

ORGANIZATION OF HEALTH CARE OF ELDERLY PEOPLE  
IN THE CITY OF SKOPJE - CONDITIONS AND NEEDSNadica Totikj<sup>1</sup>, Elena Kjosovska<sup>1</sup>, Vesna Velikj Stefanovska<sup>2</sup><sup>1</sup> Institute of Public Health of the Republic of North Macedonia, Skopje, Republic of North Macedonia<sup>2</sup> Institute of Epidemiology with Biostatistics and Medical Informatic; Ss Cyril and Methodius University in Skopje, Faculty of Medicine, Republic of North Macedonia

## Abstract

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**Received:** 8-Aug-2022; ; **Revised:** 9-Dec-2022;**Accepted:** 15-Dec-2022; **Published:** 20-Dec-2022**Copyright:** © 2022. Nadica Totikj, Elena Kjosovska, Vesna Velikj Stefanovska. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.**Competing Interests:** The author have declared that no competing interests

The main goal of the paper was to understand the attitudes of the elderly in the city of Skopje regarding health care, organization and functioning of the health system for ensuring healthy and active aging. Methods: A descriptive-analytical method was used to present the results of the study (cross-sectional study) conducted on the territory of the city of Skopje in the period March-April 2019. A total of 350 respondents aged 65+ were included. A questionnaire containing 53 questions was developed and was designed to suit the age and sex of the respondents. The questionnaire was divided into four parts: first part - general and demographic characteristics; second part - health care; third part - mobility of the elderly; fourth part - conditions and lifestyle. The statistical analysis was performed with Windows 7.0 and SPSS, version 14. A statistical significance was used for two-way tests with a significance level of  $p < 0.05$ . Results: Of the total of 350 respondents, 133 (38%) were male, and 217 (62%) were female, with a sex ratio of 0.61 : 1. According to the answers given by the respondents in our sample, 50 (37.9%) men and 124 (57.14%) women had chronic diseases. A total of 260 (75.6%) respondents stated that they were satisfied with the health information system „My Appointment“ („Moj Termin“). In terms of sex, 101 (78.9%) men and 159 (73.6%) women were satisfied with „My Appointment“. A total of 84 (24.4%), 27 (21.1%) men and 57 (26.4%) women, stated that they were dissatisfied with this service. Forty-seven (47.5%) respondents said that discrimination in health care was done by a doctor, 43 (43.4%) said it was done by a nurse and according to 9 (9.1%) respondents, discrimination was done by both the doctor and the nurse. The results obtained showed that more often highly educated people recognized discrimination and abuse by the health personnel than people with lower level of education. Conclusion: The elderly exercise partially their rights to social and health care. The elderly would like to expand the opportunities for social and health benefits. In the self-assessment of the health condition, most of the elderly perceived their health status to be relatively good. The analysis showed a higher percentage of chronic illnesses in women than in men. There is a correlation between active and healthy aging and socioeconomic conditions in which the elderly live.

## ЈАВНО ЗДРАВЈЕ

ОРГАНИЗАЦИЈА НА ЗДРАВСТВЕНАТА ЗАШТИТА НА СТАРИТЕ ЛИЦА НА  
ТЕРИТОРИЈА НА ГРАД СКОПЈЕ – СОСТОЈБИ И ПОТРЕБИНадица Тотик<sup>1</sup>, Елена Косевска<sup>1</sup>, Весна Велик-Стефановска<sup>2</sup><sup>1</sup> Институтот за јавно здравје на Република Северна Македонија, Скопје, Република Северна Македонија<sup>2</sup> Институтот за епидемиологија со биостатистика и медицинска информатика, Универзитетот Св. Кирил и Методиј во Скопје, Медицински факултет, Република Северна Македонија

## Извадок

**Цитирање:** Тотик Н, Косевска Е, Велик Стефановска В. Организација на здравствената заштита на старите лица на територија на град Скопје – состојби и потреби. Арх Ј Здравје 2022;14(2)

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**Клучни зборови:** стари лица, здравствена заштита, здраво стареење**\*Кореспонденција:** Надица Тотик, Институт за јавно здравје на Република Северна Македонија, Скопје, Република Северна Македонија.

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**Примено:** 8-авг-2022; **Ревидирано:** 9-дек-2022;**Прифатено:** 15-дек-2022; **Објавено:** 20-дек-2022**Печатарски права:** ©2022 Надица Тотик, Елена Косевска, Весна Велик Стефановска. Оваа статија е со отворен пристап дистрибуирана под условите на нелокализирана лиценца, која овозможува неограничена употреба, дистрибуција и репродукција на било кој медиум, доколку се цитираат оригиналниот(ите) автор(и) и изворот.**Конкурентски интереси:** Авторот изјавува дека нема конкурентски интереси.

Целта на трудот беше да се согледаат ставовите на старите лица на територија на град Скопје во врска со здравствената заштита и да се добијат одговори за нивните потреби и мислење за организацијата и функционирањето на здравствениот систем. Методи: беше користен дескриптивно-аналитички метод на работа, со приказ на резултати од истражување (студија на пресек) спроведено на територијата на град Скопје во периодот март-април 2019 година. Беа опфатени вкупно 350 испитаници на возраст од 65+ години. беше изработен прашалник кој содржеше 53 прашања и беше дизајниран да одговара на возраста и полот на испитаниците. Прашалникот беше поделен на четири дела: прв дел - општи и демографски карактеристики; втор дел - здравствена заштита; трет дел - мобилност на старото лице; четврти дел - услови и начин на живот. Статистичката анализа беше извршена со Windows 7.0 и SPSS, верзија 14. Статистичка значајност беше искористена за двонасочни тестови со ниво на значајност од  $p < 0.05$ . Резултати: Во студијата беа опфатени 133 (38%) мажи и 217 (62%) жени, со сооднос на полот 0.61 : 1. Според добиените изјави од испитаниците во примерокот, 50 (37.9%) од анкетираниите мажи и 124 (57.14%) од анкетираниите жени имале хронични заболувања. Од испитаниците, 260 (75.6%) изјавиле дека се задоволни од услугите „Мој термин“. Во однос на полот, задоволни од „Мој термин“ биле 101 (78.9%) од мажите и 159 (73.6%) од жените во примерокот. Вкупно 84 (24.4%) испитаници изјавиле дека се незадоволни од оваа услуга, и тоа 27 (21.1%) мажи и 57 (26.4%) жени. Кај 47 (47.5%) од испитаниците дискриминација при здравствената заштита направил доктор, кај 43 (43.4%) тоа го направила медицинска сестра, а кај 9 (9.1%) причина биле и докторот и медицинската сестра. Добиените резултати покажале дека најчесто високообразованите лица многу почесто ја препознавале дискриминацијата и злоупотребата од страна на здравствен персонал отколку лицата со пониско образование. Заклучок: Постарите лица делумно ги остваруваат правата од здравствена заштита. Постарите лица би сакале да ги прошират можностите за здравствени придобивки. Во самопроценката на здравствената состојба, најголем дел од постарите лица велат дека нивната здравствена состојба е релативно добра. Постои корелација помеѓу активното и здравото стареење и социокономските услови во кои живеат постарите лица.

## Introduction

People in the world live longer. The 20th century was marked as a revolution in longevity. The average life expectancy has increased by 20 years from 1950 to 66 years and it is expected to continue for another 10 years until 2050. Today, for the first time in history, more people have the opportunity to live 60 years or more. Aging decreases the power of adaptation to the environment which leads to development of a risk of disease or death.<sup>1</sup>

The extension of the life expectancy and increase in the participation of the elderly in the total population is an important fact that significantly increases the interest in research<sup>2</sup>. By 2050 globally, the population over the age of 60 is expected to reach 2 billion, unlike 2015 when it was 900 million.<sup>3</sup> Declining birth rates and extended life expectancy are changing the demographic picture in countries world wide<sup>4</sup>. In terms of age structure, as in the world, the Macedonian population is ageing as it is happening in all parts of the world. In the Republic of North Macedonia, of the total population, 264,964 were elderly people in 2015, while the number of elderly people in 2020 increased to 302,940.<sup>5</sup> In the Republic of North Macedonia, in 2020 the largest number of elderly people over 65+ was from the Skopje region, a total of 98,552, of which 43,066 were men and 55,486 women<sup>6</sup>. The United Nations forecasts that the average life expectancy in the Republic of North Macedonia will continue to increase; the average life expectancy of 74.9 years will reach 79.5 years in 2050. Global policies for the elderly must

scaled up because only sustainability of the pension and health system is not enough. Achieving sustainability should be done by active contribution from the beneficiaries by encouraging positive lifestyles.<sup>8,9</sup> Healthy aging is about creating the environments and opportunities that enable people to be who they are and to do what they have loved and valued throughout life.<sup>10</sup>

The aim of the study was to perceive the attitudes of the elderly in the city of Skopje regarding the health care, and to get answers about their needs and opinions with regards to the organization and functioning of the health system.

## Materials and methods

This was a cross-sectional study conducted on the territory of the city of Skopje in the period March-April 2019. The probability sampling technique was used to select the respondents by applying the method of simple random sampling (Simple Random Sampling). A total of 350 respondents aged 65+ were interviewed. The study was conducted with the method of interviews with members of the NGO "Third Age", users of home care services in the NGO "Humanity", a private institution for social protection of the elderly "Idila Terzieva", as well as users of services in the home for the elderly "Mother Teresa". A questionnaire was used consisting of 53 questions, and it was designed to suit the age and sex of the respondents. The questionnaire was divided into four parts: first part - general and demographic characteristics; second part - health care; third part - mobility of the old person; fourth part-con-

ditions and lifestyle. Statistics for Windows 7.0 and SPSS, version 14, were used for statistical analysis. Two-way tests with a significance level of  $p < 0.05$  were used to determine the statistical significance.

## Results

According to sex and age, respondents were divided into five age groups as follows: a) 65-69; b) 70-74; c) 75-79; d) 80-84; and e) over 85 years of age. The analysis showed that most of the respondents of both sexes (43.43%) were aged 65-69 years, of which 42.9% were men and 43.8% women.

Respondents in the sample had the opportunity to give a personal assessment of their health by being offered 4 possible answers: a) good; b) relatively good; c) bad and d) very bad (Figure 1).

The analysis showed that female respondents compared to males were 2,507 times significantly more likely to have poor and very poor health [OR = 2.5107 (1.11-5.65) 95% CI].

According to the statements received from the respondents, 50 (37.9%) men and 124 (57.14%) women had some chronic disease. A statistically significant association was established between the sex of the respondents and the presence of chronic disease in addition to a significantly higher prevalence of chronic diseases in female respondents (Figure 2).

All 175 (100%) respondents who stated that they had a chronic disease were asked which chronic disease it was, with the possibility of indicating more than one chronic disease.

The prevalence of the most common chronic diseases in the entire sample of 350 respondents indicated that it was hypertension (15.7%), followed by diabetes (8.6%), heart failure (6.6%), rheumatic disease (4.9%), etc.

In terms of sex, 101 (78.9%) men and 159 (73.6%) women were satisfied with the service "My Appointment" ("MojTermin"). A total of 84 (24.4%) were dissatisfied with this service, including 27 (21.1%) men and 57 (26.4%) women (Figure 3).

The most common problem in the procurement of medicines pointed out by most of the respondents or 45 (35.7%) was that the medicines they received were not on the positive list. Thirty-seven (29.4%) stated that taking prescribed drugs was problematic, and 27 (21.4%) respondents pointed out to the high drug costs (Figure 4). The need for a special procedure in the procurement of medicines was a problem for 6 (4.8%) respondents, while other problems were stated by 11 (8.7%) respondents.

The respondents were also asked about the number of visits they pay to a family doctor and/or a specialist doctor during a year. This question was answered by 120 (34.29%) respondents of the sample. According to the answers regarding the annual number of visits to a family doctor, it was found that most of the respondents had three visits per year, 34 (28.3%), followed by one visit, 31 (25.8%), and two, 26 (21, 7%). Sixteen (13.3%) respondents paid five or more visits to a family doctor per year, 5 (8.5%) being men and 11 (18%) women.

The respondents were asked how many of them trust the family doctor? A total of 258 (73.7%) stated that they trust their family doctor, 85 (24.3%) lacked confidence, while 7 (2%) of them stated that they did not trust their family doctor.

During the visit to the health institution, i.e., during their contacts with the health staff, a total of 104 (29.7%) respondents of the sample stated that they felt discrimination while receiving health care. Of those who answered positively, 34 (25.6%) were men and 70 (32.3%) were women (Figure 5).

Forty-seven (47.5%) respondents answered that the discrimination in

providing health care was done by a doctor, 43 (43.4%) said it was done by a nurse and 9 (9.1%) said discrimination was done by both the doctor and the nurse. The individual analysis of answers according to sex of the respondents indicated that the most common reason for discrimination was the doctor, followed by the nurse (Figure 6).

The respondents were asked about the proposed measures for better health and social protection. Twelve proposed measures were indicated with the option to choose more than one.

Figure 1 . Analysis by sex and assessment of health status

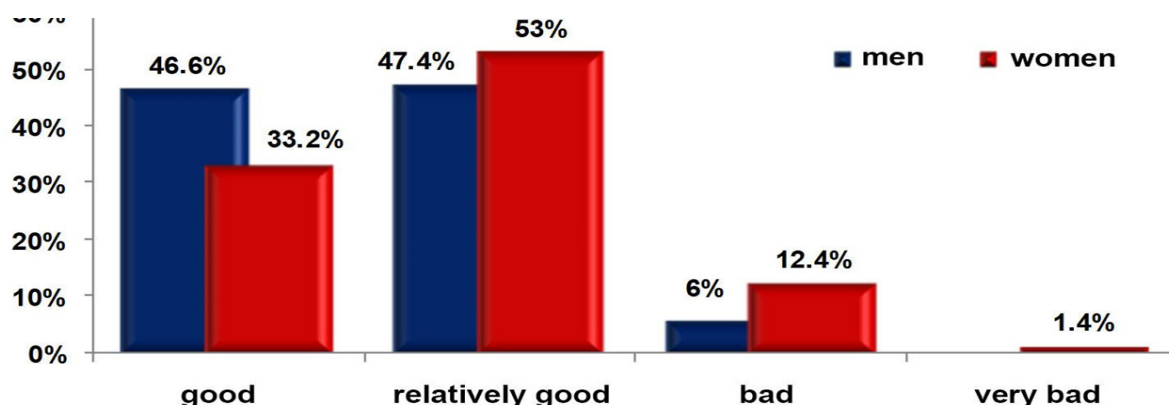


Figure 2 . Descriptive analysis of the respondents by sex and presence of chronic disease

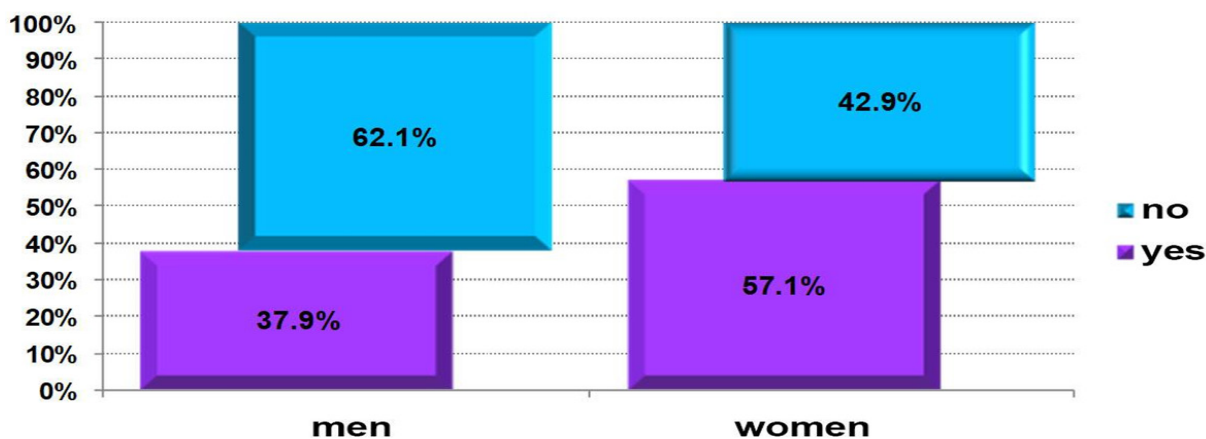


Figure 3 . Analysis by sex and satisfaction with the service „My Appointment“

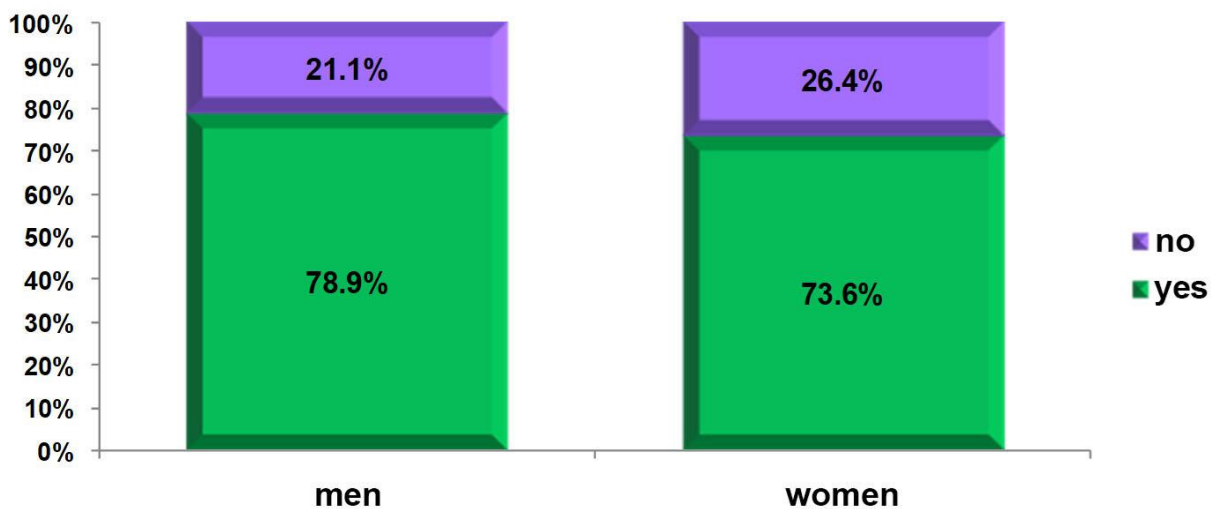


Figure 4 . Distribution by problems in procurement of drugs

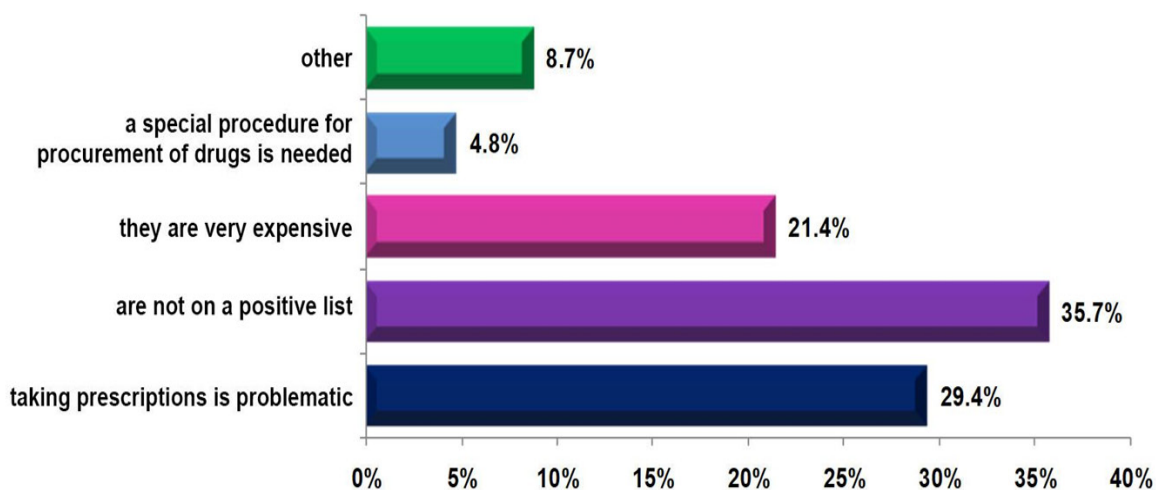
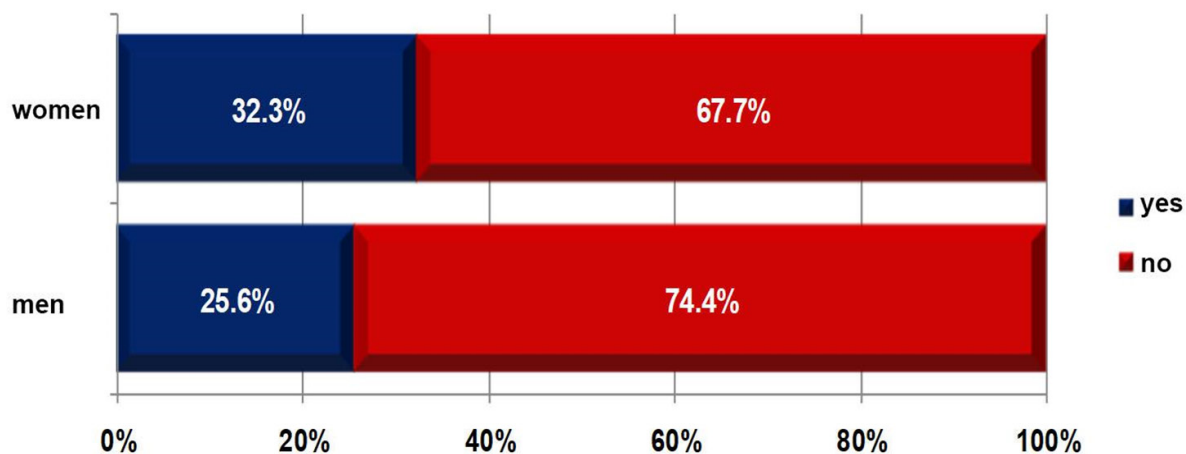
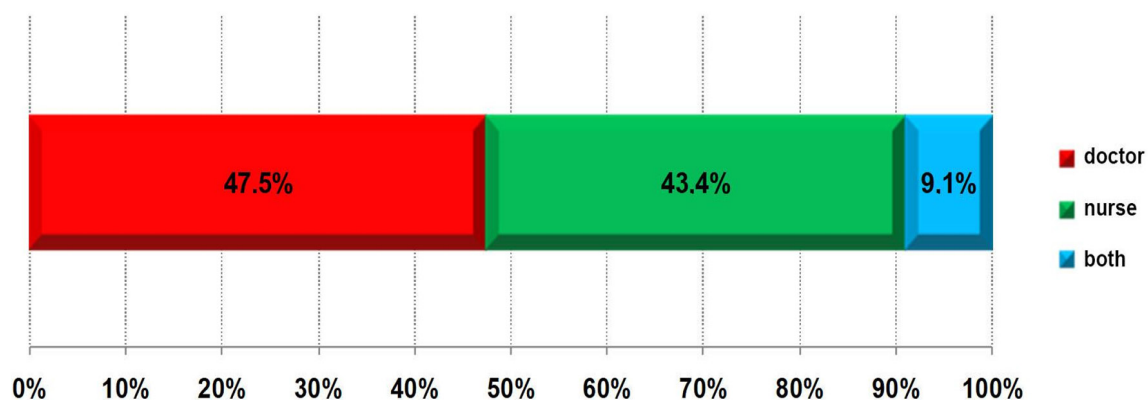


Figure 5 . Descriptive representation of perceived discrimination by sex





**Figure 6 .** Distribution by discrimination in health care**Table 1 .** Distribution according to proposed measures for better health and social protection

Proposed measures for better health protection	Respondents (N=350)	
	number	%
Transport to a health facility	86	24.57%
Regular nursing visits for receiving injections	112	32%
Home visit to measure blood pressure and diabetes	148	42.28%
Personal or telephone advice on taking medication	75	21.43%
Home visit to chronically ill people regarding personal hygiene	147	42%
Institutional care for chronically ill people	292	83.43%
Day care center for the elderly	228	65.14%
Residential center for the elderly from the village	117	33.43%
Regular delivery of cooked hot meals	93	26.57%
House cleaning and laundry service	59	16.86%
Psychological support	270	77.14%
Other	27	7.71%

According to Table 1, the largest number of respondents, 292 (83.4%), agreed on the need for an institution for care of the chronically ill people. Psychological support was required by 270 (77.1%) respondents, followed by the need for a day care center for the elderly - 228 (65.1%)s. A home visit to measure blood pressure and diabetes was a priority for 148 (42.3%) respondents, followed by a home visit for personal hygiene of the chronically ill people - 147 (42%). 117 (33.4%) respondents considered the residential center for the elderly in the countryside to be a necessity. A regular nursing visit for receiving injections was considered to be necessary by 112 (32%) respondents; 93 (26.6%) selected regular delivery of cooked hot meals, while 86 (24.6%) considered transport to a health institution essential.

## Discussion

The results of the study have highlighted the health needs of the elderly, but also gave clear directions which actions are necessary to be undertaken to achieve positive changes. The governmental institutions /organs of the Republic of North Macedonia have to enable or improve the quality of life of the elderly, that is, to provide them with active and healthy aging.<sup>11</sup> The analysis showed that most of the respondents of both sexes were aged 65-69 years, and of a total of 152 (43.43%) 57 (42.9%) were men and 95 (43.8%) women. The second most common age group of both sexes was 70-74 years old, with a total of 86 (24.6%) persons, i.e., 35 (26.3%) men and 51 (3.5%) women. The smallest number were the respondents in the age

group  $\geq 85$  years, who were represented with a total of 11 (3.1%), of which 5 (3.8%) males and 6 (2.8%) females. A similar distribution of respondents according to basic demographic characteristics was found in Albania in three areas, where 475 (52%) men and 438 (48%) women were included in the survey. The sex distribution was more or less similar in all three areas, with 45.8% of participants in Tirana, 51.5% in Shkoder and 48.1% in Vlore.

The adult distribution of respondents in Albania to the elderly was similar in all three areas included in the survey. The share of the very old included in the study, however, was higher in urban areas compared to rural areas (43.4% vs. 28.8%) The mean number of family members was  $2.54 \pm 2.31$ , which was a bit higher in rural areas ( $2.74 \pm 2.26$ ) compared to urban areas ( $2.40 \pm 2.28$ ) and in men compared to women (about 3 family members being men versus 2 women). There was a greater number of widows, divorced and/or single women (53.9%) versus men (24.4%). Most of the respondents of both sexes in the household lived with the spouse (34.6%), followed by almost a quarter or 27.4% who stated that they lived alone and a fifth or 21.1% who stated that they lived with their children. A total of 3.1% of the respondents stated that they lived with a partner, 3.8% of them being men and 2.8% women.<sup>12</sup>

A survey in Kosovo found that only 5% of older people lived alone, and a similar situation is present in developing countries in general. Figures from the neighbouring Albania and Serbia indicate that the percentage

of elderly people living alone is 20% while in Turkey it is around 30%. The World Economic and Social Survey for 2007 reported that in developed countries more than 35% of individuals aged 60 and over lived alone, while in underdeveloped countries 7% of the elderly lived alone.<sup>13</sup> Surveys show that in countries with traditional family values and views both on the Balkans and beyond, children take care and responsibility for their parents in old age. Besides the tradition, the low economic standard also plays a big role in the multi-generational dwellings. In this study, the respondents were asked about the number of visits to a family doctor and a specialist doctor during a year. This question was answered by 120 (34.29%) respondents in the sample. According to the answers received for the annual number of visits to the family doctor, most of the respondents had three visits per year, 34 (28.3%), followed by one visit, 31 (25.8%), and by two visits, 26 (21, 7%). Sixteen (13.3%) respondents had five or more visits to the family doctor per year, 5 (8.5%) men and 11 (18%) women. The survey conducted in Canada showed that the majority of respondents, > 90%, visited a family doctor regularly and the research showed that with increasing age, the visits to the family doctor also increased (it is more frequent). Excluding physically inactive respondents, more than 80% of respondents perceived their general health to be excellent, very good or good.<sup>14</sup> In our study, with ageing, the number of annual visits to the family doctor decreased insignificantly, while in the research in Canada, with increasing age, the number of visits to the family

doctor increased. The Republic of North Macedonia is at the beginning in the field of services for the elderly in home conditions. Assistance and care services in the home have the role of facilitating the daily activities of the elderly. One of those measures is escorting to a health facility. We also see the need for greater involvement of patronage services offered to adults.

According to the statements received from the respondents in our sample, 50 (37.9%) men and 124 (57.14%) women had some chronic disease. A statistically significant association was established between sex of the respondents and the presence of chronic disease in addition to a significantly higher prevalence of chronic diseases in female respondents. Hypertension was pointed out as the most common chronic disease by 55 (31.43%) respondents, followed by diabetes - 30 (17.1%) respondents. In India, the prevalence of hypertension in all respondents was 30.7%, the prevalence in female respondents was 33.9% and in men 25.6%. Out of 407 examinees, 339 or 83.2% had visual impairment; in general, the visual impairment was greater in men and was 90.3% while the visual impairment in women was 98.8%. It was found that 44.7% of respondents suffered from arthritis, and it was more prevalent in the rural population than in the urban one. In the survey, 1.71% of the respondents stated that they had a history of malignancy; the prevalence was higher in the urban population (2.46%) compared to the rural one (0.98%).<sup>15</sup>

According to a study conducted in Canada, the most common chronic



diseases in the elderly were: arthritis/rheumatic conditions 24.5%-56%, hypertension 49%, low-back pain 26%, and cardiovascular/cerebrovascular diseases 6%-31%.<sup>14</sup> Our study revealed that women had a higher percentage of chronic diseases than men, and chronic diseases in females lasted longer than in men. This is primarily due to the longer lifespan. There were no significant differences regarding chronic diseases in the studies conducted in Canada, North Macedonia and India, and the most common chronic disease presented in all three studies was hypertension. In all studies, less educated people and people with low economic status had poorer results in self-assessment of their health.

A survey by the WHO Regional Office for Europe conducted in 2018/2019 on the elderly and access to health care in North Macedonia indicated similar results to our survey. As it might be expected, the percentage of people who perceived their health as good or very good decreased with age. There can be a drastic reduction in the percentage of people who think their health is good or very good in higher age groups. This percentage decreased from 36.7% among the elderly aged 65 to 74 to 11.1% among the elderly aged 85 and over. In this study, men considered their health to be good or very good unlike women.<sup>16</sup>

To the question How satisfied are you with the “My Appointment” service, the analysis indicated that two thirds of the respondents, 260 (75.6%), stated that they were satisfied with the “My Appointment” services. In terms of sex, 101 men and

159 women in the sample were satisfied with the “My Appointment” service. A total of 84 respondents were dissatisfied with this service. The “My Appointment” service is one of the most important health-care services and has been positively accepted by the elderly due to the possibility of completing a specialist examination without waiting for too long. The waiting time for an appointment appears to be the main reason for dissatisfaction with this service. A survey conducted in England revealed that 36.8% of adult respondents over the age of 65 had experienced age discrimination. Descriptive analysis indicates that all socio-demographic factors, with the exception of marital status, are related to perceived age discrimination. Multivariate analyses have shown that with increasing age, discrimination also increases, the peak is 70-79 years.<sup>17</sup> In both England and in our country, surveys have shown that age discrimination certainly exists.

A characteristic feature of our study is the form of discrimination and how many people recognized it. The results obtained showed that most often highly educated people recognized discrimination and abuse by health personnel compared to people with lower education. Several respondents also showed insincerity in the answers to this topic. There is still stigma among these generations and a small number of older people admit age discrimination.<sup>18</sup>

The elderly in R.N. Macedonia have equal access to rights and services, but the respondents pointed out that it is necessary for the health institutions to be closer to them. The

need for institutional care comes first, small capacities cannot meet the expectations for care of these people. The change in the structure of families and the influence of the environment in which the elderly live contributes to the special needs and demands, loneliness and psychological support.<sup>19,20</sup> The elderly due to loneliness and the need for socializing, go to the doctor more than necessary to have some day activity and for socialization<sup>21</sup>.

## Conclusion

This study enabled us to perceive the real picture of the needs and way of life of the elderly in the city of Skopje. The elderly are not sufficiently informed about their rights and services that they can use. The elderly would like to expand the opportunities for social and health benefits. The most important obstacles in terms of access to services are the lack of information on existing services, the lack of information of citizens about their rights, the lack of sufficient health and propaganda materials in the languages of the communities.

It is necessary to bring closer the already developed forms and services for social and health protection of the elderly in the environment in which they live (day care centers, help centers at home) and to have easily accessible resources. In the self-assessment of their health status, most of the elderly perceived their health condition to be relatively good; the analysis indicated a higher percentage of chronic diseases in women than in men. This is primarily due to the longer life

expectancy of women as opposed to men and because of easier expression, openness or recognition that women suffer from a certain disease unlike men presented to the interviewer. The elderly have been discriminated against by health professionals. Abuse of older adults happens too often, but it remains a largely hidden problem. Adult Prejudice or "Ageism" includes the broader meaning of gerontophobia, unwarranted fear, and hatred of the elderly. Negative stereotypes and discriminatory attitudes towards adults must change. The low standard in the country does not bypass the elderly who are part of the marginalized groups in society. Low income after retirement plays a key role.

This study found that older people do not want to be constantly at home; they indicate financial difficulties, and not a reduced interest in social interaction. It is necessary for the society to be an environment that supports and maintains the internal capacities and functional abilities of the elderly that is certainly the key to healthy aging.

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