

Needs of Patients with Prostate Cancer for Home Care

Ayşe Cal¹, Seher Zengin², Ilknur Aydın Avci¹

¹Department of Public Health Nursing, Faculty of Health Sciences, Ondokuz Mayıs University, Samsun, ²Department of Public Health Nursing, Abant İzzet Baysal University, Bolu Health School, Bolu, Turkey



Corresponding author: Ilknur Aydın Avci, PhD, RN

Department of Public Health Nursing, Faculty of Health Sciences, Ondokuz Mayıs University, Kurupelit Campus, Atakum, Samsun, Turkey

Tel: +90 362 312 1919- 6341; Fax number: +90 362 457 69 26

E-mail: ilknursezera@hotmail.com

Received: February 06, 2018, Accepted: May 14, 2018

ABSTRACT

Objective: This study aimed to identify the needs for home care of patients with prostate cancer. **Methods:** A correlational descriptive study was conducted with 116 patients with prostate cancer who were admitted to a university hospital. The data were collected using by means of surveys developed by the researchers. The analysis was carried out performed with SPSS 20, using the *t*-test, Chi-square, *post hoc* test, and logistic regression. **Results:** It was found that the level of need for home care was high among the patients who had low education level and were residing in villages with a nuclear family. In addition, the level of need for home care increased among the patients who were in the recurrence phase of their illness, who had somebody in the family to meet the need for

home care, and who had other family members in need of care. It was found that the level of the need for home care was high among patients whose lives were severely affected by prostate cancer and who considered their health to be poor. Within this context, it is advisable for medical staff to include training and consultancy services in their caring process to promote patient independence. **Conclusions:** It was found that patients with prostate cancer have some needs for home care. The professional medical staff in this field should carry out studies to define the needs for home care that will be a benefit in improving men's health.

Key words: Home care nursing, nursing, prostate cancer

Introduction

Prostate cancer is a disease that is progressive in relation to the complications and the treatment applied, which negatively affects the lives of the patients and their families.^[1] The worldwide incidence of prostate cancer is 14.8%, with a mortality of 6.6% and a 5-year

prevalence of 25.2%. According to the 2012 data of the European, American, and International cancer agencies, prostate cancer is the most frequent cancer type among men, preceding lung, and colorectal cancer types.^[2]

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Cite this article as: Cal A, Zengin S, Avci IA. Needs of Patients with Prostate Cancer for Home Care. *Asia Pac J Oncol Nurs* 2018;5:408-14.

Access this article online

Quick Response Code:



Website: www.apjon.org

DOI:
10.4103/apjon.apjon_27_18

According to the 2016 data of the American Cancer Society, the incidence of prostate cancer in the USA is 180,890/100,000; its mortality rate is 26,120, which is the second highest among men.^[3] As for Turkey and the rest of the world, prostate cancer ranks the second in the most frequent cancer types among men, following lung cancer. The incidence of prostate cancer in Turkey, despite an yearly increase, is 36.1/100,000.^[4]

It was found in the studies carried out in Turkey that the incidence of prostate cancer is the highest among those who are at the age of 65–69.^[5] Considering those in need of home care are mostly old people, the common frequency of the disease among old people indicates the importance of home care. The home care needs can be provided by an informal caregiver (e.g., family or friend) or community health professional.^[6] Home care is defined as meeting short-term or long-term healthcare needs and social service needs of individuals. Home care services in Turkey's ministry of health hospitals, public or private hospitals, home health care units, and community health centers are provided through the center and family physicians. Patients with prostate cancer go through psychological and functional problems related to the treatment applied and its side effects as well as the problems related to the disease itself (urinary obstruction, metastatic pains, etc.).^[1,7] In a study, it was found that physical functions and general wellness of people with prostate cancer are rather low.^[8] In a study on the problems experienced by men who underwent radical prostatectomy due to prostate cancer, it was found that two problems that affect the patients' social and sexual lives significantly are urinary incontinence and erectile dysfunction.^[9] Moreover, the problems patients with prostate cancer experience include pain, difficulty in urination, physical dysfunction, difficulty in carrying out daily activities, changes in objectives and plans for future, and effect on social life.^[1,9-11]

It is stated that soon after being discharged from the hospital, the patients experience several problems such as maintenance of the catheter, urinary tract infection, bleeding, controlling pain, urinary retention, urinary incontinence, and erectile dysfunction.^[9,10,12-14] It is very important for the patient to be able to cope with the problems emerging as a result of the operation. The approach is that patients should be discharged from the hospital as soon as possible to prevent their exposure to hospital-acquired infections. As a result of this, the patients and their families leave the hospital with inadequate knowledge about the management of complications and needs for home care.^[10,15,16] The family members of patients have limited knowledge of and limited experience in caring for patients with prostate cancer; in addition, their resources are limited.^[8] For this reason, the

patients receiving medical treatment for prostate cancer and their family members have stated that they have difficulty in coping with the treatment process.^[9,11]

Men's health is a neglected issue in general and prostate cancer is a cancer attributed to sexuality and sexual efficiency similar to breast cancer.^[12] In studies on prostate cancer, incidence, symptoms, medical treatment approaches, and experiences of patients are mostly examined.^[17-20] Although there are studies in the literature on nursing patients with cancer at home, those that focus on socialization and needs for home care in prostate cancer are rather limited.^[21-23] Especially in traditional communities worldwide, it is stated that the sexual incompetence of a man is accepted as a social weakness, and for this reason these men tend to spend more time at home. In these communities, the power of a man is identified with sexual success. For this reason, sexual health is very important for the lives of men at these communities. Moreover, social and psychological complexities in particular were experienced at a high rate following operation.^[12]

Evaluating the process of nursing the patient at home after the hospital and identifying both the personal needs and the needs of caregivers are of significant importance. In particular, medical treatment focusing on patients' needs and having knowledge about the needs of patients with prostate cancer for home care will yield the best results in patient care. For this reason, the study was carried out to identify the needs of nursing patients with prostate cancer at home.

Research questions:

- What are the needs of nursing patients with prostate cancer at home
- What are the factors that affect the needs of nursing patients with prostate cancer at home?

Methods

Study design and time

A correlational descriptive study was conducted in the urology department of a hospital with essential permissions between January and May 2016.

Participants

The sample group was composed of 116 patients who applied to the urology department, were receiving medical treatment for prostate cancer during the implementation of the study and accepted to participate in the study. The criteria of being admitted to the research are being diagnosed with prostate cancer, not having metastasis, having prostatectomy, being at least 6 months postoperation (this period was determined for them to experience home care

in accordance with the experts' opinions), accepting to participate in the research and being over 18. We made a *post hoc* power analysis according to our results. We took a home care needs rate of H_0 28 and H_1 41, α 0.05, power 0.83 with a population of 116 (power analysis of one proportion).

Data collection

A 40-item questionnaire developed by the researchers in the light of the literature and approved by experts was used to collect the data.^[24-27] Two urologists, two professors of public health nursing, a professor of home care nursing, and an oncologist were consulted during the design of the data collecting form. The data collecting form was initially tested with a 5-member group and then it was applied to the whole cohort without making any changes. The Cronbach coefficient of the data collecting forms for this research was found to be 0.82. The form was composed of questions concerning sociodemographic data, characteristics related to the illness, knowledge about the illness, needs for home care, characteristics of caregivers, state of perceiving the current illness, and practices of maintaining health. Patients who met the inclusion criteria of the study were invited to participate by researchers. The forms were filled out face-to-face with the patients by the researchers. The data were collected in a special room in the clinic. It took 15–20 min to collect the data. All invited patients agreed to participate in the investigation and all data were included in the study.

Statistical analysis

The data analysis was performed using Statistical Package Program for Social Sciences 20.0 (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY). Descriptive statistics was used in the evaluation of the data; *t*-test, Chi-squared test, and logistic regression analysis were used to define the difference between dependent and independent variables. Logistic regression analysis was performed to identify the extent to which individual variables significantly predicted the home care needs of prostate cancer patients independent of other variables. In all tests, the level of significance was set at 0.05. *Post hoc* test was used in the evaluation of difference among the groups according to data distribution.

Ethical approval

The participants were informed that the results would be used scientifically, they could stop whenever they wished, it was a voluntary participation, and their personal details would be kept secret. The participants' approval of the voluntary participation was obtained in accordance with the principles of Declaration of Helsinki

(<http://www.wma.net/en/30publications/10policies/b3/>, 2016). Furthermore, the ethics permission for the research was obtained from the institution where the research was conducted. Ethical approval was obtained from Ondokuz Mayıs University Ethical Committee for Clinical Research (Decision Number: 2014/556-630). Each of the participants was informed about the research verbally.

Results

Descriptive features

The average age of the patients with prostate cancer who participated in the study was 65.92 ± 8.63 (minimum: 43, maximum: 90). A total of 58.6% of the patients had primary education, 25.9% had elementary and upper education, and 15.5% of them were illiterate. A total of 99.1% of the patients were married, and 63.8% lived in a nuclear family (only parents and children). A total of 31.9% lived in villages, 35.3% in districts and 32.8% in city centers. A total of 83.6% of the patients in the study were unemployed, 46.6% had a lower income than expenses, 49.9% had an income equal to expenses, and 98.3% of them had social security.

Characteristics related to the illness

A total of 86.2% of the patients had received an in-patient treatment before. Moreover, 67% of the patients did so for surgical reasons, 19% for chemotherapy, and 14% for radiotherapy. In addition, 31% of the patients in the study were in the phases of diagnosis and treatment, 48.3% in the phase of recovery, and 20.7% in the phase of recurrence. Furthermore, 79.5% of them received training about their illness, 94.6% of which was received from medical staff and 5.5% through other ways (internet, TV, radio, newspapers, magazines, friends, etc.). When asked what activities they had difficulty doing, the replies were restrictions in sexual life (59.5%), swift and hurried acts (20.7%), things demanding power and energy (23.3%), inability to sustain personal hygiene (18.2%), exercise (15.5%), and doing housework (6%).

Needs for home care

A total of 22.4% of the patients stated that they did not carry out their own daily care and 27.6% stated that they needed home care; 55.2% of the patients did not have anybody to carry out home care. Of the patients who had someone, 75% stated that the home care was carried out by their wives, 15.4% by their children, 5.8% by a private nurse, and 3.8% by their siblings or other family members. When asked about their needs for home care, the replies were using the toilet (22.4%), hygiene (22%), preparing a meal (20.7%), bathing (16.4%), transportation (14.7%),

domestic activities (1.2%), getting dressed (6%), and shopping (5.2%). There was another member in the family of 12.1% of the patients in the study who needed constant care. Moreover, 76.9% of those who carried out home care for the patients with prostate cancer had not received any kind of training in prostate cancer and 42.3% of the patients stated that the caregivers needed training. A total of 72.4% of the patients stated that their business and family life were affected negatively by prostate cancer, and 66.4% had a worsened relationship with their wives. A total of 69% of the patients stated that they met their emotional needs from their family members, 6.9% from their friends and relatives, while 24.1% stated that they could not at all. When asked about how they perceived their health, 19% of them stated that they were very well, 54.3% were well, and 26.7% were in poor health.

In this study, the average age of the patients with prostate cancer who need home care was found to be meaningfully high. It was seen as statistically meaningful that as their education level increased, their home care needs decreased. According to the study, there was no statistically meaningful relation between their employment and the need for home care. It was found that having a large family increased at a meaningful level the extent to which patients with prostate cancer needed home care. The patients living in city and district centers needed home care more than those living in villages [Table 1].

As the diagnosis time of the patients with prostate cancer increased, so did the number of those who needed home care, yet a statistically meaningful relation was not found. There is no meaningful relation found in the study between being an in-patient due to prostate cancer or being informed about prostate cancer and being in need of home care. It was found that the patients in the recurrence phase of prostate cancer needed home care more than those who were in the phases of diagnosis-treatment and healing. According to the results of the advanced analysis (*post hoc* Tukey) carried out, the difference stemmed from the patients who are in the recurrence phase of the illness [Table 2].

It was found that the extent to which the patients who had someone for home care in the family needed home care was high at a statistically meaningful level. It was found that the extent to which the patients who had someone in the family in need of care apart from them needed home care was high and significantly meaningful. The extent to which the patients who had no one to provide home care were in need of home care was high at a statistically meaningful level. The extent to which the patients whose relationship with their business and family lives were affected negatively needed home care was high, and the relationship was strong and significantly meaningful. The extent to which the patients whose relationship with their

Table 1: Distribution of the findings showing the effects of patients' descriptive characteristics on their home care needs

Descriptive characteristics	Home care needs				Statistics
	Yes		No		
	n	%*	n	%*	
Age (Mean±SD, years)	70.72±9.86		64.09±6.12		t=3.916, P=0.001
Education					
Illiterate	10	55.6	8	44.4	χ ² =13.735 d.f.=2, P=0.001**
Primary education	20	29.4	48	70.6	
Elementary and upper education	2	6.7	28	93.3	
Employment					
Employee	2	10.5	17	89.5	χ ² =3.310 d.f.=1, P>0.05
Unemploye	30	30.9	67	69.1	
Family type					
Nuclear	15	20.3	59	79.7	χ ² =5.476 d.f.=1, P=0.019
Large	17	40.5	25	59.5	
Residence					
City	3	7.9	35	92.1	χ ² =13.678 d.f.=2, P=0.001**
Districts	12	29.3	29	70.7	
Villages	17	45.9	20	54.1	

*Line percent were taken. ** Fisher's Exact test was performed materiality control

Table 2: Distribution of the findings showing the effects of characteristics related to the illness on their home care needs

Disease-related characteristics	Home care needs				Statistics
	Yes		No		
	n	%*	n	%*	
Diagnosis (Mean±SD, years)	6.19±6.12		4.65±3.60		t=1.665, d.f.=114, P>0.05
Hospitalization history					
Yes	28	28.0	72	72.0	χ ² =1000 d.f.=1, P>0.05
No	4	25.0	12	75.0	
Reason of hospitalization					
Radiotherapy	3	21.4	11	78.6	χ ² =2.404 d.f.=2, P>0.05
Chemotherapy	8	42.1	11	57.9	
Surgical	17	25.4	50	74.6	
Phase of the illness					
Diagnosis-treatment	7	19.4	29	80.6	χ ² =14.322 d.f.=2, P=0.001**
Healing	11	19.6	45	80.4	
Recurrence	14	58.3	10	41.7	
Information (for the disease)					
Yes	23	25.0	69	75.0	χ ² =1.489 d.f.=1, P>0.05
No	9	37.5	15	62.5	

*Line percent were taken. **Fisher's Exact test was performed materiality control

wives were affected negatively needed home care was high, but the relation was not meaningful. It was found that the use of medicine by the patients with prostate cancer who were in need of home care was high at a meaningful level. The patients who need home care felt their health situation was bad. The patients who need home care felt their health situation was bad. It was found that there was a significant relationship at a statistically important level between perceived health and

the need for home care. As a result of further analysis, it was revealed that the meaningfulness stemmed from the patients who felt their health was very good [Table 3]. The patients who had nobody at home to care for them needed home care 93 times more than those who did (odds ratio = 93.00, 95% of confidence interval: 11.95, 723.61).

Some sociodemographic features did not affect the need for home care significantly. The place to live in, having someone to care for at home and negative effects of prostate cancer on the patients' life were important explanatory factors in the need for home care. These variables provided a meaningful relationship at a high level with the need for home care ($R = 0.374$, $R^2 = 0.539$, $P < 0.001$). These three variables accounted for nearly 54% of the total variance in need for home care. It was found that there was no predictor effect of training on the need for home care [Table 4].

Discussion

Considering that men's health is a frequently ignored issue, it is important to study the existence of a degenerative illness such as cancer, especially, in this group and the needs of this group for home care.

It was detected in the study that the patients with prostate cancer who were older needed home care more

than the others. Studies showed that age was an important demographic variable in home care. As patients got older, the need for home care increased.^[24,27,28] Weakness in particular, which is caused by the symptoms of illness such as cancer and getting older, may lead to an increase in the need for home care.

It was seen that the more educated the patients were, the less they needed home care. Studies have showed education is an important factor to cope with illnesses in general. It is stated in parallel with the study results that as the level of education increased, the needs in the treatment process of prostate cancer diminished.^[27,28] The increase in participating in the treatment process with the increase in education may lead to progress in coping with the illness and a decrease in the need for home care. The extent to which the patients with prostate cancer having a nuclear family needed home care was higher than a large family. In the study carried out on patients with prostate cancer by Ardahan and Temel, it was found that the life quality of those who had nuclear families was better than that of the patients who had large families.^[29] As the number of family members increased, it became easier for the family members to take roles informally as caregivers to meet the needs of the patients. It was found in the study that those living in

Table 3: Distribution of the findings showing the effects of patients' home care selected characteristics on their home care needs					
Home care-related characteristics	Home care needs				Statistics
	Yes		No		
	n	%*	n	%*	
Daily self-care					
Yes	6	6.7	84	93.3	
No	26	100.00	-	-	
Somebody dealing with home care					
Available	31	59.6	21	40.4	$\chi^2=48.402$ d.f.=1, $P=0.000$
Unavailable	1	1.6	63	98.4	
Somebody dealing with home care					
Wives	22	56.4	17	43.6	
Children	4	50.0	4	50.0	
Siblings	2	100.0	-	-	
Private nurse	3	100.0	-	-	
Another people who need to home care at patients' family					
Available	10	71.4	4	28.6	$\chi^2=15.320$ d.f.=1, $P=0.000$
Unavailable	22	21.6	80	78.4	
Negative effects of prostate cancer on patients' life					
Yes	29	34.5	55	65.5	$\chi^2=7.337$ d.f.=1, $P=0.007$
No	3	9.4	29	90.6	
Effect partner relationships					
Yes	22	28.6	55	71.4	$\chi^2=0.111$ d.f.=1, $P>0.05$
No	10	25.6	29	74.4	
Health perception					
Very well	5	22.7	17	77.3	$\chi^2=12.452$ d.f.=2, $P=002^{**}$
Well	11	17.5	52	82.5	
Bad	16	51.6	15	48.4	

*Line percent were taken. **Fisher's Exact test was performed materiality control

Table 4: Investigation of multiple regression analysis the effects of patients' some demographic characteristics on their home care needs

Descriptive characteristics	B	β	t	P	
Constant	0.780	0.154	-	5.033	0.000
Education	0.356	0.052	0.079	1.074	0.285
Residence	-0.126	0.036	0.227	-3.465	0.001
Somebody dealing with home care	0.545	0.059	0.607	9.251	0.000
Negative effects on life	0.274	0.064	0.274	4.264	0.000

city and district centers needed home care less compared to those living in villages. It was harder for the patients living in villages to reach health services than those living in city and district centers, which was thought to increase the level of need for home care.

In the study, 72.4% of the patients stated that their business and family lives were negatively affected by the illness and 66.4% of them said that the relationship with their wives had deteriorated because of the illness; home care needs of those whose business and family lives were negatively affected increased. It has been reported in the literature that patients with prostate cancer had difficulty in coping with the problems they encountered; their sexual and social lives were affected significantly, and they had to become unemployed during the treatment of the illness.^[9,30] It was defined in the study that the family members and close relatives of the patients with prostate cancer provided social support for them; however, this support may remain limited, for they have limited knowledge of and limited experience in the disease.^[8] Having difficulty in coping with the illness due to the fact that the patients in need of home care and their family members as caregivers did not receive adequate consultancy support about the treatment may be one of the reasons why their business and family lives were negatively affected.

This study showed that 44.8% of the patients had a family member dealing with their home care and the majority of the caregivers were wives and children. The existence of other family members who were in need of home care was found to be significantly associated with the need for home care. Having more than one patient who was in need of home care in a family would make it difficult to perform the role of caregiver.

This study showed that the level of need for home care increased substantially during the recurrence phase of the illness. The relevant literature has shown that the period when patients most needed support was when the illness recurred and spread. Nurses should promote exchanging information in every phase of treatment to better cope with the illness, define the essentials of supplementary care and develop self-efficiency.^[24] It is

possible for patients to be psychologically affected due to the recurrence of the illness and to have a deteriorated capability of coping with the illness. It was found that the patients with prostate cancer who had a poor health perception needed home care more than the others at a meaningful level. It can be considered that such challenging symptoms such as the exhaustion felt due to cancer treatment affected negatively the patient's sense of health and increased the need for home care.

Conclusion

As a result of this study, the risk factors for the increasing level of the need of patients with prostate cancer for home care were elderly, low level of education, living in villages or with a large family, having other family members in need of home care and experiencing a recurrence of the illness. Meeting the needs of patients and their families by taking into consideration the risk factors defined as a result of this study will contribute to promoting the quality of the patients' home care. Thus, the health situation and life quality of patients will develop. The medical staff giving care in this way to patients with prostate cancer should pay attention to training and consultancy, including the support for the home care of the patients. The monitoring of patients by family members to detect the recurrence of the illness after treatment is important to manage the needs for home care.

Limitations

This study has some limitations. First, the study was conducted in one medical center. The other limitation is that the study was specific to prostate cancer and the interventions cannot be generalized for all cancer patients. Nevertheless, our study has given important evidence on home care needs in patients with prostate cancer. Thus, the results could provide important information on which to plan future work.

Implications for nursing practice

Men's health is a frequently ignored issue. Prostate cancer is one of the most frequent cancer types among men. The nurses who work in oncology units and home-care services develop plans based on home care needs. There is a need for more studies and evidence with the aim of defining and developing the needs of patients with prostate cancer for care.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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