characteristics		N	%
Sex	Male	43	38.1
	Female	70	61.9
Age	31–40	2	1.8
	41–50	14	12.4
	51–60	28	24.8
	61–70	28	24.8
	> 70	41	36.3
Unit/Department	Home care	38	33.6
	Day care	75	66.3
Income	< 600 euro	38	33.6
	600–1300 euro	54	47.6
	> 1300 euro	21	18.6
Main caregiver	Husband/housewife	67	59.3
	Daughter	22	19.5
	Son	5	4.4
	Other	6	5.4
Diagnosis	Digestive cancer	21	18.6
	Genital cancer	12	10.6
	Respiratory cancer	14	12.4
	Breast cancer	41	36.3
	Hematopoietic	16	14.2
Metastases	Yes	28	24.8
	No	85	72.5
Hospitalization in the last year	Yes	60	53.1
	No	53	46.9
ECOG Performance status	Stage 0	29	25.7
	Stage 1	45	39.8
	Stage 2	25	22.1
	Stage 3	14	12.4

Patients' self-care deficit on the guidance and direction received from nurses to improve self-care ability is shown in Table 2.

Tab. 2 Patients self-care deficit on 'guiding' in home care and day care unit

'Guiding' Questions	Unit	N	Mean	Std. Deviation	p value
I communicate with my therapists	Day care	75	1.2000	.40269	.654
	Home care	38	1.2368	.43085	
be more involved in decisions	Day care	75	1.4800	.50296	.470
	Home care	38	1.5526	.50390	
better check my pain	Day care	75	1.5067	.50332	.394
	Home care	38	1.4211	.50036	
better check the symptoms	Day care	75	1.3333	.47458	.450
	Home care	38	1.2632	.44626	
to have more information for diagnosis	Day care	75	1.3200	.46962	.112
	Home care	38	1.4737	.50601	
to have more information for the future development	Day care	75	1.3067	.46421	.011
	Home care	38	1.5526	.50390	
to have more information on the examinations	Day care	75	1.2267	.42149	.062
	Home care	38	1.3947	.49536	
to have information for the treatment	Day care	75	1.2800	.45202	.021
	Home care	38	1.5000	.50671	
guiding the search for financial assistance	Day care	75	1.1067	.31077	.000
	Home care	38	1.5263	.50601	

Student's t-test, $p \leq 0.05$, CI 95%

Patients' self-care deficit to perform tasks and self-care acts is shown in Table 3.

Tab. 3 Patients' self-care deficit to perform tasks and self-care in home care and day care unit

'doing for others' questions	Unit	N	Mean	Std. Deviation	p value
to look after the wound, stoma, catheter	Day care	75	1.8000	.40269	.001
	Home care	38	1.5000	.50671	
to take a blood sample	Day care	75	1.2267	.42149	.671
	Home care	38	1.2632	.44626	
make an appointment with my doctor	Day care	75	1.2000	.40269	.013
	Home care	38	1.4211	.50036	
to procure my drugs	Day care	75	1.1733	.38108	.010
	Home care	38	1.3947	.49536	
to supply equipments for my care	Day care	75	1.6533	.20240	.454
	Home care	38	1.5000	.50671	
to be scheduled chemotherapy or blood transfusion	Day care	75	1.2667	.44519	.006
	Home care	38	1.5263	.50601	

Student's t-test, $p \leq 0.05$, CI 95%

For procedural issues such as helping to ‘make an appointment with their doctor’ ($p = 0.013$), ‘to procure my drugs’ ($p = 0.010$) and ‘be scheduled chemotherapy or transfusion’ ($p = 0.006$) seems the home care patients to entirely need help more than patients from the day care unit, significantly.

Patients’ self-care deficit and their need for the participation of the nurse in the physical and psychological support for their self-care are shown in Table 4. Important for home care patients is the physical and psychological support for their self-care ‘do not depend on others’ ($p = 0.040$).

Tab. 4 Patients self-care deficit and their need for ‘physical and psychological support’ in home care and day care unit

‘physical and psychological support’ questions	Unit	N	Mean	Std. Deviation	p value
independently to eat, to take a bath	Day care	75	1.8000	.40269	.053
	Home care	38	1.6316	.48885	
moving on my own or with little help	Day care	75	1.8400	.36907	.001
	Home care	38	1.5526	.50390	
to take care of myself	Day care	75	1.5867	.49575	.385
	Home care	38	1.5000	.50671	
to feel better	Day care	75	1.3600	.48323	.853
	Home care	38	1.3421	.48078	
to share and manage my feelings	Day care	75	1.4000	.49320	.831
	Home care	38	1.4211	.50036	
to manage my feelings about the change in my body image	Day care	75	1.5867	.49575	.938
	Home care	38	1.5789	.50036	
to take control of my life	Day care	75	1.6667	.47458	.523
	Home care	38	1.6053	.49536	
do not depend on others	Day care	75	1.4267	.49792	.040
	Home care	38	1.6316	.48885	
to talk to people with the same problem	Day care	75	1.5600	.49973	.649
	Home care	38	1.6053	.49536	
to talk about what is happening to me	Day care	75	1.3333	.47458	.927
	Home care	38	1.3421	.48078	
to feel useful for others	Day care	75	1.6000	.49320	.748
	Home care	38	1.6316	.48885	
to manage the death meaning	Day care	75	1.7600	.42996	.089
	Home care	38	1.6053	.49536	
To feel less isolated / alienated	Day care	75	1.5733	.49792	.208
	Home care	38	1.4474	.50390	

Student’s t-test, $p \leq 0.05$, CI 95%

Patients’ self-care deficits on ‘maintaining an appropriate environment’ are shown in Table 5. The day care patients referred that they need help by the nurse to maintain and improve the environment on ‘to have more respect from my family’ ($p = 0.000$), ‘to have more attention and care from my family’ ($p = 0.010$), ‘to learn to do light households’

($p = 0.013$), 'to make the necessary changes in the environment' ($p = 0.028$), compared with patients in the home care significantly. Unlike the home care patients need 'to have more information about their rights and insurance coverage' ($p = 0.000$) compared with patients in the day care.

Tab. 5 Patients self-care deficit on 'maintaining an appropriate environment' in home care and day care unit

'maintaining an appropriate environment' questions	Unit	N	Mean	Std. Deviation	p value
have more respect from my family	Day care	75	1.9467	.22621	.000
	Home care	38	1.7105	.45961	
have more respect from health professionals	Day care	75	1.3333	.47458	.853
	Home care	38	1.3158	.47107	
get more attention and care from my family	Day care	75	1.9467	.22621	.010
	Home care	38	1.7895	.41315	
get more attention and care from health professionals	Day care	75	1.3067	.46421	.706
	Home care	38	1.3421	.48078	
get more help with the housework	Day care	75	1.4133	.49575	.385
	Home care	38	1.5000	.50671	
learn to do light housework	Day care	75	1.8000	.40269	.013
	Home care	38	1.5789	.50036	
to make the necessary changes in the environment	Day care	75	1.8400	.36907	.028
	Home care	38	1.6579	.48078	
have more information about my rights and insurance coverage	Day care	75	1.0133	.11547	.000
	Home care	38	1.2105	.41315	

Student's t-test, $p \leq 0.05$, CI 95%

Patients' self-care deficit on 'teaching subjects' and their desire to be trained in skills that would improve their self-care, are shown in Table 6. The training needs of patients receiving care from day care unit differ significantly from those in patients of home care and focus 'to be trained in insulin-therapy' ($p = 0.020$), 'to learn to handle oxygen' ($p = 0.014$), 'learning to care for the wound, stoma, catheter' ($p = 0.013$) and 'learning to care for lymphedema' ($p = 0.045$).

Tab. 6 Patients self-care deficit on 'teaching subjects' in home care and day care unit

'teaching' questions	Unit	N	Mean	Std. Deviation	p value
to be trained in insulin-therapy	Day care	75	1.9200	.27312	.020
	Home care	38	1.7632	.43085	
to make decisions about my nutrition	Day care	75	1.3067	.46421	.634
	Home care	38	1.2632	.44626	
learning to handle oxygen	Day care	75	1.8933	.31077	.014
	Home care	38	1.7105	.45961	
learn to recognize the infections promptly	Day care	75	1.4667	.50225	.324
	Home care	38	1.3684	.48885	
to learn the medication management	Day care	75	1.4000	.49320	.633
	Home care	38	1.4474	.50390	
learning to care for the wound, stoma, catheter	Day care	75	1.8000	.40269	.013
	Home care	38	1.5789	.50036	
learning to care lymphedema	Day care	75	2.0000	.00000	.045
	Home care	38	1.9474	.22629	

Student's t-test, $p \leq 0.05$, CI 95%

Discussion

This study investigated the self-care deficit patients with cancer receiving outpatient health care in Greece based on the theory of Orem self-care deficit. Differences were indicated between patients receiving care from home care unit comparing with those receiving care from the day care unit. Patients in the home care considered that health professionals can assist them in practical matters (providing information about the disease, treatment, economics, supply of materials and medicines, scheduling transfusion or chemotherapy, rights and insurance coverage) compared with patients in the day care unit. The need for more information refers to be present to the first stages of the disease (Tamburini et al., 2000, p. 35) but also patients in palliative care wanted more information to increase the sense of control of the situation (Osse et al., 2005, p. 728). The severe situation of home care patients or adjustment to the disease (Mizunoh et al., 2005) or the potential emotional coverage of patients from their caregivers (close family ties in Greece) or even more the economic crisis, maybe related to the increase of the practical issues that are referred to as deficits in self-care. The economic burden on patients due to the chronicity of the disease brings self-care deficit in this area (Blank et al., 1989) or maybe these need for professional attention on finances indicates deficits in care coordination (Osse et al., 2005, p. 728). The need for co-ordination and continuity of care (McIlfatrick, 2007, p. 83) through the necessary scheduling of interventions may be essential to care illness trajectory. Maintaining the balance between the needs and the capacity for self-care, for example 'to maintain the independence', is an important dimension in the care and main goal of home care (Adamakidou, 2009; Marrelli, 2012). The absence of reference in self-care deficit of ADL maybe was related with the fact that home care nurses paid major attention in that field (Osse et al., 2005, p. 728).

The self-care deficit in satisfaction emotional needs such as respect ($p = 0.004$), the attention and care by the family ($p = 0.03$), the empowerment to maintain functionality ($p = 0.003$) positively correlated with patients in day care unit (Mizunoh et al., 2005; McIlfratrick, 2007). Perhaps, their experiences adduce and magnify the emotional needs and indicate their need to be accompanied in this journey by loved ones and competent professionals (Osse et al., 2005, p. 728). It mentioned that a high percentage of patients needed to feel useful within their family (Tamburini et al., 2000, p. 35). Patients best functional status, compared with that of patients in the home care, and the new role of the patient in the disease management (Tamburini et al., 2000, p. 35) have resulted in active participation in their care and for this reason seek training for their daily care. Patients treated in day care unit usually have recently had a surgery and their contact with the disease is in their memory. Therefore show self-care deficit in wound care, ostomy and lymphedema care and need training and assistance on these issues (Potter et al., 2010, p. 541). The absence of reference of similar training needs of patients in home care may be associated with the chronicity of their condition, which results in these requirements have been covered in the past.

The ability to self-care or self-care deficit of the patients seems to guide and their reported needs. Nurses must investigate individually the reported deficit or self-care ability and support depending on the patient and the family environment. Designing a self-care deficit support program for ambulatory patients should take into account the capabilities and characteristics of the target population.

Conclusion

The self-care deficit which was expressed from the patients and differences founded between patients in the day care and home care could be key determinants for nurses and other health care providers. These determinants will be able to support and guide the providing care in order to increase the patients' satisfaction from the care and to improve their quality of life.

Conflicts of interest

None

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