

Determination of Health Care Needs in Older Individuals Visited at Home

Ev Ziyareti Yapılan Yaşlı Bireylerde Sağlık Bakım Gereksinimlerinin Belirlenmesi

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ABSTRACT Objective: The aim of the research is to provide knowledge about health care needs and nursing care of individuals aged 65 years and over who were visited within the context of public health nursing course. **Material and Methods:** The research is of descriptive type. The population of the research consisted of the older individuals living in the central neighborhoods of Avanos district, which was the public health nursing application field of a health college in Nevşehir between February and May 2017; and 110 older individuals were included in the sample who were selected by random sampling method and accepted the home visit. This was conducted 16 h a week for 12 weeks under the supervision of instructors. Students conducted home visits to designated families at least once a week for 45 min. The data were obtained by the researchers through a retrospective examination of the files pertaining to the home visits of students, and descriptive statistics and chi-square test were used in their assessment. **Results:** Fifty-nine nursing students conducted 601 home visits and provided home nursing services for 110 patients. Totally, 67.3% of the elderly were females and 68.18% were in the 65-74-year age group and 20% were living alone. The three most common chronic diseases were hypertension (46.6%), diabetes (24.6%), and cardiovascular diseases (13.3%). Moreover, 52.7% of the elderly were using multiple medications and 24.5% did not use their medications regularly. During the follow-up period, it was determined that the older people are in need for information about the disease, nutrition and the medicines they used (26.4%), inadequate fluid intake (20%) and the most common psychosocial problem that they experienced was found to be the inability to cope with stress (36.4%). In nursing care applications, it was determined that the students used education, research, care, and consultancy roles. **Conclusion:** Home visits are important for determining the health care needs of older individuals and for planning the services to be offered.

Keywords: Older; health care; nursing care; home visit

ÖZET Amaç: Araştırma, halk sağlığı hemşireliği dersi kapsamında ev ziyareti yapılan 65 yaş ve üstü bireylerin sağlık bakım gereksinimleri ve hemşirelik bakımına ilişkin bilgilerinin sunulması amaçlanmıştır. **Gereç ve Yöntemler:** Araştırma tanımlayıcı tiptedir. Araştırmanın evrenini, Şubat-Mayıs 2017 tarihlerinde, Nevşehir’de bir sağlık yüksekokulunun halk sağlığı hemşireliği uygulama alanı olan Avanos ilçesi merkez mahellerinde yaşayan yaşlılar oluşturmakta olup, rastgele örnekleme yöntemiyle seçilen ve ev ziyaretini kabul eden 110 yaşlı birey örnekleme dâhil edilmiştir. Uygulama öğretim elemanları danışmanlığında bir yarıyılıda haftada 16 saat ve 12 hafta olmak üzere yürütülmektedir. Öğrenciler sorumlu oldukları ailelere haftada en az 1 kez ve 45 dk ev ziyareti yapmaktadır. Veriler, araştırmacılar tarafından öğrenci uygulama dosyaları geriye doğru incelemeye elde edilmiş, değerlendirilmesinde tanımlayıcı istatistikler ve ki-kare testi kullanılmıştır. **Bulgular:** Yaşlıların %67,3’ü kadın, %68,18’i 65-74 yaş grubunda ve %20’si yalnız yaşamaktadır. İlk üç sırada görülen kronik hastalıklar hipertansiyon (%46,6), diyabet (%24,6), kardiyovasküler hastalıklardır (%13,3). Yaşlıların %52,7’sinin çoklu ilaç kullanımı olduğu ve %24,5’inin ilaçlarını düzenli kullanmadığı belirlenmiştir. İzlemler süresince yaşlıların hastalığa, kullandıkları ilaçlara ve beslenmeye ilişkin bilgi gereksinimi (%26,4), sıvı tüketiminde yetersizlik (%20) olduğu ve psikososyal sorunlardan en fazla yaşananın stresle başedememe (%36,4) olduğu belirlenmiştir. Hemşirelik bakımı uygulamalarında öğrencilerin eğitim, araştırma, bakım ve danışmanlık rollerini kullandıkları belirlenmiştir. **Sonuç:** Sonuç olarak yaşlı bireylerin sağlık bakım gereksinimlerinin belirlenmesinde ve bu doğrultuda sunulacak hizmetlerin planlanmasında ev ziyaretleri önemli yer tutmaktadır.

Anahtar Kelimeler: Yaşlı; sağlık bakım gereksinimi; hemşirelik bakımı; ev ziyareti

The worldwide older population of 382 million in 1980 has increased more than twice and reached 962 million in 2017; this figure is estimated to reach 2.1 billion by 2050.¹ The older population in Turkey increased from 5.68 million in 2012 to 6.65 million in 2016, with an increase in 17.1% in the last five years. The percentage of the older population within the total population increased from 7.5% in 2012 to 8.3% in 2016.² It has been emphasized worldwide that due to this rapid change in the older population, governments should formulate policies specifically targeting the health needs of the older to address housing, employment, health care, and social security issues and achieve intergenerational solidarity.¹ However, the main purpose of healthcare services provided to the older should ensure that the older live in their own homes as long as possible without being dependent on others.^{3,4} Public health nurses play a key role in providing these services. One of the important tasks of public health nurses in maintaining and improving health is home visits.⁵ Buyukcoskun (1998) found that public health nursing services offered at home increase the level of independence of the older in daily life activities and improve their health problems and also result in positive changes in maintaining and improving geriatric health.⁵ In a meta-analysis examining the effects of home visits by nurses on the health of older people, home visits were found to positively affect psychosocial health, decrease hospitalization, and affect physical health at a moderate level.⁶

In our country, home visits within the scope of the public health nursing course are made by the the hospitals and/or health centers which are present in the province or district where the universities are located. Home visits enable public health nurses to apply their theoretical knowledge, pass from being a student to being a professional, use and develop professional knowledge and skills, and make decisions; and develop their skills of problem solving, interpersonal relationships and communication skills.

In this study, it was aimed to determine and provide the health care needs of individuals aged

65 and over who were visited by the nursing students within the scope of public health nursing course applications.

MATERIAL AND METHODS

STUDY DESIGN AND SAMPLE

The research is of descriptive type. The population of the research consisted of the older individuals living in the central neighborhoods of Avanos district, which was the public health nursing application field of a health college in Nevşehir older individuals were included. The sample of the study consisted of 110 people aged 65 and over elderly people, who were followed by the students through visiting the homes of the families that they randomly selected. The data of the research were collected from Avanos district of Nevşehir province, which was an application field of public health nursing. Avanos is the district which owns the highest number of older population.⁷

HOME VISITS

Nursing students who made home visits were senior students and had already taken courses covering the first three years of their education as a prerequisite of their course. The older individuals were followed by the students making home visits 10-12 times between February and May 2017. Home visits were conducted twice a week during one semester under the supervision of the faculty members. Students visited the families for whom they were responsible at least once a week. Students made home visits to designated families at least once a week for 45 min. During the home visits, the students determined the health problems suffered at home by the older people; and they recorded the nursing practices intended for the solution of the problems, the characteristics of the older people which they gave care, and the nursing care plans to the application files.

DATA COLLECTION

In the study, the data were collected by the researchers through retrospective examination of the files from the home visit files of the student. In the home visit files, there were demographic charac-

TABLE 1: Descriptive characteristics of the older individuals visited at home.

Descriptive Characteristics	n	%
Gender		
Female	74	67.3
Male	36	32.7
Age		
65-74	75	68.2
75-84	26	23.6
85 and above	9	8.2
Marital status		
Married	69	62.7
Single	41	37.3
Educational status		
Illiterate	31	28.2
Literate	24	21.8
Primary school graduate	34	30.9
Middle school graduate	3	2.7
High school graduate	6	5.5
University graduate	12	10.9
Income status		
Below the minimum wage	62	56.4
Above the minimum wage	48	43.6
Social security		
There is	104	94.5
No	6	5.5
The person he lives with		
Partner	67	60.9
Son	11	10.0
Daughter	8	7.3
Daily caregiver	2	1.8
Alone	22	20.0
Total	110	100.00

teristics and chronic diseases of the older people, medications they used, their health problems determined through home visits, and nursing interventions and roles for the identified problems.

STATISTICAL ANALYSIS

Data were analyzed by statistical package program and descriptive and analytical statistics were used to evaluate the data.

ETHICAL CONSIDERATIONS

Approval from University Ethics Committee (02.02.2016/84902927) and verbal consent from all participants were obtained. The study was conducted in accordance with the principles of the Declaration of Helsinki.

RESULTS

Within the scope of the public health nursing course, 59 student nurses made 601 home visits and provided home nursing services to 110 patients over 65 years of age. Table 1 presents the descriptive characteristics of older individuals who were monitored and cared for through home visits.

Totally, 67.3% of the older people were females and 68.2% were in the 65–74 year age group; 62.7% were married, 71.8% were literate, 56.4% had income below the minimum wage, 94.5% had social security, and 20% lived alone (Table 1). Hypertension (46.6%), diabetes (24.6%), and cardiovascular diseases (13.4%) were the most common chronic diseases. It was found that 52.7% of the older individuals were taking multiple medications and 24.5% did not use their medications regularly (Table 2).

Among the problems identified during home visits, the most common ones were lack of information in chronic diseases (26.4%), inadequate water intake (20%), high blood pressure (14.1%),

TABLE 2: Distribution chronic diseases and number of medications used by the older persons visited at home.

	n	%
Chronic Disease Status *		
Hypertension	70	47.0
Diabetes	37	24.8
Cardiovascular D.	20	13.4
COPD	8	5.4
Depression	4	2.7
Osteoporosis	4	2.7
Reflux Disease	2	1.3
Prostate CA	1	0.7
Hyperthyroidism	1	0.7
Hyperlipidemia	2	1.3
Total	149	100.00
Number of Drugs Used		
Less than 4	52	47.3
4 or above	58	52.7
Total	110	
Medication Use Status		
Regularly using	83	75.5
Does not use regularly	27	24.5
Total	110	100.00

*Declared more than one disease.

TABLE 3: According to age and gender, the informational status of the older individuals regarding the disease and their case of using medicine.

Characteristics	Lack of information on diseases (n=87)					Insufficiency of water consumption (n=65)				
	There is		No		P*	There is		No		P*
	n	%	n	%		n	%	n	%	
Gender										
Female	65	74.4	11	47.8	.015	45	69.2	31	68.9	.001
Male	22	25.4	12	52.2		20	30.8	14	31.1	
Age										
65-74	60	80.0	15	65.2	.456	42	64.6	33	73.3	.225
75 and over	27	20.0	8	34.8		23	35.4	12	26.7	

* The chi-square analysis results for the categorical variables are in the table.

and problems related to medicine use (8.2%, Figure 1). No statistically significant difference was found according to age and gender in the awareness status of the older people regarding the disease and their cases of using medication. According to gender and water consumption; 69.22% of females and 30.8% of males had insufficient water consumption and no statistically significant difference was found between them (Table 3).

In the examination of the psychosocial problems in the older individuals, 36.4% of them were unable to cope with stress, 28% had social isolation, 17.6% had problems in acknowledging their diseases, 10.3% felt grief, and 7.5% had other psychosocial problem. The students mostly solved the problems identified by them during their home visits by utilizing the roles of education (47.8%), research (20.3%) and caregiving (15.4%) (Figure 2, Figure 3).

DISCUSSION

Home visits to the younger old (60-75 years) had a higher impact, whereas they had a negative effect on the older individuals over the age of 80 years.⁶ In the present study, more than half of the older individuals visited at home were in the 65-74 year age group. Furthermore, the majority of the older people visited at home (67.3%) were females; this finding was consistent with the rate of the female population (56%) among the older people in Turkey.⁸ The rate of illiteracy (20.8%) in the older

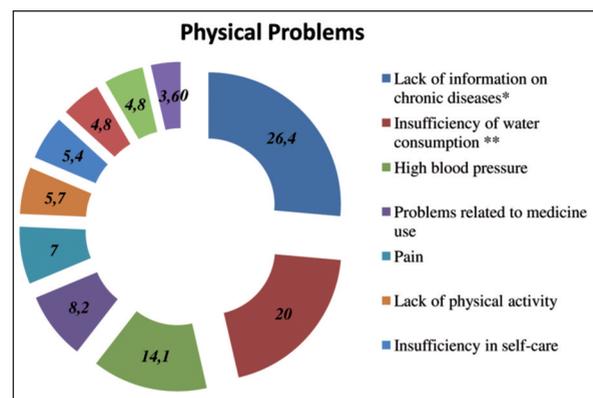


FIGURE 1: Distribution of physical problems of the older individuals identified during home visits.

*Covers problems related to nutrition and insulin administration in diabetes and lack of knowledge in issues such as exercise, hypertension, and salt consumption.

**4 cups less water intake per day.

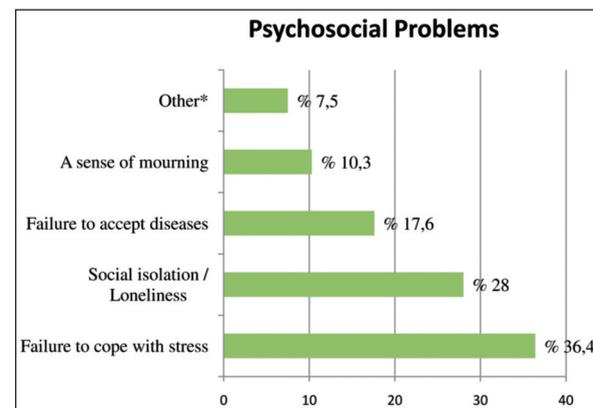


FIGURE 2: Distribution of psychosocial problems in the older individuals identified during home visits.

*Other psychosocial problems include obscurity, impaired communication, and inability to maintain health.

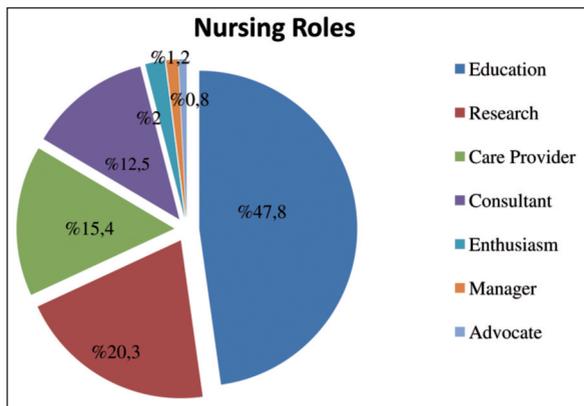


FIGURE 3: Distribution of nursing roles used to solve problems identified during home visits.

*The students used multiple nursing roles simultaneously to solve identified health problems.

population has decreased over the years. In this study, the rate of illiteracy (28.2%) was found to be above the country average, although the study field has a high socioeconomic level (Table 1).

Regular home visits made by nurses have a positive effect on the quality of life of older patients with chronic diseases as a result of reducing hospital stay, unexpected deaths, and health expenditures.⁹⁻¹³ Therefore, home visits to older people who have chronic disease and disability have been recommended to be prioritized.⁶ In the present study, hypertension, diabetes, and cardiovascular diseases were found to be most common problems among the older individuals visited at home, more than half of them were using multiple medications and 24.5% did not use their medications regularly (Table 2). In the older individuals who were visited in their homes insufficient water consumption, high blood pressure and lack of information about the chronic disease (medicine and nutrition etc.), and problems related to taking medicine stands forth as primary problems (Table 3).

Insufficient fluid intake is an important problem in the older population; it has been reported that falling, cognitive impairment, confusion, constipation, laxative use, and recurrent hospitalization can be prevented by ensuring sufficient fluid intake and supporting the physical and mental conditions of the individuals.^{14,15} The insufficient water consumption of the female older individuals was

found to be twice that of male, and a statistically significant difference was determined between them (Table 3; $p > 0.05$). In his study, Aksoydan was found that the mean water consumption was 5.5 cups per day in men and 4.9 in women.¹⁶ In Turkey, among older individuals both receiving institutional care and living at home, water intake was found to be insufficient.¹⁷ Similarly, in this study, with regard to the daily needs of the older individuals, insufficiency of water consumption was found to rank first among the health problems. Individuals stated that they did not like to drink water. They were observed to believe that they were drinking enough water while taking medicine. Considering the problems that may be caused by insufficient fluid intake, the importance of monitoring the sample group in this respect is noteworthy.

In the current study, psychosocial problems (stress, social isolation, not acknowledging diseases, grief) were significant in the older individuals visited at home (Figure 2). It has been stated that nursing services offered by home visits are not only effective in identifying psychosocial problems in older people but also in resolving these problems.^{11,18,19} During the home visits which were made within the scope of the public health nursing course application, students often interviewed women and the older individuals present there, for the men were at work. For this reason, they have identified and conducted training and consultancy issues for the problems and information needs of older people.

In the current study, nursing students made some attempts to resolve the health problems identified in older individuals. The students resolved these problems by utilizing the role of education (Figure 3). In studies investigating the effectiveness of home visits, it can be seen that health education is the most used attempt by nurses.^{13,18,19} In terms of the development and professionalism of our occupation, it is very important for public health nurses to be aware of their educational role and implement it. It is very important for nurses to be aware of their all professional roles and to use these roles to prove themselves and to develop the nursing profession.

In conclusion, home visits by nurses have an important place in determining the health care needs of older people. Home visits are an important tool for not only determining the need for care but also meeting these needs and improving the health condition of older individuals. However, home visit services by nurses as implemented in this study are not offered within the scope of health services in Turkey; and the public health nursing course presented in this study is a method used by a school in nursing education. It is recommended that evidence-based studies demonstrating the effectiveness of home visits at the national level are planned so that the health care needs of the growing older population can be addressed in a holistic and multidisciplinary manner.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Ayşegül Özcan, Kamuran Özdil; **Design:** Ayşegül Özcan, Kamuran Özdil; **Control/Supervision:** Ayşegül Özcan, Kamuran Özdil; **Data Collection and/or Processing:** Ayşegül Özcan; **Analysis and/or Interpretation:** Ayşegül Özcan, Kamuran Özdil, Gülhan Küçük Öztürk; **Literature Review:** Ayşegül Özcan, Kamuran Özdil, Gülhan Küçük Öztürk; **Writing the Article:** Ayşegül Özcan, Kamuran Özdil, Gülhan Küçük Öztürk; **Critical Review:** Ayşegül Özcan.

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