HEALTH STATUS AND LIFESTYLE OF OLDER PEOPLE IN EUROPEAN COUNTRIES

ABSTRACT

The knowledge on the health status of older people in specific age groups, health risks they face and related health determinants are key points in designing a well-targeted and effective health promotion for older people (HP4OP). It is crucial to conduct research on the subject and transfer the knowledge to policy makers at different governance levels, which is the aim of this policy brief.

The research points to healthy lifestyle, social participation and networking as crucial elements of health and well-being of the older population in different age groups, living at home and in institutions. Importantly, even among the oldest old people (80+/ 85+), lifestyle is related to health outcome. In terms of policy, it is important to encourage data collection on health status and health risks separately for different age groups and based on that to develop and maintain health promotion interventions aimed at healthy lifestyle combined with social participation and networking. At the national level, countries should create political advocacy and institutional environment for health promotion actions rooted in civic organizations’ initiatives and movements promoting health literacy and healthy lifestyle among older people.

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http://pro-health65plus.eu/
INTRODUCTION

The last few decades have brought serious age-related demographic changes associated with the longevity revolution. A large and rapid increase in life expectancy has been accompanied by a substitution of deaths caused by degenerative causes such as circulatory system diseases and cancers for deaths previously caused by infectious and parasitic diseases. Older people live longer, but a significant proportion (from 50% to over 80% dependent on the age and country) is reported to live with multi-morbidity and chronic conditions. This policy brief reports on the health status of older Europeans and indicates main risk factors of poor health as well as points to the lifestyle that stimulates ageing in good health for older people in different age groups and across countries, living at home and in care institutions.

POLICY CONTEXT

European countries vary in health status in older age and these differences together with age specifics should be accounted for when designing adequate public health policy. The WHO agenda on ageing points that public health policy should take into account the health diversity in older age related to the decline of capacities with activities designed for the specific age cohort needs. This is especially important for reaching the EU policy objective of increasing healthy life years. Behavioral factors contribute not only to reducing the risk of non-communicable diseases in adulthood, but also to the increase of the capacity for good self-perception and ageing in good health. Health promotion programs tackling lifestyle of older people are found to be among the central strategies that might reverse or delay frailty and decline in physical and cognitive functioning. Cultural and environmental factors might be of great importance for undertaking healthy behaviors in older age and there is a differentiation of the prevalence of healthy habits among older population in European countries and between age groups among older people.

EVIDENCE AND ANALYSIS

DATA POOL

The research undertaken includes several activities: the literature overview on the health status definitions and main behavioral risk factors of poor health, as well as an overview of the representative statistical research and databases on the health status and life-style of older people in European countries, followed by the analysis of the health status of older population in the selected EU countries and identification of predictors of good health in older age.

The analysis of predictors of good health of older people living at home is based on a representative SHARE sample study (http://www.share-project.org/) for the period of 2010/2011 (wave 4 of the survey). The research uses the data from 6 selected European countries representing different welfare policies, traditions and behavioral patterns: Netherlands and Germany (Western Europe), Italy and Spain (Southern Europe) and Poland and Hungary (Central-Eastern Europe). Overall, the analysis covers 5139 men and 5909 women. Predictors of good health in older age are assessed using a logit analysis, separately for the three age groups: 50-67, 68-79 and 80+ and for the three groups of countries: Western, Central-Eastern and Southern Europe. The health status is
defined referring to indicators of self-reported health status, functional abilities and the perceived meaning of life. The behavioral analysis uses two indexes of healthy lifestyle and psychosocial indexes. The healthy lifestyle index refers to the domains of smoking, physical activity and nutrition (consumption of fruits and vegetables per week, drinks per day and regular consumption of more than 3 meals per day), with each domain valued with a score from 0 to 2, depending on its potential health effect as identified in the literature. The index is a sum of the points for each of the domains. In principle, it follows the WHO guidelines on the selected domains, though in a simple manner as the database provides only information on types and frequencies of selected behaviors, not accounting for their quality (i.e. the calories intake of specific types of food, time spend on specific physical activities). The psychosocial index includes domains of participation in the labor market, organized activities of social character (volunteering, learning, sports, clubs, religious and community organizations), undertaking leisure activities at home (reading, playing games or chess, doing crosswords), satisfaction from the social network and life satisfaction. Again, a coding is applied to each type of activity (from 0 to 2 points) and the index is a sum of the points for each dimension.

The analysis of the relationship between health outcome (death) and healthy behaviors of older people living in institutions uses the data from the Services and Health for Elderly in Long TERm care (SHELTER) project from the years 2009-2011. This 12-months prospective cohort study collects information on residents admitted to 57 nursing homes in 7 European countries (Czech Republic, England, Finland, France, Germany, Italy, The Netherlands) and one non EU country (Israel). The presented analysis covers 3966 patients, excluding all the patients below the age of 65 years. The median of survival time of patients in nursing home is compared regarding each active ageing determinant using Kaplan Mayer method. The equality of survivor functions across the groups is compared using the log-rank test. Furthermore, the relationship between health outcome (death) and the presence of the main behavioral factor investigated in the SHELTER study is assessed through a multivariate model adjusted for potential confounders, including age, sex, number of diseases, cognitive and functional impairment.

FINDINGS

HEALTH STATUS OF OLDER POPULATION

The core elements of health status that decline with age, are related to physiological changes and the high risk of the occurrence of often coinciding chronic conditions (which is referred to as multi-morbidity), frailty, sarcopenia due to bone mass loss in the skeleton, a loss of muscle strength, the frequent occurrence of functional limitations and in many cases disability. Note that the measurement of health status of older people has been evolving over the past years: from mortality oriented measures to measures that take into life expectancy correct by living with poor health, chronic conditions or disability what reflects the changing aims of public health activities from not only expanding longevity, but living longer in better health and good quality of life. Therefore, the analysis of the health status in older age covers various indicators: life expectancy of the population 65+, healthy life years of the population 65+, prevalence of chronic conditions as well as occurrence of functional limitations.

The longevity of Europeans has been increasing in recent years, but high variations between European countries are still observed: from the highest life expectancy (LE) in Southern Europe (Italy) and some Northern European countries (Sweden) to the lowest life expectancy in Central and Eastern Europe (Latvia, Lithuania, Bulgaria). Older age is characterized by numerous and often age-specific conditions which are often chronic and coexist with one another. Suffering from long-standing illnesses increases with age, accounting for the average prevalence of chronic conditions of about 54% for people in their 60s, increasing to 64% for men and 68% for women in their
70s and reaching 71% for men and 74% for women over 85 years of age (Figure 1). In some countries the prevalence of chronic illnesses exceeds 80% above the age of 85. The frequency of developing long-standing illness strongly varies between European countries. The occurrence of chronic conditions in older age is more frequent in Central and Eastern European countries (Estonia, Hungary, Latvia, Slovakia), followed by countries of Central and Western Europe (France, Germany, the United Kingdom). People living in Scandinavian countries (Denmark, Sweden) and some countries of Western Europe (Belgium, the Netherlands) declare long-standing illnesses least frequently, which could be related to various factors, including health care system performance and provision of care or technical aids, but it also might be related to the fact that individuals with a more severe health status are more frequently in full time care facilities and are not covered by survey research.

**Figure 1.** Prevalence of long-standing illness, EU countries 2013 (columns sorted by age group: first 65-74, second 75-84, third 85+), men (see graph above) and women (see graph below)

*Source: Eurostat, EU-SILC data [hlth_silc_04]*
Poor health status and loss in capabilities in older age might be related to cognitive decline and dementia. There is no routine data on dementia collected throughout Europe however. The Survey of Health Age and Retirement in Europe (SHARE) study results show that in Western European countries, approximately 2% of people aged 65-70 and 25-30% of those aged 85+ develop dementia. Cognitive impairments (including dementia), diabetes and Parkinson’s disease are especially relevant health problems increasing the risk of functional limitations. About 42% of men and 47% of women aged 65-64, in EU countries suffer from some sort of limitations in usual activity due to health problems. The prevalence of functional limitation steeply increases with age. Above the age of 85, 70% of men and 79% of women reports some sort of limitations due to health problems (Figure 2).

**Figure 2.** Self-perceived (some and severe) long-standing limitations in usual activities due to health problems, EU countries, first column: 65-74, second column: 75-84 and third column 85+, men (see graph above) and women (see graph below)

![Graph showing functional limitations across European countries](image1)

![Graph showing functional limitations across European countries](image2)

*Source: Eurostat, EU-SILC data [hlth_silc_06]*

There are great variations in the occurrence of functional limitations across European countries, similar to the pattern observed for long-standing illnesses with more frequent functional limitations in Eastern European Baltic countries (Latvia, Estonia) and Southern European countries (Croatia, Romania), followed by the countries of
Western and Central Europe (Germany, Poland, the Netherlands, Austria, France) and Northern European countries (Denmark, Sweden). There are some countries, in which the prevalence of functional limitations very strongly increases with age: it is low-moderate for the population aged 65-74 and very high for the oldest. Among these countries are Belgium, Bulgaria, Malta, but also the Czech Republic, Austria and France.

Behavioral risk factors for poor health status and physical limitations in older age include inadequate nutrition resulting in obesity or under nutrition, lack of physical activity, smoking and alcohol overuse. Also lack of social ties, social isolation and loneliness might be among factors contributing to poor mental health of older people. The analysis of survey results in the population living at home and in institutions (i.e. long-term care facilities) allows for better understanding of the potential predictors of poor health in older people throughout European countries.

PREDICTORS OF GOOD HEALTH IN OLDER POPULATION LIVING AT HOME

Results of the health predictors analysis by age groups confirm that non-smoking, undertaking physical activity, healthy diet based on high consumption of vegetables and fruits, high consumption of liquids and regular meals and social participation and networking are crucial and positively related to health outcomes in older age. These results are found for all age groups identified and for both sexes. It should be noted that even after controlling for life-style, social participation and networking, there is still a gradient in health status by education in males and incomes in females below the age of 68. The positive relation between education and health of men might be related to their prolonged outside activity, especially on the labor market, which is more common among people with higher education degree. This relation is not observed however for women, for whom it is not education but income that increases the probability of better health. Such results would suggest that for women economic standing is more adequate social status indicator than education and could be a better predictor of health, this however would require further studies. At the same time stratification factors of education or income become unrelated to health with more advanced age (68+) while undertaking healthy behaviors and participation still matter for being in good health.

In all countries analyzed, undertaking healthy lifestyle and activity (social networking and participation) are important factors for being in good health in older age. However, cross-country analysis points that in countries with higher economic inequalities and health inequalities (Italy, Spain, Hungary and Poland), education plays a role for females and the probability of good health increases with education, even if lifestyle, psychosocial factors and age are controlled for. In Western Europe (Germany, Netherlands) the factor of education is insignificant predictor of good health.

PREDICTORS OF SURVIVAL IN OLDER POPULATION LIVING IN INSTITUTIONS

The analysis arising from the SHELTER study highlights how several active and healthy ageing determinants still play an important protective role in terms of survival for older residents in nursing home, regardless of age, sex, comorbidity and other possible confounders. An overall survival improvement is found in older adults with higher Body Mass Index (BMI), more frequent physical activity and social involvement, as well as in elderly vaccinated against influenza and pneumococcal disease. On the contrary, being underweight is associated with higher mortality, stressing the important role of nutrition in maintaining older people in good health. Finally, patients receiving visits by family members seem to be have a greater risk of death, but it could be mostly explained by attitudes of the relatives of residents in long term care facilities which tend to be more participating when health condition of their beloved ones worsens.
All ordinal variables included in the multivariate model show a well-defined, linear and usually inverse trend in respect of mortality that strengthened their role in the analyzed health outcome. BMI has a remarkable correlation with survival, with obese and overweight residents with lower mortality rate as compared with normal-weight and, above all, underweight old adults. The absence of the well-known U-shape relationship between mortality and BMI is consistent with the recent theory of the “reverse epidemiology” and is worthy of further research efforts in this field. Similarly, the unexpected lack of any significant association between smoking habits and mortality is probably due to the low prevalence of smokers in institutionalized older adults.

**IMPLICATIONS AND RECOMMENDATIONS**

**EUROPEAN LEVEL**

- Encourage EU member states to collect and publish comparable, standardized and representative information on health status of older people, including morbidity and behavioral risk factors contribution to poor health of older people. Preferably, the information should be age specific, including also the oldest old (80 or 85+) and covering people living at home and in institutions.

- Encourage EU member states to develop and maintain health promotion interventions and programs targeted to older people that account for age, health status and their specific needs; stimulating physical exercises, adequate nutrition combined with social participation and networking.

- Encourage EU member states to undertake health promotion activities targeted to the oldest old (80 or 85+), including population living in the institutions, taking into account their health status, abilities and health risks they face.

**NATIONAL LEVEL**

- Develop information and knowledge on the age specific health and social problems of older people and their determinants.

- Ensure knowledge transfer (via media, meeting, publications) on specific health needs and HP4OP to politicians, medical experts, health promoters and other interested parties.

- Create political advocacy and institutional environment for health promotion actions rooted in civic organization initiatives and movements, promoting health literacy and healthy lifestyle for age and health specific groups of older people, including the oldest old (80 or 85+) and population living in institutions.

- Support participation of older people in local decision making in health policy.

- Strengthen the role of medical professionals as health promoters and advisers in actions for seniors (family doctors, environmental nurses and older people carers) in HP4OP to avoid specific health risk and lead healthy lives.
PROJECT FOCUS
ProHealth 65+ is focused on health promotion and prevention of health risks among seniors. The project seeks to determine effective methods of promoting a healthy lifestyle among older population groups by bringing together knowledge and experience of main partners and health promoters from Poland, Germany, Italy and the Netherlands and exchange it with collaborating partners from Portugal, Greece, Bulgaria, Czech Republic and Hungary. The effective implementation of training for health promoters working with this age group is the ultimate project goal.

PROJECT OVERVIEW
Pro-Health 65+ project corresponds with directions of the EU strategic Health Program (the Second and Third Health Program). The project is focused on ‘Investing in Health’ as part of the Social Investment Package for Growth and Cohesion through professionally designed health promotion programs implemented by well-informed and efficiently operating health promoters. It is targeted at the elderly with the intention of providing them with good health and good quality of life, and enabling them to be active and socially integrated (Healthy Aging). It will be implemented as a collaborative project in close cooperation with partner countries using a variety of research and institutional experience. It will be important to add the project activities to other European and national activities so that they are complementary and compatible.

METHODOLOGY
This project is about research and implementation. It will use two sets of tools. For research, we will accumulate and develop knowledge: analyze previous studies related to the subject of health status of older people and the health determinants (social, economic and cultural) in different stages of life; identify and evaluate health promotion methods; analyze institutions of health promoters and also funding, distribution, and modelling of financial circuit and incentives; critically review cost-effectiveness analysis. Quality will be guaranteed by supervision of the Advisory Board and will be assessed in accordance with the rules of the project. For the implementation of project results, we plan to prepare a manual for health promotion that will help to fill the most common knowledge gaps among street-level health promoters and training materials for key institutions providing health promotion for the elderly. We will also conduct training in cooperation with the newly created Board of Health Promoters for selected street-level health promoters.

EXPECTED OUTCOMES
Widespread knowledge and use of evidence based and economically effective methods of health promotion within different groups of street-level health promoters (health care practitioners, policy-makers, local and NGOs activists, social workers, trade unionists, journalists etc.) is one direct result of the project. Analyzing different institutions of public health, legal basis, sources and methods of financing and cost-effective ways of conducting the work in this area, will enrich the knowledge on possibilities and barriers related to promoting health. The project will contribute to the application of relevant health promotion methods in joint actions in the field of public health.
PROJECT NAME

PRO HEALTH 65+
Health Promotion and Prevention of Risk – Action for Seniors

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FUNDING SCHEME

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DURATION

August 2015 – July 2017 (36 months)

BUDGET

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WEBSITE

http://pro-health65plus.eu

LINKEDIN FORUM

https://www.linkedin.com/groups/ProHealth-65-Health-Promotion-Prevention-8354412/about

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