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### SOCIO-ECONOMIC DETERMINANTS OF HEALTHY AND ACTIVE AGING IN MACEDONIA

### I Introduction

### Healthy ageing as a concept

In recent years, ageing, and healthy ageing in particular, has become more popular issue with the general public, and also with the academic and professional community. As a result, numerous definitions have been designed attempting to describe the scope, the meaning and the influence of healthy ageing on the population, but also on the society in a broader context. In these terms, ageing, depending on the context under consideration, is described with different denominators, such as: "active ageing", "successful ageing" and "healthy ageing". With this in mind, this paper presents a brief overview of the most used definitions of ageing, relevant for the purpose of the undertaken pilot study.

The World Health Organization (WHO) defines active ageing as "the process of optimizing opportunities for health, participation and safety N.Milevska Kostova, CRPRC Studiorum

S.Chichevalieva, WHO Office, Skopje in order to improve the quality of life of elder people" (WHO, 2002). The European Union has similar observations, perceiving the active ageing as "an orientation to policies and practices that include lifelong learning, longer working life, gradual and later retirement, and involvement in activities aimed at maintenance of health and individuality of the elderly. These practices aim to raise the quality of life of the individual above the average level, while, at community level, to contribute in increasing the socio-economic growth, reducing the burden of the costs resulting from the care of a third party, thus allowing substantial savings in pension and health care systems. In other words, healthy ageing and associated policies represent a winning combination for all ages" (CEC, 2000).

Another term used - "Successful Ageing" – has wider application in gerontology and geriatrics and refers, more specifically, to the maintenance of physical and mental function, thereby ensuring that individuals have the psychological and physical "reserves" necessary to withstand stressful experiences in later life. The absence of these "reserves" can lead to increased frailty and dependence (Walters et al., 1999).

As a kind of sublimate, the definition of healthy ageing includes both aspects, as "the process of optimizing opportunities for physical, social and mental health to enable older people to take an active part in society without discrimination and to enjoy an independent and good quality of life" (SNIPH, 2007).

Thus, the significance of healthy ageing is supported by this definition in a manner that:

- "It presumes that older people are of intrinsic value to society rather than a burden and that their autonomy and sense of personal control are essential for maintaining human dignity and integrity;
- Population-wide healthy ageing requires focusing on health inequalities and the underlying socioeconomic factors. Heterogeneity of needs across individuals must be taken into account;
- Healthy ageing policies rely strongly on prevention and, in this context, "it is never too soon and never too late to promote health" (SNIPH, 2007).

It can, therefore be concluded that healthy ageing is a process, not just a status in itself; this process is present in and reflecting onto all segments of the society, and directly or indirectly affects the entire population. Due to its complexity in qualitative and quantitative terms, and in terms of profound (positive or negative) effects that it has, as its definition proposes - this process should be viewed prospectively, rather than retrospectively, and be held for acting preventively rather than curatively.

### Health ageing as a global challenge

One of the achievements of the contemporary medicine and medical technology is longer life expectancy, which on global level shows an upward trend. Unfortunately, not always, long life is accompanied with good health; there are numerous studies, mainly from the American continent, indicating a sharp rise in the medical costs and increased emergence of chronic diseases in older population (Thorpe and Howard, 2006). In this regard, the longer life expectancy and maintaining adequate quality of life and the highest attainable level of health - as defined by the WHO, although given in a different context - basically implies direct interdependence between the growing trend of longer life expectancy and the costs of health care and care for the elderly.

Healthy ageing, according to some definitions means maintaining good health in the older population and enabling - depending on conditions their autonomy in carrying out daily activities, i.e. the ability to control, handle and make decisions in daily life according to their own choice, and independence, i.e. the ability to perform daily activities with little or without help from others (WHO, 2002).

On the other hand, healthy ageing is likely to be one of the most important determinants in dealing with the ageing costs; according to Gramenos (2005), the health care for the elderly in the EU represents about 30-40% of the total health care expenditures (THE).

But, whatever the magnitude of expenditures, there is a widespread consensus globally that the impact of an increased share of the elderly in the population on overall health-care costs can be mitigated by keeping individuals in good health and out of hospitals and doctors' offices (Oxley, 2009). The recent projections for EU Member States show that the influence of ageing on health care costs can be twofold reduced if healthy life expectancy increases in proportion to the extension of the same (DGEC-FIN, 2006).

### Strategic approach to healthy ageing

Some of these definitions are at the core of public policies in this area. Hence, it can be concluded that, although the policies are specific to the given legal-normative, and demographic, social and economic context, in essence they all revolve around the same principle - optimizing the social and health care protection for the elderly after retirement, i.e. for their remaining life. In this context, active ageing policies are aimed at main-

taining the activity on the labor market and the need for maintenance and prolonging the functional capacity of the individual as a nucleus of the community and the society. In this regard, according to the European Commission, for example, active ageing will help increase social protection for all by providing greater labor force (i.e. by increasing the retirement age), (CEC, 2002), while for WHO and some National Public Health Institutes the focus should be put on increasing the opportunities to extend the years of healthy and active life (WHO, 2002, SNIPH, 2007). On the other hand, some scholars support the opinion of extending the work performance of the population, not in terms of extending working life, but rather on contrary - in terms of using this functional and partly professional capacity for "reinvesting into the community" i.e. through involvement in voluntary activities that would contribute to the welfare of all, as a "win-win" policy outcome. Examples of such policies are organizing voluntary activities within the local community, assisting children at an early age for independent going to school, care for public areas and the like.

Healthy ageing policies may play greater role in solving the problems associated with ageing, which are related to the availability of public finances. Healthy adult population may be less inclined to leave the labor market, but even if that is not the case, the health of this population group undoubtedly mean less expenditures on medical treatment and third party care. New health policies increasingly perceive health as an investment in economic growth and development, rather than as expenditure; in this context, the good health of retired population affects the working population through reduced absenteeism to care for sick parent or other elderly person in the family (OECD, 2006).

Healthy ageing policies are multidimensional and should undoubtedly have an inter-sectoral approach. At the same time, healthy ageing should be an integral part of all policies like health care, social care, education, environment, etc. Thus, if structured properly, in cohesive and complementary manner, these policies can also be self-sustainable. Taking into account the multidimensionality, the development of such policies should not only include more sectors and ministries, but also other diverse stakeholders in the society, especially the target group - retired and elderly, as well as the civil society and the business community.

### Healthy ageing in Macedonia

According to the Human Development Index (HDI), Macedonia is positioned on the 71st place in the group of countries with high degree of hu-

man development, ranked after Montenegro (49<sup>th</sup> place), Romania (50<sup>th</sup>), Croatia (51<sup>st</sup>), Bulgaria (58<sup>th</sup>), Serbia (60<sup>th</sup>), Albania (64<sup>th</sup>), the Russian Federation (65<sup>th</sup>) and Bosnia and Herzegovina (68<sup>th</sup>). In 2010, the HDI in the country was 0.701 (Serbia 0.735, Slovenia 0.828, Russia 0.719, Greece 0.855, Croatia 0.767, Bulgaria 0.743 and Albania 0.719).

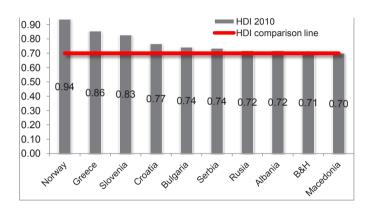


Figure 1. Comparative view of Human Development Index in 2010

(Selected countries, source: UNDP, 2011)

One dimension of measuring human development is the age structure of the population. According to the United Nations data from 2010, the life expectancy in Macedonia has steady growth, reaching 74.54 years in 2010, comparable to the regional average.

The population in Macedonia, as well as in the most developed countries, is ageing. United Nations' projections are that in the future, the elderly population in Macedonia will increase especially for the age group over 60 years, from 16.5% in 2009 to 33% in 2050, and for the age group over 80 years from 2.0% to 6.8% in 2009 and 2050 respectfully (UN, 2009). In Macedonia, according to the 1994 Census, 13% of the population was over 60 years (SSO, 1994), 15% in 2002 (SSO, 2002) and 17.1% in 2011 (SSO, 2012). The trend is not an exception in the world and in Europe, as a result of what the European Union (EU) and the World Health Organization (WHO) undertake measures and provide guidance for development of relevant policies aimed at this target population. While WHO and EU promote and support the "Health in All Policies" (HiAP) approach, in addition EU develops innovative partnerships for healthy ageing.

### Strategic approach to the aging population in Macedonia

Macedonia has adopted a National Strategy for elderly for the period 2010-2020. This strategy, considers that factors affecting quality of life and longevity among the elderly are the living conditions (including social and cultural aspects), health and the social status, whereas as indicators for measuring success of its implementation determines the life expectancy and healthy life expectancy. Thus, the social is concerned with supporting persons at social risk (financial aid, social housing and social care), rather than the societal status of the population or - the elderly in this particular case - except in the context of employment. Therefore, as most aging policies in Macedonia, the strategy is more directed towards socially marginalized groups within the elderly population. The needs of the elderly that is not in direct and immediate social need are not specifically addressed by this strategy.

The strategy, noteworthy, represents an important step in improving the social status and active and healthy ageing of the elderly in Macedonia, due to the established principles in the context of its implementation and which are aimed at improving the societal status of the older population by encouraging their independence (living in appropriate conditions that will promote the skills of these persons), access to the available resources within the society, encouraging social activity and formal and informal care protection.

The implementation of the strategy includes promotion, respect and protection of human rights and the rights of the elderly, planning for and sustainability of effects and results, inter-sectoral and inter-ministerial cooperation, involvement of local institutions in improvement and endorsement of local policies, encouraging public-private partnerships and intermunicipality cooperation.

### Challenges for the implementation of the Strategy

One of the major challenges to the implementation of the Strategy, as well as addressing the problems and needs of this population group, is the lack of data - both on national and local level, as well as on community level – on the current conditions and the opinion of the elderly on the enforcement of activities in strategic areas envisaged with the Strategy, which would be conceptualized around the basic socio-economic determinants of active and healthy ageing, as described later in this document. Research on the current situation and the opinion of the older population would significantly contribute to the quality, but justification as well -of the activities for implementation of the Strategy's goals in the next decade, i.e. for the preparation of short-term and long-term action plans.

Hence is the purpose of this research, which is aimed at providing data on lifestyle and living conditions, quality and needs to maintain a healthy and quality life, which is a prerequisite for healthy and active ageing of the population in Macedonia.

This research, also, represents a pilot phase in creating a comprehensive database of retired persons in the country. The initial research undertaken on a small sample population is aimed at providing information on the current situation about and opinions of the retired persons, and at the same time to allow for refining of the research questions and the research instrument that is intended to be used for the whole population of retired persons in the country; to enable obtaining more exact data of highest quality, especially in terms of the views of the target group, its problems, needs and hopes for healthy, active and decent ageing.

### II Aim and Methodology

The aim of this research is to understand the problems and needs of the retired persons, to improve the conditions for healthy and active ageing, as a new approach to integrated healthy and active ageing in Macedonia.

The methodology of choice for the research is a structured questionnaire, in which most of the questions are multiple-choice, and a smaller number of questions are open-ended and require descriptive answer by the respondent.

The sample size was set at 1,100 questionnaires sent in 5 Associations of retired persons active on the territory of the City of Skopje, and the sample consists of retired persons who are members of these Associations. In December 2012, 740 completed questionnaires were collected from 4 Associations. The response rate was 67.3%, which is within the expected response rate in this type of research, and it is acceptable according to scientific research standards as satisfactory to continue with the research, i.e. with the process of analysis and interpretation of the gathered data.

### Validation and validity threats

According to the methodology, all validated questionnaires were entered into an electronic version of the questionnaire, developed by the example of the printed version. The input of the data was conducted in two steps: firstly, every questionnaire was entered into separate file, to avoid two types of possible methodological errors:

- **Observation error** - during data input in encoded database, the person who inputs data may accidentally entered code that does not correspond to the actual answer (e.g. in encoding answers NO = 1 or YES = 2, to enter 1 for answer "YES"). This error is avoided by creation of a special electronic format of the questionnaire, that has exactly same layout as the printed version, and where all questions and answers are given in full text;

- Technical-technological error - during creation of large databases, the risk of so-called "corruption" of files (electronic computer files) is greater than with some simple computer data handling. Such "corruption" of files, may lead to loss of all entered data, which requires start over of data input. Hence, the development of special electronic copy of the questionnaire solves this problem, and as a result, the possible data loss can occur only at a level of individual questionnaire, which can quickly and easily be recovered by reentering only those questionnaires, which in terms of time consumption, has an insignificant effect on the process of input and analysis of the gathered data.

All validated questionnaires from this pilot research were entered into the electronic template of the questionnaire, during the period December 15, 2012 to January 9, 2013.

After entry and validation of all questionnaires, the data has been imported into a single database of coded answers for each cluster of respondents. In this research, there were four clusters, i.e. one for each Association of retired persons (Kisela Voda, Aerodrom, Gjorche Petrov, Saraj). Because the completion of the survey questionnaire was completely anonymous, the respondents could only be associated with the cluster to which they belong, i.e. the Association of their membership.

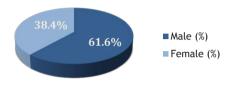
### **III Results**

The data analysis was performed on the level of disaggregated data – for questionnaires from each cluster separately, i.e. for respondents from each Association of retired persons who provided answers to the respective questions; this approach is chosen to ensure comparability of separate clusters in order to detect inter-cluster differences regarding the studied parameters. Additionally, the data has been processed on a sample aggregate, i.e. on the completesample of respondents from all Associations of retired persons that sole purpose is to compare the separate clusters in relation to the complete sample.

### a. The Sample

This section provides the basic demographic characteristics of the sample, used to determine the validity of the sample itself. The gender and age structure of the sample, for respondents who provided answer to the respective questions, is:

### Figure 2. Gender structure of total sample (n=722)



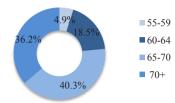
Although the total sample shows a significant variation in gender structure (61.6% male vs. 38.4% female) compared to the gender structure of the general population in the country (see table below), the data analysis at cluster level shows that this variation is mainly due to the unequal representation of both genders in the cluster Saraj, where almost all respondents (93.2%) are male. As a result of the latter, it can be concluded that the sample in the three remaining clusters, and in the complete sample, adjusted for cluster Saraj, fulfills the requirements of representativeness by gender.

# Table 1. Gender structure of the population in Macedonia(31.12.2011, projection)

	Total	Male	Female
Republic of Macedonia	2,059,794	1,031,926	1,027,868
%		50.1%	49.9%
Age group 55+ years	488,304	228,118	260,186
%		46.7%	53.3%

(Source: SSO, 2012)

The age structure of the total sample and the separate clusters are presented in table and chart below.



## Figure 4. Age structure of total sample (n=712)

	55-59 years	60-64 years	65-69 years	70 years and above				
Republic of Macedonia*								
	27.3%	22.9%	16.6%	33.2%				
Total sample	Total sample							
	4.9%	18.5%	40.3%	36.2%				
By clusters								
Kisela Voda	3.3%	13.9%	34.4%	48.3%				
Gjorche Petrov	6.4%	25.9%	40.5%	27.3%				
Aerodrom	5.5%	17.5%	46.5%	30.4%				
Saraj	3.2%	12.6%	36.8%	47.4%				
* Population projection: 31.12.2011								

### Table 2. Sample structure by specific age groups

As shown above, compared to the age structure of the general population, the largest difference occurs in the age group 55-59, which is understandable, given the fact that the retirement conditions in the country determine 62 for women and 65 for men as retirement age. Hence, although the percentage of this age group within general population is higher (27.3%), the majority is still economically active, and therefore not targeted with the sample, i.e. the research. Further argument in favor is the fact that over three quarters of respondents are over 65 (76.5%), i.e. older than the legally defined retirement age.

The other age groups show no significant differences, except, as mentioned earlier - in the age group 65-69, which actually represents the majority of the retired population group. Such share difference within the total sample is partly a reflection of the sample skewedness at the expense of group 55-59 (with less representation in the total sample). Likewise, in the separate clusters no significant variations in the age structure were observed. Hence, we can conclude that the total sample and the cluster samples alike, meet the requirement of sample representativeness by age.

It can thus be concluded that, in accordance with the principles and standards of scientific research, the complete and the cluster samples are observing the representativeness criteria, and therefore the analysis can be considered relevant and can be extrapolated to all retired persons living on the territory of the City of Skopje and countrywide.

### b. Housing as a healthy ageing factor

It is undisputed that housing is a basic human rights and existential need, which in terms of its priority emerges as one of the most important issues. The housing fulfills the physical need of creating security and shelter from the weather and climate conditions, the psychological need for creation of a sense of personal space and privacy and the societal need for a common space for the family. By (not) solving the housing problem for any person, the other numerous life issues that are directly or indirectly related to the housing are alleviated or aggravated (social, economic, sociological, psychological, political, spatial planning, legal, etc.) (Habitat, 2011). On the other hand, the right to housing is a universal human right that is recognized internationally in more than one hundred national constitutions in the world. The essence of exercising the right to housing is the humanistic realization of the notion that the human life is more than a mere subsistence, i.e. it implies appropriate housing that meets certain standards. The right of every man, woman, young person and a child is a safe home and community as part of the prerequisites for a peaceful and dignified life (Golay and Melik, 2007).

In this regard, the National Housing Strategy of Republic of Macedonia 2007-2012 (MTV, 2007) aims at long-term, standardized and harmonious development in accordance with the contemporary standards for quality of life. The Strategy propagates that realistic strategic objectives of the housing policy and their successful implementation will also have positive influence on other segments of the society. The experience shows that in all developed democracies the housing needs are not only addressed through market principles of supply and demand, but the state, via various policy interventions, measures and instruments, models the housing issue, adapting to changes and conditions on the real estate market.

In this context, the questionnaire used in this pilot research deals with housing of retired persons in terms of the current situation in residential housing on one, and the opinions of respondents in relation to their needs and requirements in realization of this basic human right, on the other side.

From the answers gathered, the pensioners-members of the Association of retired persons of Aerodrom, predominantly live with their family or other persons (72%), while only 28% reported living alone. The average residential area in which they live is 65.7 m<sup>2</sup>. In Gjorche Petrov and Kisela Voda, the situation is nearly identical, 76% and 73% of respondents reported that they live with their family or other persons, while 24% and 27% reported living alone. In Saraj much larger proportion of respondents (85%) live with the extended family and only 15% reported living alone. The average residential area in Gjorche Petrov is 77.6 m<sup>2</sup>, and in Kisela Voda 64.45 m<sup>2</sup>. In Saraj, the average residential area, according to the obtained data is 78.45m<sup>2</sup>.

Table 5.1 cl sons in the nousehold of the respondents					
	Alone	With family/ others	n		
Total	24.4%	75.6%	677		
Gjorche Petrov	23.9%	76.1%	209		
Kisela Voda	27.0%	73.0%	174		
Aerodrom	26.6%	73.4%	203		
Saraj	15.4%	84.6%	91		

Table 3. Persons in the household of the respondents

In trying to understand what is the structure of the inhabitants living with the respondents, further analysis have been done, as shown below.

	Spouse	Children	Children and their families	Other family	Other persons
Gjorche Petrov	54.3%	21.8%	21.3%	0.5%	2.1%
Kisela Voda	52.9%	18.4%	27.2%	1.5%	0.0%
Aerodrom	65.3%	15.9%	17.6%	0.0%	1.2%
Saraj	29.1%	16.5%	53.4%	1.0%	0.0%
Total	50.4%	18.2%	29.9%	0.8%	0.8%

Table 4. Kinship of the retired persons with cohabitants in their home

	Children and their families*	Other families*	Other persons*		
Gjorche Petrov	2	3	3		
Kisela Voda	2	3	4		
Aerodrom	2	1	3		
Saraj	2	2	3		
* average values					

According to the data, 50% of respondents reported living in a household with their spouse (from 29% in Saraj to 65.3% in Aerodorm) and their children (from 15.9% in Aerodrom to 21.8% in Gjorche Petrov; average: 18.2%), or with children and their families (from 17.6% in Aerodrom to 53.4% in Saraj; average: 29.9%). In a very small number, respondents reported living with another family (0.8%) or other persons who are not immediate family (0.8%).

The housing security, which, among other, means owning a home, is one of the important characteristics of the health of the individual and other family members, and, thus, is considered one of the indicators of healthy ageing. In terms of housing security, in this pilot research the majority of respondents reported living in their own home (86.6%), or in a property of a close family member (10.5%).

	Own property	Close family member property	Rental	Other basis
Gjorche Petrov	87.7%	11.8%	0.5%	0.0%
Kisela Voda	84.7%	11.1%	1.8%	2.4%
Aerodrom	81.0%	13.0%	2.0%	4.0%
Saraj	93.0%	6.0%	1.0%	0.0%
Total	86.6%	10.5%	1.3%	1.6%

Table 6. Ownership of the residence

Housing security also involves having minimum standards of a decent home, namely access to safe drinking water and sewerage, regular municipal waste collection, access to means of communication such as telephone and television, and computer-mediated communication technologies (e.g. Internet).

	Water	Electric- ity	Tele- phone	τν	Internet	Waste col- lection
Total	100.0%	100.0%	93.9%	98.2%	38.2%	60.3%
Gjorche Petrov	100.0%	100.0%	99.1%	96.8%	33.8%	64.4%
Kisela Voda	100.0%	100.0%	94.9%	98.3%	41.7%	62.3%
Aerodrom	100.0%	100.0%	96.8%	100.0%	48.4%	72.4%
Saraj	100.0%	100.0%	74.8%	97.1%	20.4%	22.3%

Table 7. Access to basic housing infrastructure

In terms of basic infrastructure, all respondents reported having access to drinking water and sewerage, to electricity and organized waste collection. This situation is expected, given that respondents live in the urban area of the capital city. Telephone and television are also present in most of the homes of respondents, and only the Internet is not part of their everyday life. Understandably so, considering that the respondents are from the older stratum of the population, although this data suggests that there is a room for education of and raising awareness among this population group on using new technologies.

Given the traditionality of the family, the social and cultural values in a historical context, it can be stated that retired persons often live in their own home supplied with basic infrastructure for urban living, but more often with their children and children's families, rather than alone. The reasons for this can be various, but it is likely that among other things, it is the lack of economic or other means, for their children to provide conditions for independent living in their own home. This multigenerational environment has its advantages and disadvantages, which are partly covered in the subsequent sections of this paper.

### c. Healthy lifestyles as a precondition for healthy ageing

One of the most important postulates on which public health policies are founded is the possibility for gaining benefits from care for own health by each person. Although there are factors - such as genetic - that cannot be significantly influenced, the healthy lifestyles, as a predictor of individual health and public-health measures as a factor of population health, are among the key conditions influencing the maintenance of good health, and prolonging healthy life expectancy. Although healthy lifestyles are essential to be introduced as early as possible in life, their importance exponentially increases throughout life in order to maintain good physical and mental health of the individual.

In the literature, healthy lifestyles are defined as care for personal health through personal and individualized choice of balanced diet, physical activity adjusted to age and physical fitness, maintaining optimal body weight, abstinence or moderate to minimal use of alcohol, tobacco and other psychotropic and other addictive substances, avoiding stressful situations or properly manage the inevitable stress, as well as regular and natural rest of the organism.

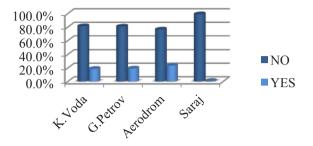
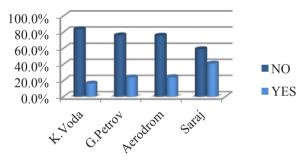
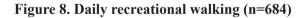


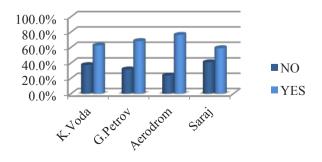
Figure 6. Daily alcohol consumption (n=687)

Figure 7. Daily tobacco consumption (n=697)



According to the data gathered in this research, the necessity for healthy lifestyles prevails, as the respondents are reporting exercising them on regular basis. Most of the respondents do not consume alcohol (80-95%) or tobacco (60-80%) on daily basis, and on the other hand most of them practice daily recreational walking (60-73%).





Unfortunately, many of the respondents answered that they do not go to sport or other clubs for recreational purposes (92.2%), which is surprising, given the fact that many have reported regularly, i.e. daily practicing recreational walking. However, such finding should raise further research interest in order to understand this behavior, but at the same time to find possibilities for exercising healthy lifestyles that, as elaborated earlier, play important role in maintaining good physical and mental health, and thus contribute to healthy ageing and healthy life expectancy.

However, despite the positive benefits that lifestyle can have on maintaining good health, inevitably older population faces naturally occurring health problems for which they require health services. With respect to health services, and primary health care in particular, the majority of respondents reported visiting a physician once a month (59.1%), while in the other categories of offered answers, the distribution is almost equal (14.8% do not visit, 11.7% visit twice a month and 14.4% pay a visit to a physician several times a month).

	Do not visit	Once a month	Twice a month	Several times a month
Kisela Voda	19.1%	56.7%	9.6%	14.6%
Gjorche Petrov	12.4%	62.2%	13.4%	12.0%
Aerodrom	15.6%	66.0%	10.8%	7.5%
Saraj	10.4%	41.7%	13.5%	34.4%
Total	14.8%	59.1%	11.7%	14.4%

Table 9. Number of visits to physician's practice

Bearing in mind the system of medicine prescription in the country, and the necessity for obtaining therapy for the chronic non-communicable diseases that are part of the common disease pattern within this age group, it can be assumed that the majority of respondents who reported visiting a physician once a month are doing so in order to obtain prescription filling for continuation of their therapy.

In addition to the previous finding, further analysis has been made to confirm the requirement of continuous therapy for chronic non-communicable diseases by the majority of respondents. When asked what kind of health problems they face, most respondents reported cardiovascular problems and high blood pressure, but as well problems with the musculoskeletal system, blood cholesterol and diabetes, whereas the percentage of those having problems with urogenital system is not as high.

	Kisela Voda	Gjorche Petrov	Aerodrom	Saraj	TOTAL
Heart and blood ves- sels problems	74	81	57	39	251
Skeletal and muscular problems	54	55	38	19	166
Kidney problems	15	19	14	10	58
High blood pressure	88	110	82	45	325
High cholesterol level	36	40	34	19	129
Diabetes	31	54	38	21	144
None	12	4	44	1	61

Table 10. Most frequent chronic diseases self-reported by respondents

On the basis of data analyzed in terms of prevailing health conditions, it can be concluded that the pensioners in the City of Skopje have similar problems as retired persons living in the metropolitan areas in the developed countries; the disease pattern coherent with the national statistics, and most European countries, requires regular therapy for chronic noncommunicable diseases, and further reinforcement of the raising awareness and health education activities concerned with the importance of practicing healthy lifestyles.

Further to this, a major benefit for the this age group and the healthcare system alike, would be the improvement of the prescribing policies for chronic therapy in terms of simplification of prescription filling procedures, especially for patients on life-sustaining or life-long therapies; introduction, for example, of a system in which the patient's medicine therapy is kept on record with the local pharmacy or patients' health card, would score benefits for both the chronic patients as well as for the health system. Some of the resulting effects would be decrease in unnecessary waiting times in health facilities, in benefit to the regular walking and recreation; at the other end of the spectrum, the benefits to the healthcare system would be in more time for the healthcare professionals to commit to specific cases or patients who need further diagnosis or treatment revision.

In conclusion of this pilot research regarding the underlying socioeconomic determinants for healthy ageing, it can be concluded that retired persons want openly to discuss their health and other problems, and by providing honest opinions, make suggestions to improve their status, as well as the system, giving advantage to others, especially younger generations – during their daily choices.

### d. The income as a precondition for healthy ageing

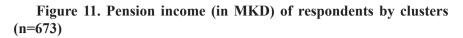
The economic welfare of the individual and the family is an essential element of the overall socio-economic, societal and psychophysical personal wellbeing and that of the community. The regular and timely income is necessary for maintaining good quality of life and satisfying basic living needs, and it is one of the most common stressor factors of today.

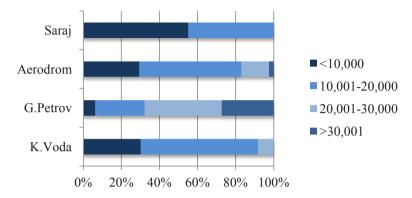
For decades, Macedonia has a well established and functioning pension system based on solidarity principle, through which all citizens who meet the legal requirements have the opportunity for regular and timely pension income calculated against predefined criteria. Hence, the questionnaire does not include questions concerning the regularity of income, but rather the interest of the research is focused on the types of income sources and their amount on a monthly basis. Such focus was chosen in order to answer the research question whether the retired persons have financial independence and to what extent, and whether their income is sufficient to maintain the desired quality of life, in terms of meeting the basic living needs.

In that sense, only 12% of respondents in the Aerodrom cluster did not report receiving pension, while of the remaining 88%, most have pensions in amount of 10,000 to 20,000 Macedonian denars (MKD) (57%), up to 10,000 MKD (27%), and significantly less number of respondents reported pension in amount of more than 20,000 MKD (combined 16%). Only 13 respondents reported additional income, ranging between 3,000 and 31,000 MKD.

Similarly in the Gjorche Petrov cluster, only 12% of respondents did not report receiving pension, while of the remaining 88%, most have pensions in amount of 10,000 to 20,000 MKD (61%), up to 10,000 MKD (31%), whereas an insignificant percentage reported pensions in amount more than 20,000 MKD (combined 8%). Of all respondents, only 26 (10%) reported additional income of average of 9,000 MKD per month.

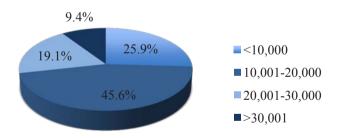
In Saraj and Kisela Voda clusters, none of the respondents reported income higher than 30,000 MKD; in Kisela Voda, the largest percentage of respondents receive between 10,000 and 20,000 MKD (61.6%), and in Saraj – most of them have pension of up to 10,000 MKD (55.2%). In Kisela Voda, only 20 persons reported additional income (ranging between 600 and 15,000 MKD), while in Saraj, 15 persons said that apart from the pension, have additional income between 1,000 and 12,000 MKD.





As Figure 12 shows, nearly half of all respondents (45%) have income between 10,000 and 20,000 MKD, and additional 25% have income of less than 10,000 MKD, i.e. they belong to the lowest pension range group.

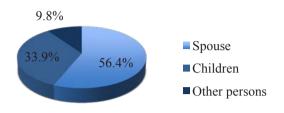
Figure 12. Pension income, total sample (n=673)



On cluster level, the lowest income was reported by respondents from the Association of Retired Persons of Saraj, while the highest percent with income in the category above 30,000 MKD is noticed from the answers of pensioners of the Association of Retired Persons of Gjorche Petrov.

At the same time, it is noteworthy, that the number of those reporting regular support to other person or persons with their income is not insignificant - nearly half in each of the clusters. From those who answered positively, the majority reported supporting the spouse (56.4%) and their children (33.9%).





### Table 12. Dependents of the respondents by cluster

	Spouse	Children	Other persons
Kisela Voda	54.3%	38.3%	7.4%
Gjorche Petrov	58.2%	31.5%	10.3%
Aerodrom	60.4%	31.9%	7.6%
Saraj	52.6%	33.7%	13.7%

### **IV** Conclusions and recommendations

### a. Conclusions

In the context of the findings of this pilot study, some conclusions can be drawn with regard to the main research question of what is the situation with basic socio-economic determinants of healthy ageing for the retired persons living in the City of Skopje, and further extrapolate these onto the retired population nationwide.

One of the main conclusions is that the retired persons in the City of Skopje live urban life, and mainly face all the benefits and disadvantages of the urban environment. However, considering their specific position in the society, as well as the special requirements they have in order to maintain a quality of life and attainable health, it is necessary to consider and enable additional mechanisms and possibilities for further facilitation and improvement of the life of this age category.

Arguments in support of this claim are the chronic prescription therapy and the effects that would arise from introducing simplification of medicines prescription system for chronic non-communicable diseases, in particular on the quality of life of this population; the pension income amount and the potential benefits from additional social and health care services, which can contribute to maintain and improve the standard of living; the high percentage of chronic cardiovascular diseases and the effect of promoting healthy lifestyles through health education and raising awareness about the importance of physical activity and introduction of measures to encourage sport and recreation among elderly, etc.

Despite the validity of these arguments, the causal relationship of any of them is a challenge that needs to be tackled and further researched in order to get an overall picture of the extent and prevalence of these phenomena, their relationship to and influence on healthy ageing, as well as what is the opinion and attitude of the target group regarding such phenomena and the opportunities for change. As a follow-up to this pilot study, it is necessary to undertake a more in-depth and comprehensive analyses of the current situation and the respective views and opinions of the retired persons nationwide, with particular focus on specific population subgroups, such as elderly living in rural areas, retired women, retired persons with disabilities, but at the same time, it is essential to do analysis of the best practices in other countries in order to further the process into formulation of appropriate policies for healthy ageing of the population in Macedonia.

### b. Future actions and recommendations

The ageing population is a global phenomenon which, besides in developed countries, it is becoming more and more common in the developing countries alike. While the developed countries have experienced this phenomenon earlier in time, in the developing countries its occurrence happens in a much more dramatic way, in terms of the pace of demographic changes and the complexity of actions and measures taken as a response of the society in addressing issues related to ageing, and more specifically – to healthy and active ageing.

Health is a life quality that affects not only the individual, but also the family and the wider community. The promotion of good health in elderly has a central role in the global answer to the ageing population. Poor health, negative stereotypes and barriers to active participation in social life place older people on the societal margins furthering the minimization of their role and contribution to the society, while at the same time creating greater costs for the society. The investment in the health of people, particularly in the elderly reduces the occurrence of disease, has positive influence on their socio-economic status, encourages independence and productivity, and thus directly provides huge benefits for the society.

The population ageing means increase of the demand for health ser-

### Neda MILEVSKA KOSTOVA, Snezana CHICHEVALIEVA

vices at all levels of health care, more pension funds and social benefits, but on the other side of the scale, the older generations are an important societal link and a significant social and economic resource, that are contributing to the society as family members and as active volunteers in the community.

While on one handside, ageing is a challenge to the society, prolonging the quality of life and healthy life expectancy means expansion of the possibilities for new and creative ways to make a contribution to the society, to its sustainable and lasting values and ultimately - to its future.

#### Abstract

In recent years, the aging, and healthy and active aging in particular have become an important discussion topic, both for the general public, and the academic and professional communities alike. Healthy and active aging is a process not a condition in itself, that penetrates in all segments of the social life, and directly or indirectly is of concern to the entire population. This paper gives an overview of the concept and the definitions of the healthy and active aging on global level, and further elaborating on the socio-economic determinants of the elderly in Macedonia, through analysis of the data acquired in the pilot-research undertaken among the pensioners in the City of Skopje, with the aim of determining the future steps and activities in the current and future policies shaped to ensure healthy and extended life with full respect of the human rights of every citizen in Macedonia.

#### Резиме

Во последниве години, стаи особено реењето. здравото стареење, станува се поактуелна тема, како меѓу општата јавност, така и меѓу академската и професионалната заедница. Здравото и активно стареење претставува процес, а не состојба, кој навлегува во сите сегменти на општествениот живот, и директно или индиректно го засега целокупното население. Овој труд дава преглед на концептот и дефинирањето на здравото а активно стареење во светски рамки, и се осврнува на социоекономските детерминанти на здравјето и здравото стареење на повозрасното население во Република Македонија, преку анализа на податоците добиени од пилот истражувањето спроведено меѓу пензионерите во Градот Скопје, со цел утврдување на идните чекори и активности во тековните и идните применети политики за овозможување здрав и долготраен живот почитувајќи ги човековите права на секој/а граѓанин/ка во Македонија.

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