

SOCIODEMOGRAPHIC AND HEALTH PROFILE OF INSTITUTIONALIZED PEOPLE AGED 65 AND OVER

Galina Haralanova, Lora Georgieva

*Department of Social Medicine and Health Care Organisation, Faculty of Public Health,
Medical University of Varna*

ABSTRACT

INTRODUCTION: Accommodation for people aged 65 and over in social institutions is often the only opportunity for their physical survival. Revealing the specific characteristics of elderly people living in institutions will help the understanding and satisfaction of their different needs, and hopefully will increase their quality of life.

AIM: The aim of this study is to reveal the sociodemographic and health profile of institutionalized people aged 65 and over.

MATERIALS AND METHODS: Sociodemographic and health information for age, gender, education, marital status, diagnosed diseases and mobility for all 175 people aged 65 and over, living in four residential homes in Varna and Provadia was extracted from their records.

RESULTS: The most prevalent group among the studied participants is women, and those in the age group 81–85 years. Most of the residents are widowers with upper secondary education. The leading diagnosis among the institutionalized elderly are those from ICD class IX: Diseases of the Circulatory System. Most of the people have limited mobility and use assistive technology (AT). People with normal and limited mobility have an almost equal share, as the first group is 44% and the second—46.3%. The remaining nearly 10% are severely disabled (unable to leave the bed).

CONCLUSION: The sociodemographic and health profile of institutionalised elderly people provides necessary information to health professionals for the health needs of that specific group of the population.

Keywords: *people aged 65 and over, social institution, socio-demographic characteristics, health status*

Address for correspondence:

Galina Haralanova
Faculty of Public Health
Medical University of Varna
55 Marin Drinov St
9002 Varna
e-mail: Galina.Haralanova@mu-varna.bg

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INTRODUCTION

Specialized institutions provide a range of social services for elderly with or without disabilities (1). An important feature of this type of service is that it provides a form of care in which consumers are permanently separated from their home/family environment. Social services in specialized institutions are provided after the possibilities for the

services in the community have been exhausted. In these cases, the benefits of accommodation in a retirement home for elderly persons are much greater, especially for people who have serious health and social difficulties and fail to cope alone with the challenges of everyday life (2, 3).

The changes in the family model in recent decades destroy the traditional cohabitation of generations in a household (4) and fates many older people not only to loneliness, but also to problematic physical survival. Informal care for the elderly, provided by family members, leads to difficulties in fulfilling labour obligations for the younger ones, and this reduces household income (5). At a certain moment, it is necessary to make a difficult decision about the further fate of the elderly relative. In cases of lack of care from relatives and friends, most often they move to an institution—a retirement home for elderly persons (6), and in most cases this is the best option (7). Besides the difficulties in caring by younger ones, the leading reasons for institutionalization include inadequate housing, remoteness from family and friends, and the need for personal assistance in everyday life (8). Undoubtedly, institutionalization is a significant event in the life of the elderly, leading to a loss of social balance (9).

Revealing the specific characteristics of elderly people living in institutions will help the understanding and satisfaction of their different needs, and hopefully will increase their quality of life.

Although the provision of institutional care for the elderly requires a greater commitment on the behalf of the staff (10), more often than not, the latter fail to take into account the specific needs of every occupant and treat most of them in the same way.

AIM

The aim of this study is to reveal the sociodemographic and health profile of institutionalized people aged 65 and over, as a prerequisite for assessment of their leading social and health needs, and necessary care..

MATERIALS AND METHODS

Residents of four institutions for elderly people in Varna and Provadia were included in the study. Two institutions from each of the two cities were included—one institution with municipal funding and

one with private funding from each town. Sociodemographic and health related information for: gender, age, education, marital status, diagnosed diseases and mobility status for all 175 people aged 65 and over, was extracted from the personal records of the residents that were available at the day of the visit of the institution. People were classified into three groups in relation to mobility: (a) with normal mobility, if they did not need technical or personal assistance while walking or moving, (b) with limited mobility if they required technical assistance, (c) severely disabled—unable to leave their bed.

The extracted data was assessed with descriptive statistical methods. Quantitative variables are presented with mean and SD and qualitative with a percentage.

RESULTS

A total of 175 elderly people, 65 and older, were included in the study, 119 (68.0%) of whom were from Varna. Participants from the municipal homes for elderly were 107 in total, distributed, respectively, 86 from Varna and 21 from Provadia.

Table 1. Distribution of the persons included in the study

Characteristics	Number (%)
Age (in years)	
65-69	15 (8.6)
70-74	24 (13.7)
75-79	25 (14.3)
80-84	49 (28.0)
85-89	35 (20.0)
90-94	21 (12.0)
95+	6 (3.4)
Gender	
Female	121 (69.1)
Male	54 (30.9)
Education	
Primary or less	62 (35.4)
Secondary	81 (46.3)
Higher	32 (18.3)
Marital status	
Single (without a partner)	156 (89.1)
Living with a partner	19 (10.9)

Table 2. Distribution of participants according to primary and secondary diagnoses by ICD-10 classes

Classes of Diseases Under ICD-10	Leading diagnosis n (%)	Secondary diagnoses n (%)
I. Certain infectious and parasitic diseases		1 (0.6)
II. Neoplasms	2 (1.1)	7 (4.0)
III. Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism		10 (5.7)
IV. Endocrine, nutritional and metabolic diseases	6 (3.4)	52 (29.7)
Diabetes		37 (21.1)
Dyslipidemia		6 (3.4)
Other endocrine diseases		9 (5.1)
V. Mental and behavioural disorders	8 (4.6)	49 (28.0)
Dementia		12 (6.9)
Other		37 (21.1)
VI. Diseases of the nervous system	8 (4.6)	41 (23.4)
VII. Diseases of the eye and adnexa		21 (12.0)
Glaucoma		5 (2.9)
Senile cataract		12 (6.9)
Other		4 (2.3)
VIII. Diseases of the ear and mastoid process		6 (3.4)
IX. Diseases of the circulatory system	116 (66.3)	382 (218.3)*
Hypertensive heart disease		143 (81.7)
Stroke		43 (24.6)
Other cerebrovascular disease		80 (45.7)
Ischaemic heart disease (incl. myocardial infarction)		61 (34.9)
Heart failure		24 (13.7)
Other		31 (17.7)
X. Diseases of the respiratory system	5 (2.9)	28 (16.0)
XI. Diseases of the digestive system	4 (2.3)	29 (16.6)
XII. Diseases of the skin and subcutaneous tissue	1 (0.6)	3 (1.7)
XIII. Disease of the musculoskeletal system and connective tissue	11 (6.3)	63 (36.0)
Arthrosis		33 (18.9)
Osteoporosis		8 (4.6)
Other		22 (12.6)
XIV. Disease of the genitourinary system	4 (2.3)	21 (12.0)
XIX. Injury, poisoning and certain other consequences of external causes	10 (5.7)	15 (8.6)
XX. External causes of morbidity and mortality		2 (1.1)
Total	175 (100.0)	175 (100.0)

*For the secondary diagnoses, the percentage exceeds 100% of the total for a given class, as the participants have more than one secondary diagnosis of a given class

The main sociodemographic characteristics of the participants are presented in Table 1.

The mean age of the participants in the study was 81.21 years (81.21±7.5). The majority were in the age group 80–84 years—48 (27.4%), followed by the age group 85–89 years—35 (20%) and in third place were people aged 75–79 years—25 (14.3%). The advanced age of the participants was associated with specific health and social characteristics and needs.

The gender distribution shows that women predominate over men. This characteristic corresponds to the trends in the gender difference in life expectancy in the country and around the world. More long-lived people are usually observed among women.

The distribution by educational status shows that the major part of the participants has upper secondary education—81 (46.3%) followed by primary or without education—62 (35.4%).

In terms of marital status, the majority of the participants in the study and the residents in the institutions are single (living without a partner)—156 (89.1%). The share of families is not very low—they form 10.9% of all included in the study. Their need for institutional care is most likely a result of the inability of the partner to take the necessary care for the person. In such cases, accommodation in a retirement home for elderly persons often comes after the family discusses the benefits and risks of institutionalization. Often the elderly themselves decide to enter an institution and thus to relieve their relatives from caring for them. In cases of severe mental disorder, they are unable to make independent decisions about the future and are institutionalized at the request of the relatives.

Based on the personal health records, information on the leading diagnosis coded with International Classification of Diseases (ICD-10) is extracted and summarized for all participants in the study.

The data in Table 2, reveals that the diseases of the circulatory system have the largest share - 116 (66.3%) as causes of disease prevalence and disability in the studied group. This is not surprising given the advanced age and the high prevalence of cardiovascular disease in the country.

In terms of secondary diagnoses, the data shows that again diseases of the circulatory system predominate. The most common of these are hypertensive

heart disease—143 (81.7%), ischemic heart disease (myocardial infarction)—61 (34.9%), and stroke—43 (24.6%). According to the data, 21.1% of the individuals have diabetes as a secondary diagnosis, from which it follows that it is spread among the participants in the study. It can be noted that diabetes is a severe chronic disease, whose complications such as diabetic polyneuropathy, sensory disorders, affecting the musculoskeletal system, significantly reduce the quality of life. In many cases, they lead to severe disability and inability to lead independent lives. This is often the reason for accommodation in a retirement home for elderly persons.

Regarding mobility (Table 3), those with limited mobility using assistive technology (AT) predominate—81 (46.3%). They are followed by persons who move independently, without the help of AT—77 (44%) and last are those unable to leave their bed—17 (9.7%). The results demonstrate that the majority of the individuals encounter difficulties in their independent movement, but still retain their autonomy.

Table 3. Distribution of the persons included in the study according to their mobility

Mobility	n (%)
Moves independently, without help of assistive technology (AT)	77 (44.0)
Limited mobility—moves with help of assistive technology (AT)	81 (46.3)
Unable to leave bed	17 (9.7)
Total	175 (100.0)

Fig. 1 shows that there are many persons with several secondary diseases, and those with seven or more make up 12.6% of all participants in the study. Polymorbidity among institutionalized people is one of the main problems faced by both themselves and the staff of the institutions. The lack of definitive treatment and the complications that occur over time make it difficult for elderly people to perform their daily activities and limit their autonomy.

DISCUSSION

A review of the literature shows similar data. Regarding gender distribution, the results of the study show that women are more than twice as many as men. This is easily explained, given the demograph-

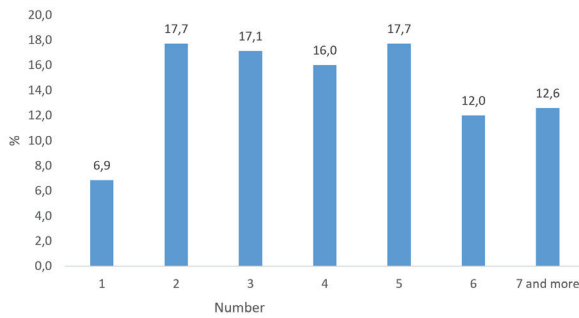


Fig. 1. Distribution of the participants according to the number of secondary diseases

ic characteristics and trends of both sexes. Life expectancy in men is shorter than in women (11). The former have the phenomenon of “over-mortality”—higher mortality in working age (12).

Older age is a risk factor for accommodation in a retirement home for elderly persons (13), which is supported by the results of the study. Lee et al. (2018) explore the differences between patients visiting an emergency center depending on the age group to which they belong. They categorize persons aged 65 and over into 3 separate groups: the youngest-old (65–74 years); middle-old (75–84 years) and oldest-old (≥ 85). Patients aged 85 years and over had a longer stay in the emergency department and died more often (14).

The marital status of the subjects included in the study shows that most of them live alone, i.e. without a partner. Older people who do not have a spouse are at increased risk of accommodation in a retirement home for elderly persons (15). Institutionalization is less common in the presence of a spouse.

The educational level affects the general and the health knowledge and is a basic element of the social determinants of health (16). Based on education data of the persons involved, to some extent, their way of life can be generalized before institutionalization. Of course, education is not a sufficient criterion for evaluation of the attitude towards institutionalization, but it could be among the leading factors.

Advanced age leads to an increase in the need for care due to concomitant diseases in almost all people. Differentiating the health problems of retirement homes for elderly persons from those of the community is of great importance for providing complex health care to institutionalized people

(17). This type of social institution is greatly affected by chronic diseases, as those accommodated in them most often suffer from at least one of them (18). A combination of physical and mental disorders is often observed (19). Diseases of the circulatory system are leading in morbidity and mortality in Bulgaria and around the world (20). Many people suffer and they have even already developed some of the complications—heart attack, stroke.

Usually, the profile of institutionalized persons includes old age, poor health, severe functional and/or cognitive disabilities (21). Another important feature, given the need for social institutional services, is mobility. According to the degree of mobility is determined and the possibility of self-service. Limited mobility is one of the main factors mediating institutionalization (22). Among the participants in the study, the share of those with limited mobility mediated by AT predominates. However, they managed to keep much of their autonomy. The ability to cope with daily activities with the help of different AT (prostheses, cane, crutches) is assessed as independence (23).

CONCLUSION

Examination of institutionalized persons by different sociodemographic characteristics shows that the persons aged 80 and over, as well as women, predominate. Most of the residents are widowers and have secondary education. In regard to health status, cardiovascular disease is seen to be the most common leading diagnosis in retirement homes for elderly persons. In regard to mobility, most have limitations and use AT. The created categorization by sociodemographic and health characteristics forms the profile of the institutionalized persons, and this supports the organization of work with them.

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