Journal of Gerontology & Geriatric Research

Aktas, et al, J Gerontol Geriatr Res 2016, 6:1
DOI: 10.4172/2167-7182.1000379

Research Article Open Access

Application of the Omaha System in the Determination of Healthcare Needs of Individuals Receiving Home Healthcare

Betül Aktaş*, Medine Yilmaz, Nazife Kaplan and Banu Çankiri

Sanko University, Gaziantep, Turkey

***Corresponding author:** Betül Aktaş, Sanko University, Gazimuhtar Paşa Boulevard, No: 36, 27090 Şehitkamil, Gaziantep, Turkey, Tel: 05055250335; E-mail: betulaktas36@gmail.com

Rec date: Nov 28, 2016; **Acc date:** Dec 20, 2016; **Pub date:** Dec 23, 2016

Abstract

Objective: The aim of this study was to detect the needs of individuals receiving home healthcare and to create guidance data for initiatives to be planned for this purpose by demonstrating the availability of the Omaha system in determining the care needs of these people.

Background: Home care services are generally provided to promote and protect an individual's wellbeing or to restore his/her to health either by health professionals or by family members in the person's own home or the place where he/she lives. Design. Eighty-seven people receiving home healthcare services from Bayındır State Hospital affiliated with Izmir Province Association of Public Hospitals South General Secretariat in their home environment between January 2015 and April 2015 comprised the population and sample of this descriptive and cross-sectional

Study and methods: The sample of the research field of home care services unit formed individuals (N=87). A total of 50 patients were included in the study. The data collection tools used in the study were the 5-item sociodemographic characteristics questionnaire and OMAHA problem classification scheme (PCS).

Results: According to the OMAHA PCS, 29 problems were identified. The problems identified, 49% were in the physiological domain, 28.8% in the health-related behaviors domain, 15.4% in the psychosocial domain and 6.8% in the environmental domain. With the nursing diagnoses, 2326 actual symptoms-signs were determined.

Conclusion: It was determined that the OMAHA PCS could be used to identify healthcare needs of people receiving home care services.

Keywords: Home health care; The Omaha System; Healthcare needs

Introduction

In our age, aging and increases in aging-associated chronic diseases and disabilities have started to create a lot of pressure on social policies. Because this increase, along with the increased average life span, has led to rise in need for care, to increases in costs of health care beyond estimations, and thus to the development of alternative systems [1].

A person's needs, and socio-cultural values and preferences affect their decision to receive long-term care services either at home or in an institution. Home healthcare services can be provided for people who need healthcare due to factors such as chronic diseases, severe mental illnesses, developmental disabilities, and old age if they want to, as an alternative to institutional healthcare [2].

Home health care is a care model that includes psychosocial, physiological, and medical support services offered to elderly persons, convalescents, people with disabilities and/or people with chronic diseases in their own environment. Home health care aims to help those people to adapt to social life and to integrate them into society so that they can lead a happy and peaceful life. It also aims to ease the burden on family members, particularly women, who provide care for those people [3].

Home care services are generally provided to promote and protect an individual's wellbeing or to restore his/her to health either by health professionals or by family members in the person's own home or the place where he/she lives.

These services also aim to protect the person's quality of life and social prestige considering his/her needs in a wide range of health and social services. Therefore, home healthcare services are in general defined as services which take the place of institutional care and reduce the need for and length of stay in institutions [1].

Long-term care needs of a person constantly change in the flow of his/her life, and are affected by the environment and changes in the physical, mental, cognitive, and/or functional capacities of that person. While most people lose some of their functional capacities, they can regain others. Therefore, it is often difficult to determine the type and duration of healthcare need of a person [2].

Nursing classification systems are used to classify and label patient-related problems that nurses deal with, interventions to solve these problems and these interventions' contribution to patient outcomes [4]. The Omaha System, one of the nursing classification systems, is based on "problem-solving approaches in the nursing process", and it combines and analyzes individual-focused basic information [5].

This system classifies the health needs of individuals and makes the provision of healthcare and focusing on the problem easier. The

Problem Rating Scale which assesses an individual's health in the process of problem solution in the same way ensures the continuity of health monitoring of the individual [5-8].

The system which was first used for the community-based home care was later used in health areas such as public health, school health and occupational health [6,9-11]. In Turkey, there are several area studies in which the Omaha System problem classification scheme is used either alone or together with the rating scale.

Among these studies are "effects of the use of the Omaha system in the development of women's health on the lifestyle and quality of life [12]", "determination of nursing practices, and the healthcare needs of the elderly living in nursing homes [10,13]", "determination of elementary school students' health problems [9]", "assessment of occupational health nursing interventions with the Omaha nursing interventions scheme [5]", "the use of the Omaha system in occupational health nursing practices, advantages of nurses' using a common language in the assessment of health problems, diagnosis and interventions [14]", "application-based use of the Omaha System in the family nursing training [15]", "the use of the Omaha System to identify of health problems, health applications and results in the provision of home healthcare [16]", and "the use of the Omaha system in the nursing care of children with acute care needs [17]".

This present study is expected to contribute to the provision of home care services as well.

Aim: The aim of the present study is to diagnose the needs of individuals receiving home healthcare with a standard method by demonstrating the availability of the Omaha system in determining health care needs of those individuals, and to create guidance for attempts to be planned in this area.

Methods

Design and sampling

Eighty-seven people receiving home healthcare services from Bayındır State Hospital affiliated with Izmir Province Association of Public Hospitals South General Secretariat in their home environment between January 2015 and April 2015 comprised the population and sample of this descriptive and cross-sectional study.

During the study, of these 87 people, 22 who lost their lives and 5 who were referred to other hospitals were excluded from the study. In addition, 10 people who lived in mountain villages were also excluded from the study because it was difficult to access them. Therefore, the study data were collected from the remaining 50 people who volunteered to participate in the study and who were contacted (participation rate: 57.5%).

Inclusion criteria: Receiving home healthcare services, being registered with a home healthcare unit, volunteering to participate in the study and living in an accessible area.

Exclusion criteria: Not being registered with a home healthcare unit, not volunteering to participate in the study, villages who cannot be reached by public transport.

Data collection

The study data were collected from the participants in the home environment between January 2015 and April 2015 by the researchers through one-to-one interviews using the observation method.

In the study, the sociodemographic characteristics questionnaire and OMAHA problem classification scheme were used as data collection tools.

Sociodemographic characteristics questionnaire: The questionnaire developed by the researchers includes five items questioning the participants' socio-demographic characteristics (age, gender, education, place of residence, people lived together at home, etc.).

OMAHA problem classification scheme: The problem classification scheme (PCS) was used to collect data on individuals' health assessment.

The OMAHA system developed by the North America Visiting Nurses Association (VNA) is the oldest classification system used since 1975 and enables nurses to implement and keep the records. The OMAHA system was adapted to Turkish by Erdogan, and it was proven that it was a valid and reliable tool for the Turkish society and could be used in public health nursing education. The model was considered as a guiding tool indicating the value of the nursing process in practice [7].

The PCS is the section in which nursing diagnoses are classified. The scheme holistically diagnoses health problems of an individual in four domains (environmental, psychological, physiological, and health-related behaviors) [6,9,10,18].

Ethical considerations

The permission to conduct the study was received from the ethics committee (dated and numbered 18/12/2014, 277). Prospective participants receiving home healthcare services and their families were informed about the study and told that the participation was voluntary. Then their consent was obtained.

Data analysis

Statistical analysis of the data was conducted using the SPSS 20.0 statistical software package. For the evaluation of the data, percentages and means were used.

Results

Analysis of the socio-demographic characteristics of the participants demonstrated that of them, 74% were in the 65 and over age group, 62% were female, 76% were illiterate, 46% lived in a village, 54% lived in a town, 44% lived with their children, and 24% lived with their spouse (Table 1).

In the study, the participants were determined to have 2326 (46.5 per person) symptoms, signs, deficiencies, insufficiencies related to 29 problems included in the four diagnosis domains designated in the OMAHA Problem Classification Scheme (Figure 1).

In the present study, the participants' symptoms, signs, deficiencies, insufficiencies related to the four diagnosis domains designated in the OMAHA Problem Classification Scheme were evaluated. These symptoms, signs, deficiencies, insufficiencies are as follows:

Environmental domain

In this domain, 159 insufficiencies related to 3 problems (housing, sanitation, income) were identified.

Socio-Demographic Characteristics	Number	%
Gender		
Female	31	62
Male	19	38
Age		
17-19 years	3	6
47-64 years	10	20
65 years and over	37	74
Education		
Illiterate	38	76
Primary school graduate	9	18
Secondary school graduate	3	6
Place of residence		
Village	23	46
Town	27	54
Households		
Alone	3	6
Spouse	12	24
Spouse and children	5	10
Children	22	44
Relatives	2	4
Mother and/or father	6	12
Total	50	100

Table 1: Distribution of socio-demographic characteristics of the participants.

The housing-related problem comprised 87 (54.7%) insufficiencies. Of these insufficiencies, 29.9% were associated with the inadequate heating and cooling system, 27.6% with the untidy living area and 24.1% with the structurally weak housing. The sanitation-related problem comprised 56 (35.2%) insufficiencies. Of these insufficiencies, 41.2% were due to the dirty living area, and 30.4% due to bed smelling of the living area. The income-related problem included 16 (10.1%) insufficiencies, all of which resulted from low-income levels or lack of income (Table 3).

Physiological domain

In this domain, 1140 impairments related to 10 problems were identified. The hearing-related problem included 36 (3.1%) impairments all of which were related to difficulties in hearing normal speaking voices.

Of the problems identified, 49% were in the physiological domain, 28.8% in the health-related behaviors domain, 15.4% in the psychosocial domain and 6.8% in the environmental domain (Table 2).

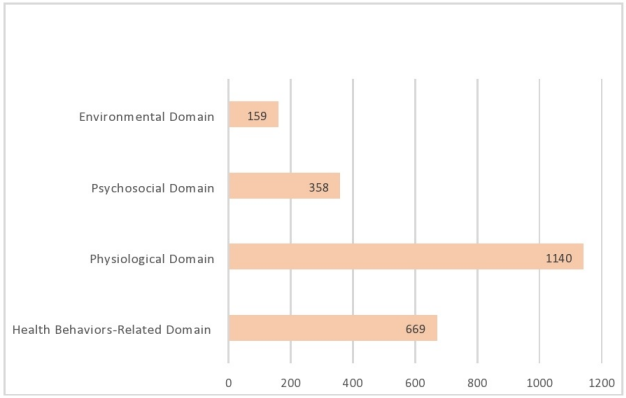

Figure 1: Distribution of individuals in terms of the four domains of the OMAHA problem classification scheme (N=2326).

Problem Classification Domain	Nursing diagnoses	The number of the problems identified	The percentage of the problems identified
Environmental Domain	Income	16	0.68
	Sanitation	56	2.41
	Housing	87	3.74
	Total	**159**	**6.83**
Psychosocial Domain	Utilization of community resources	20	0.86
	Social interactions	37	1.59
	Interpersonal relationships	62	2.67
	Mental health	121	5.20
	Caregiving/parenting	87	3.74
	Neglect	31	1.33

	Total	358	15.4
Physiological Domain	Hearing	36	1.55
	Vision	73	3.14
	Speech and language	34	1.46
	Oral health	67	2.88
	Cognitive status	133	5.72
	Pain	76	3.27
	Consciousness	27	1.16
	Skin	144	6.19
	Neuro-musculo-skeletal function	231	9.93
	Respiratory function	82	3.53
	Circulatory function	64	2.75
	Digestion and hydration	72	3.10
	Intestine	59	2.54
	Urinary function	42	1.81
	Total	**1140**	**49.0**
Health Behaviors-Related Domain	Self-feeding and nutrition	103	4.43
	Sleep	70	3.00
	Physical activity	38	1.63
	Personal care	377	16.21
	Medication	81	3.48
	Total	**669**	**28.8**
General total		**2326**	**100**

Table 2: Distribution of Nursing Diagnoses of the Participants in Terms of Problem Classification Domains.

Problem	**Insufficiency**	**Number**	**%**
Income	Low/none	16	100
Total		**16**	**10.1**
Sanitation	Dirty living area	23	41.2
	Storage and disposal of food	4	7.1
	Bed smelling of the living area	17	30.4
	Insufficient fresh water	4	7.1
	Laundry	4	7.1
	Mold	4	7.1
Total		**56**	**35.2**
Housing	Structurally weak housing	21	24.1

	Inadequate heating and cooling system	26	29.9
	Steep/unsafe stairs	3	3.4
	Narrow and inadequate entrance to the building	8	9.2
	Untidy living area	24	27.6
	Crowded/inadequate living area	5	5.7
Total		**87**	**54.7**
Environmental domain total		**159**	**100**

Table 3: Problems and insufficiencies related to the environmental domain according to the OMAHA problem classification scheme.

There were 73 (6.4%) impairments related to vision. Of these impairments, 54.8% were associated with having trouble reading small font size texts, and 38.4% with having difficulty seeing distant objects.The number of speech and language impairments was 34 (2.9%). Of them, 61.7% were related to improper pronunciation and incomprehensibility, and 38.2% to inability to speak. Of the impairments regarding the 67 (5.9%) oral health problems, 32.8% were related to the loss of teeth, 25.4% to ill-fitting dentures or dentures with missing teeth, 20.9% to tooth decays and 20.9% to injured, swollen or bleeding gums. There were 133 (11.7%) impairments related to the cognitive status problem. Of these impairments, 30.8% were related to inadequacy in the calculation and counting skills, and 29.3% to decreased reasoning ability. Of the impairments regarding the 76 (6.7%) pain problems, 42.1% were related to grimace, 30.3% to pale appearance/sweating. Regarding consciousness, 27 (2.4%) impairments were identified. While stupor constituted 37% of the impairments, lethargy constituted 48.1% of them. The number of impairments related to the skin problem was 144 (12.6%). While 22.9% of the impairments were associated with dry skin, 20.8% were associated with pressure sores. There were 231 (20.3%) impairments regarding the neuro-musculo-skeletal functions. Of these impairments, 20.3% were associated with a decrease in muscle strength and 19.5% were associated with difficulty in walking/moving.

The number of impairments associated with breathing (respiratory system) was 82 (7.2%). Whereas 40.2% of them were related to abnormal breathing, 20.7% were related to coughing. Of the impairments regarding the 64 (5.6%) circulatory system problems, 45.3% were identified as discoloration of the skin/cyanosis and 37.5% were identified as edema. Seventy-two (6.3%) impairments regarding the digestion and hydration were identified. Of the impairments, 41.7% were related to anorexia. Of the 59 (5.2%) intestinal function-related impairments, 69.5% were associated with fecal incontinence, and of the 42 (3.7%) urinary function-related impairments, all were associated with urinary incontinence (Table 4).

Problem	**Impairment**	**Number**	**%**
Hearing	Difficulty in hearing normal speaking voices	36	100
Total		**36**	**3.1**
Vision	Having trouble reading small font size texts	40	54.8
	Having difficulty seeing distant objects	28	38.4
	Others	5	6.8
Total		**73**	**6.4**
Speech and	Limited ability to speak or produce	13	38.2
Language	sound/inability to speak		
	Improper pronunciation, and incomprehensibility	21	61.7
Total		**34**	**2.9**
Oral Health	Deformity in the teeth, broken/missing teeth	22	32.8
	Tooth decays	14	20.9
	Injured, swollen or bleeding gums	14	20.9
	Ill-fitting dentures or dentures with missing teeth	17	25.4
Total		**67**	**5.9**

Cognitive Status	Decreased reasoning ability	39	29.3
	Deterioration in orientation to time/person/place	19	14.3
	Inability to recall recent events	8	6.0
	Inability to recall the events from the distant past	9	6.7
	Inadequacy in the calculation and counting skills	41	30.8
	Lack of concentration	11	8.3
	Uncontrolled movements	6	4.5
Total		**133**	**11.7**
Pain	Attempts to protect the aching part	21	27.6
	Grimace	32	42.1
	Pale appearance/sweating	23	30.3
Total		**76**	**6.7**
Consciousness	Lethargy	10	37.0
	Stupor	13	48.1
	Unresponsiveness to stimuli	4	14.8
Total		**27**	**2.4**
Skin	Lesion/pressure sore	30	20.8
	Rash	18	12.5
	Dry skin	33	22.9
	Inflammation	13	9.0
	Itching	18	12.5
	Bruise	21	14.6
	Excessive growth of nails/nail hypertrophy	11	7.6
Total		**144**	**12.6**
Neuro-Musculo-Skeletal Functions	Decrease in muscle strength	47	20.3
	Decreased coordination	36	15.6
	Decrease in muscle tone	35	15.2
	Reduction in sensation	13	5.6
	Balance disorder	13	5.6
	Difficulty in walking/moving	45	19.5
	Transfer difficulty	38	16.5
	Fractures	4	1.7
Total		**231**	**20.3**
Respiration	Abnormal breathing types	33	40.2
	Inability to breathe independently	6	7.3
	Coughing	17	20.7

	Voice breathing	15	18.3
	Abnormal breathing sounds	11	13.4
Total		**82**	**7.2**
Circulation	Edema	24	37.5
	Discoloration of the skin/cyanosis	29	45.3
	Abnormal blood pressure measurements	11	17.2
Total		**64**	**5.6**
Digestion and Hydration	Difficulty in chewing/swallowing/indigestion	25	3.7
	Anorexia	30	41.7
	Cracked lips/dry mouth	17	23.6
Total		**72**	**6.3**
Intestinal Function	Abnormal stool consistency/frequent	18	30.5
	defecation	41	69.5
Total	Fecal incontinence	**59**	**5.2**
Urinary Function	Urinary incontinence	42	100
Total		**42**	**3.7**
General Total for the Physiological Domain		**1140**	**100**

Table 4: Problems and insufficiencies related to the physiological domain according to the OMAHA problem classification scheme.

Physiological domain

In this domain, 358 inabilities related to 10 problems were identified.

Twenty (5.6%) inabilities regarding the utilization of community resources were identified. Of them, 35% were related to inability to know options/processes on how to utilize services. Of the 37 (10.3%) inabilities regarding the social interactions, all were associated with establishing social interaction. There were 62 (17.3%) inabilities regarding interpersonal relations. While 54.8% of these inabilities were related to the shortage of shared activities, 25.8% were related to establishing interpersonal relationships. The number of the inabilities regarding the mental health was 121 (33.8%). Of them, 22.3% were sadness/despair/decreases in self-esteem, 22.3% were worries/undefined fears. The number of inabilities identified within the framework of caregiving/parenting was 87 (24.3%). Of them, 52.9% were associated with difficulty in taking responsibility/dissatisfaction, and 47.1% with difficulty in providing physical care/safety. Regarding neglect, 31 (8.7%) inabilities were determined. Of them, 64.5% were associated with the lack of physical care (Table 5).

Problem	Insufficiencies	Number	%
Utilization of Community Resources	Inability to know options/processes on how to utilize services	7	35
	Inability to know the tasks and roles of service providers	5	25
	Inability to access services	4	20
	Inadequate communication tools/failure to use of communication tools	4	20
Total		**20**	**5.6**
Social Interactions	Lack of social interaction	37	100
Total		**37**	**10.3**
Interpersonal Relations	Difficulty in establishing and maintaining interpersonal relationships	9	14.5
	Shortage of shared activities	34	54.8

	Lack of interpersonal communication	16	25.8
	skills Prolonged, unresolved tensions	3	4.8
Total		**62**	**17.3**
Mental Health	Sadness/despair/decreases in self-esteem	27	22.3
	Concern (worries)/undefined fears	27	22.3
	Loss of interest in self-care and maintenance of daily activities	23	19.0
	Blunting of emotions	9	7.4
	Restless/agitated/aggressive	23	19.0
	Difficulty in anger management	5	4.1
	Hallucinations/illusions	3	2.5
	Stating the desire to commit suicide/homicide	4	3.3
Total		**121**	**33.8**
Caregiving/Parenting	Difficulty in providing physical care/safety	41	47.1
	Difficulty in taking responsibility, dissatisfaction	46	52.9
Total		**87**	**24.3**
Neglect	Lack of physical care	20	64.5
	Lack of emotional care/support	11	35.5
Total		**31**	**8.7**
General Total for the Psychosocial Domain		**358**	**100**

Table 5: Problems and insufficiencies related to the psychosocial domain according to the OMAHA Problem Classification Scheme.

Health behavior domain

In this domain, 669 insufficiencies related to 5 problems were identified. Regarding self-feeding and nutrition, 103 (15.4%) insufficiencies were determined. Of them, 40.8% were malnutrition-associated insufficiencies. Of the 70 (10.5%) insufficiencies related to sleep and rest patterns, 45.7% were associated with frequent night waking. Of the 377 (56.4%) insufficiencies related to personal care, 12.5% were associated with forgetting/not willing/not being able to do personal care activities, 11.7% with the cleaning/washing of the clothes, 11.9% with not being able to have a bath, 11.7% with not being able to clean himself/herself after going to the toilet and 11.9% with having difficulty in wearing lower body clothing. Of the 81 (12.1%) insufficiencies related to the management of drug administration, 56.8% were associated with failure to take medication without aid and 23.5% with non-compliance with the recommended dose/treatment program (Table 6).

Problem	Insufficiencies	Number	%
Self-Feeding and Nutrition	Overweight (BMI score of 25 and above)	21	20.4
	Underweight (BMI score of 18.5 and below)	4	3.9
	Daily calorie/fluid intake lower than the standard	19	18.4
	Malnutrition	42	40.8
	Inability to maintain the proposed nutrition program	3	2.9
	Inability to buy and prepare food	14	13.6
Total		**103**	**15.4**
Sleep and Rest Pattern	Sleep and rest patterns causing discomfort to family members	20	28.6

	Frequent night waking	32	45.7
	Insomnia	18	25.7
Total		**70**	**10.5**
Physical Activity	Sedentary lifestyle	38	100
Total		**38**	**5.7**
Personal Care	Inability to clean and wash clothing	44	11.7
	Inability to have a bath	45	11.9
	Difficulty in cleaning himself/herself after going to the toilet	44	11.7
	Difficulty in wearing lower body clothing	45	11.9
	Difficulty in wearing upper body clothing	38	10.1
	Bad body odor	29	7.7
	Difficulty in washing and combing hair	42	11.1
	Difficulty in performing oral care/tooth brushing/flossing	43	11.4
	Forgetting/not willing/not being able to do personal care activities	47	12.5
Total		**377**	**56.4**
Management of Medication	Non-compliance with the recommended dose/treatment program	19	23.5
	Inadequate management of medication	16	19.8
	Failure to take medication without aid	46	56.8
Total		**81**	**12.1**
General total for the health-related problems domain		**669**	**100**

Table 6: Problems and insufficiencies related to the health-related problems domain according to the OMAHA Problem Classification Scheme.

Discussion

In this present study, health problems of individuals receiving home healthcare were determined through one-to-one interviews using the observation method at the participants' homes. During the interviews, the OMAHA Problem Classification Scheme was used.

Of the participants, 74% were in the 65 and over age group. As in the present study, the majority of individuals participating in several other studies were elderly people [16,19-22]. This situation reveals the necessity of home healthcare services for the elderly in Turkey where the average life expectancy is increasing with each passing day.

Problems among the participants were identified based on four domains of the OMAHA Problem Classification Scheme. Of the problems identified, 49% were in the physiological domain, 28.8% in the health-related behaviors domain, 15.4% in the psychosocial domain and 6.8% in the environmental domain. As the identified problems demonstrate, the OMAHA Problem Classification Scheme ensures the provision of a holistic diagnostic approach which covers all the components of health. This result shows that the Omaha system is an appropriate tool in performing individual, family and community-oriented nursing diagnoses from a holistic perspective.

Most of the insufficiencies determined among the participants were related to the physiological domain. In a study conducted with the elderly [13], of the nursing diagnoses, most were related to the physiological domain, followed by health-related behaviors, psychosocial and environmental domains. In another study conducted on the home healthcare by Erdogan et al., the most common problems were determined in the physiological domain (63%), followed by health-related behaviors domain (16.8%), environmental domain (10.3%) and psychosocial domain (9.9%) [16].

Similar to the findings of this present study, Westra et al. determined that patients receiving home healthcare experienced problems mostly in the physiological and health-related behaviors domains. The problems were mostly associated with the neuro-musculo-skeletal function, skin, pain, medication management and circulatory system [23].

In this present study, the distribution of the identified problems regarding the physiological domain was as follows: neuro-musculo-skeletal function (20.3%), skin (12.6%) and cognition (11.7%). Because most the participants in the study sample were in the 65 and above age group, and because intra- and extra-cellular changes occurring with aging lead to the development of physiological problems and dysfunction, noticeable changes occur in the body structure and image. The study findings indicate that the impairments detected in the participants were due to physiological changes. Similar to the results of this study, in Erdogan et al.'s study, the most common problems were related to the physiological domain. The problems were

related to skin, neuro-musculo-skeletal system, and urinary function in 92%, 47% and 18% of the participants respectively [16].

In Olgun et al. study investigating the health status of the elderly, the results of the physical examinations revealed that of the participants, 72.1% had muscle weakness/walking problems, 42% had skin problems such as paleness, rash and cold skin, 41% had gastrointestinal complaints such as pain, nausea, constipation, 61.8% had respiratory problems such as cough, phlegm and respiratory difficulties, 59.4% had neurological problems such as fatigue, headache and dizziness, 47.6% had genitourinary problems such as frequent and painful urination and urinary incontinence, and 65.6% cardiovascular system problems such as edema, nocturia and fatigue [24].

The health-related behaviors domain was the domain in which the second highest number of problems was identified with the OMAHA Problem Classification Scheme. In the health-related behaviors domain, impairments were most frequently observed in personal care (56.4%), self-feeding and nutrition (15.4%), medication management (12.1%), sleep and rest (10.5%) and physical activity (5.7%). The problems identified in the present study are similar to problems identified in several other studies conducted with individuals receiving home healthcare services [16,20,21,25]. The most common problems identified by Erdogan et al. in the health-related behaviors domain were related to personal care, and self-feeding and nutrition [16]. Similarly, in Önder et al. study investigating individuals receiving home healthcare services, of the participants, 90.4% were not able to take a bath without assistance, 82.7% were not able to dress without assistance, and only 34.6% were able take medication unassisted [20]. In Hisar and Erdoğdu's study of the patients receiving home healthcare services, 74.5% were not able to carry out personal care, and 14.9% were not able to feed orally [21]. Akdemir et al. determined that a great majority of bedridden patients (94.7%) did not receive sufficient hygienic care, and that they were not knowledgeable enough about nutrition, hygiene, and medicines they took [25]. Because home healthcare has a wide range of services such as provision of assistance for personal care, personal hygiene, dressing, having a bath, preparing meals, feeding and patient education, it could contribute to the fulfillment of the needs of individuals if problems are well defined with a multidisciplinary team approach and if healthcare is planned accurately [26,27].

In the present study, according to the OMAHA PCS, the most common insufficiencies identified in the environmental domain were housing (54.7%), sanitation (35.2%) and income (10.1%). In their study in which they used the OMAHA PCS for the identification of problems, Erdogan et al. determined that the problems were related to sanitation, income, housing, and environmental safety. In many studies evaluating patients receiving home healthcare, problems related to the patient's environmental conditions have not been addressed. The use of the OMAHA PCS in the diagnoses of patients at home eliminates these limitations and enables health workers to evaluate patients together with their environment. The regulation published in 2011 focusing on nursing specialties addresses home healthcare nurses' roles regarding the environmental domain. The OMAHA PCS can be considered as an important tool in the fulfillment of these roles.

In the present study, according to the OMAHA PCS, the most common problems identified in the psychosocial domain were mental health (33.8%), caregiving/parenting (24.3%), interpersonal relationships (17.3%), lack of social interaction (10.3%), neglect (8.7%) and utilization of community resources (5.6%). In their study determined that 78.9% of the bedridden patients receiving home healthcare had psychosocial problems and that 63.2% of them were unable to communicate verbally [25].

Erdogan et al. determined that the problems identified in the psychosocial domain were mental health, neglect, interpersonal relationships, sadness, social relations and utilization of community resources [16]. Because the OMAHA Problem Classification Scheme, evaluate individuals receiving home healthcare together with the environment they are in, it facilitates the identification of health problems arising due to aging and disease process.

Limitations

Findings of this study are limited by the small sample size of 50 patients. There are limited sources about OMAHA Assessment System in home care patients, so discussion was restricted. Reliability in the use of Omaha System problems and signs/symptoms at the community level was also a limitation of this study. A limitation of the study's descriptive results is the nature of preliminary data. The data of this research will constitute data for a so-called interference initiative.

Conclusions

The results of the evaluation conducted to determine the health problems of individuals receiving home healthcare services revealed that the problems they had most were in the physiological domain followed by the problems in the health-related behaviors, psychosocial and environmental domains. The results also revealed that the OMAHA PCS evaluates healthcare needs of individuals receiving home healthcare services considering all the components of health, and facilitates the identification of health problems of an individual by offering opportunities to evaluate the individual together with his/her family and environment.

References

1. Yilmaz M, Sametoglu F, Akmeşe G, Tak A, Yagbasan B, et al. (2010) In-home health services as an alternative form of presentation of patient care. Istanbul Med J 11: 125-132.
2. Koç F (2009) Home care service and it's progress. Eskişehir Osmangazi University, Medicine Faculty, Department of public health. Eskişehir Osmangazi University School of Medicine. Department of Public Health Medicine Thesis. Eskişehir.
3. Bahar A, Parlar S (2007) Elderly and home care services. Journal of Fırat Health Services 2: 32-39.
4. Korkmaz Aslan G, Emiroglu ON (2012) Use of a standardized and coded nursing terminology to enhance nursing visibility: Clinical care classification system. Health Sci Nurs J 69-79.
5. Isci F, Esin MN (2009) Evaluation of occupational health nursing ınterventions using OMAHA scheme in a company. Nurs Electronic J 2: 39-55.
6. Erdoğan S, Nahcivan N, Esin N (2005) Public health nursing of practice guide. Istanbul University Florence Nightingale School of Nursing, Public Health Nursing Department, Press no: 4588, Istanbul University Press, Turkey.
7. Erdogan S (2000) OMAHA system public health of nursing practice guide, Istanbul University, Turkey.
8. Aylaz R, Bilgin N, Omaç M, Ulukoca N (2010) Impact of using the OMAHA system of public health nursıng students workıng at communıty health care centers on famıly health. Journal of Anatolia Nursing and Health Sciences 13: 28-35.
9. Gur K, Ergun A, Yildiz A (2008) Health problems of students according to OMAHA problem classification scheme in a primary school. J Nurs Res Dev 3: 1-14.

10. Dilli S (2011) Nursing implementations and outcomes of elderlies staying in a nursing home: OMAHA system based study. Istanbul University, Institute of Health Science, Department of Public Health Nursing, Master Thesis, Istanbul, Turkey.
11. Yoo Y, Cho WJ, Chae SM, Kim MJ (2004) Community health service needs assessment in korea using OMAHA classification system. Int J Nurs Stud 41: 697–702.
12. Erci B (2012) The effectiveness of the OMAHA system intervention on the women's health promotion lifestyle profile and quality of life. J Adv Nurs 68: 898-907.
13. Kulakcı H, Emiroglu O. The usability of the OMAHA system in ıdentifying the health needs, nursing ınterventions and outcomes of the elderly living in a nursing home. Health Sci Nurs J 36-50.
14. Tokur Keskin M, Kubilay G (2014) Using the OMAHA system in occupational health nursing applications: Advantages of a common language in the diagnosis, intervention and evaluation of nurses' health problems. Procedia Soc Behav Sci 152: 488-494.
15. Erdogsan S, Esin NM (2006) The Turkish version of the OMAHA system: Its use in practice-based family nursing education. Nurse Educ Today 26: 396-402.
16. Erdoğan S, Seçginli S, Coşansu G, Nahcivan NO, Esin MN, et al. (2013) Using the OMAHA system to describe health problems, ınterventions, and outcomes in home care in İstanbul, Turkey: A student informatics research experience. Comput Inform Nurs 31: 290-298.
17. Coşansu G, Cangöl S, Erdoğan S (2014) The use of OMAHA system in the nursing care of children with acute care needs. J Nurs 22: 137-144.
18. Westra BL, Solomon D, Ashley DM (2006) Use of the OMAHA system data to validate medicare required outcomes in home care. J Healthcare Inform Manag 20: 88-94.
19. Çayir Y, Avsar UZ, Avsar U (2013) Characteristics of patients who receive home health services and expectations of caregivers. Konuralp Med J 5: 9-12.
20. Onder T, Anuk T, Kahramanca S, Yildirim AC (2015) Evaluating sociodemographic and medical conditions of patients under home care service. Dicle Med J 42: 342-345.
21. Hisar KM, Erdogdu H (2014) Determining factors affecting the quality of life and quality of life status who are the people take home health care. Gen Med J 24: 138-142.
22. Karaman D, Kara D, Yalcin Atar N (2015) Care needs and dısease states of ındıvıduals, who home health care servıces are provıded evaluatıng: example of Zonguldak provınce. J Health Sci 4: 347-356.
23. Westra BL, Oancea C, Savik K (2010) The feasibility of ıntegrating the OMAHA system data across home care agencies and vendors. Comput Inform Nurs 28: 162–171.
24. Olgun N, Eti Aslan F, Yucel N (2013) Assessment of health status of the elderly. J Health Sci 4: 72-78.
25. Akdemir N, Bostanoğlu H, Yurtsever S, Kutluturkan S, Kapucu S, et al. (2011) Needs of home care services for the bedridden patient's problems living in their home. Dicle Med J 38: 57-65.
26. http://www.tkhk.gov.tr/Dosyalar/63df317e06a248d7bbd1a74fe876b332.pdf
27. Karahan A, Güven S (2002) Homecare for elderly. Turkish J Geriatr 5: 155-159.