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. 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.

The sample of their search field of homecare services unit formed individuals (N=97). A total of 50 patients were included in the study. The data collection tools used in the study was the 5-item socio-demographic characteristics questionnaire and OMAHA Problem Classification Scheme (PCS).

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

Abstract

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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 [5,6,7,8].

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 [6,9,10,11]. 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**

Ninety-seven people receiving home healthcare services from Bayındır State Hospital affiliated with İzmir 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 97 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: 51.5%).

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.

**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 living 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 Problem Classification Scheme (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).

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).
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.

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.

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).

**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 related to health behaviors.
Table 2: Distribution of Nursing Diagnoses of the Participants in Terms of Problem Classification Domains.

| 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                                  | 5.2                                      |
|                               | Care giving / 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                        | 3.1                                      |
|                               | Intestine        | 59                                   | 2.54                                     |
|                               | Urinary function | 42                                   | 1.81                                     |
|                               | Total            | 1140                                 | 49                                       |
| Health Behaviors-Related Domain | Self-feeding and nutrition | 103                  | 4.43                                     |
|                               | Sleep            | 70                                   | 3                                        |
|                               | Physical activity | 38                                   | 1.63                                     |
|                               | Personal care    | 377                                  | 16.21                                    |
|                               | Medication       | 81                                   | 3.48                                     |
|                               | Total            | 669                                  | 28.8                                     |
| General total                 |                  | 2326                                 | 100                                      |

Table 3: Problems and insufficiencies related to the Environmental Domain According to the OMAHA Problem Classification Scheme.

| Problem                          | Insufficiency                  | Number | %   |
|----------------------------------|--------------------------------|--------|-----|
| Income                           | Low / none                     | 16     | 100 |
| 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|
| Sanitation                       | Structurally weak housing      | 21     | 24.1|
| Inadequate heating and cooling system |                   | 26     | 29.9|
| Sleep / 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 |

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 caring/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).

**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
### Table 4: Problems and insufficiencies related to the Physiological Domain According to the OMAHA Problem Classification Scheme.

| 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 Language              | Limited ability to speak or produce sound / inability to speak | 13   | 38.2|
|                                  | Improper pronunciation, and incomprehensibility | 21     | 61.7|
| Total                            |                                                  | 34     | 2.9 |
| Oral Health                      | Inadequacy in the calculation and counting skills| 41     | 30.8|
|                                  | Lack of concentration                            | 11     | 8.3 |
|                                  | Uncontrolled movements                           | 6      | 4.5 |
| 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      | 6.6 |
|                                  | 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  |
|                                  | Stupor                                          | 13     | 48.1|
|                                  | Unresponsiveness to stimuli                      | 4      | 14.8|
| Total                            |                                                  | 27     | 2.4 |
| Skin                             | Lesion / pressure sore                           | 30     | 20.6|
|                                  | 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 |
| Total                            |                                                  | 49     | 7.3 |
| Circulation                      | Edema                                           | 24     | 37.5|
|                                  | Discoloration of the skin / cyanosis            | 29     | 45.3|
| Total                            |                                                  | 53     | 7.2 |
| Digestion And Hydration          | Abnormal blood pressure measurements             | 11     | 17.2|
|                                  | Difficulty in chewing / swallowing / indigestion | 25     | 3.7 |
| Total                            |                                                  | 64     | 5.6 |
| Intestinal Function              | Anorexia                                        | 30     | 41.7|
|                                  | Cracked lips / dry mouth                        | 17     | 23.6|
| Total                            |                                                  | 72     | 6.3 |
| Urinary Function                 | Abnormal stool consistency / frequent defecation | 18     | 30.5|
|                                  | Fecal incontinence                              | 41     | 69.5|
| Total                            |                                                  | 59     | 5.2 |
| General Total for the Physiological Domain |                                      | 1140   | 100 |
Table 5: Problems and insufficiencies related to the psychosocial domain according to the OMAHA problem classification scheme.

| 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 skills                                       | 16     | 25.8|
|                          | Prolonged, unresolved tensions                                                   | 3      | 4.8 |
| Total                    |                                                                                 | 62     | 17.3|
| Mental Health            | Sadness / despair / decreases in self-esteem                                     | 22     | 22.3|
|                          | Loss of interest in self-care and maintenance of daily activities               | 23     | 19  |
|                          | Blunting of emotions                                                            | 9      | 7.4 |
|                          | Restless / agitated / aggressive                                                 | 23     | 19  |
|                          | 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|
| Care giving / 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 6: Problems and insufficiencies related to the Health-Related Problems Domain According to the OMAHA Problem Classification Scheme.

| 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|

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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).

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 OMHAHA 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 [16,19,20,21,22]. 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 OMHAHA 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 OMHAHA Problem Classification Scheme ensures the provision of a holistic diagnostic approach which covers all the components of health. This result shows that the OMHAHA 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. (2013), the most common problems were identified 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. (2010) 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 the majority of the participants in the study sample were in the 65 and above age group, and because intra- and extracellular 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 (2013), 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.’s study (2013) 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 OMHAHA 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. (2013) in the health-related behaviors domain were related to personal care, and self-feeding and nutrition [16]. Similarly, in Onder et al.’s (2015) 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 Erdogan’s study (2014), 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 (2011) 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 have 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 OMHAHA Problem Classification Scheme, 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 OMHAHA Problem Classification Scheme 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 OMHAHA Problem Classification Scheme 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 nurse’s roles regarding the environmental domain. The OMHAHA Problem Classification Scheme can be considered as an important tool in the fulfillment of these roles.

In the present study, according to the OMHAHA Problem Classification Scheme, the most common problems identified in
the psychosocial domain were mental health (33.8%), care giving / 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. (2013) 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.

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 Problem Classification Scheme 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.

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