CONSEQUENCES POPULATION AGEING FOR THE POLISH HEALTH CARE SYSTEM

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Abstract: *The phenomenon of an increasingly fast population aging in Poland has a number of different consequences. One of them is the rising costs of health care and long-term care for this part of society. There will be a growing demand for geriatricians, physiotherapists and nursing staff. Therefore, the introduction of compulsory care insurance which will be used by people who require care or care due to their health condition, should be considered. This is important because the future retirement benefits of large part of society will be lower than the current one. In addition, future seniors should be made aware that their health is largely a consequence of their earlier lifestyle. The article presents demographic changes related to aging of the population and the rising costs of health care.*

Key words: *aging, demography, health protection*

JEL codes: *I18*

1. Introduction

The progressive aging of the Polish population is an unavoidable consequence of the decline in the number of births and the prolongation of further life expectancy. This results in a greater demand for health services. In turn, this generates an increase in health care costs. In view of the deepening of this process, one must begin searching for new system solutions in order to meet the growing needs of older people. The aim of the article is to present the consequences of the aging process of the population for the health care system. The current consumption of health services by this group of population was also characterized.

2. Outline of the health care system in Poland

The health care system adopted in Poland finds its basis in the provisions of the Constitution. Namely, in Article 68 there is a record that everyone has the right to health protection. The Basic Law guarantees everyone the right to health protection and the right to health care services financed from public funds. The article also stipulates that public authorities are obliged to provide special health care to, among others, elderly people (Konstytucja RP).

The mandatory health insurance system covers about 98% of the population including family members of persons paying insurance premiums and certain social groups whose contributions are covered from the state budget.

The legal framework of the health care system is based on a few basic legal regulations, that is: Act of 27th August 2004 on health care services financed from public funds (Journal of Laws 2017, item 1938), Act of 15th April 2011 on medical activities (Journal of Laws 2018, item 160) and regulations harmonizing Polish law with EU law. Management, financing and supervision and control functions are divided between the Ministry of Health, the National Health Fund and local self-governments. In Poland, the National Health Fund is the main public entity responsible for organizing health care. It is a state organizational unit that in the system of universal health care deals with the financing of health services. It is the only entity authorized to manage money from health contributions. The National Health Fund finances health care services and contracts them with public and non-public health care providers. The Ministry of Health supervises the activities of the National Health Fund, while the supervision of the finance economy is exercised by the Ministry of Finance. The Ministry of Health is

also responsible for setting health policy, financing and implementing health programs, financing selected highly specialized services and larger investments, research and education of medical staff. In addition, it performs numerous supervisory functions, and (in relation to some entities) direct management functions. At every level of administration, territorial self-government authorities are responsible for identifying the health needs of their residents, planning health service supply, health promotion, and in relation to public health care units for which they are founding bodies, perform certain functions related to the management of staff, investment financing, and functions supervision and control in this area (*Zarys systemu ochrony zdrowia*, 2012).

Every elderly person using the services provided by the Polish health care system, regardless of whether he is healthy or ill, uses the right of a patient. Namely, the person has the right to:

- health wedges in accordance with current medical knowledge,
- information about his health condition,
- the right to report adverse reactions to medicinal products,
- behaviour by persons providing health services the secret of information related to its treatment,
- giving consent or refusing to provide health services,
- respect for intimacy and dignity in particular when providing health services,
- access to medical documentation regarding the state of health and health services provided,
- to object to an opinion or doctor's decision,
- respect for private and family life,
- pastoral care in a medical entity performing medical activities such as stationary and round-the-clock health services,
- storage of items in the deposit of a medical entity (Act of 6 November 2008 on patients' rights and the Patient's Rights Ombudsman).

It should be noted that the legislator treated geriatrics in Poland as one of the priority areas of medicine (Regulation of the Minister of Health of December 20, 2012 on defining priority areas of medicine). The basic goals that assume the functioning of the system in the field of care for seniors are:

- dissemination and improvement of access to health care and improvement of the quality through the application of standards of gerontological and geriatric expertise,
- financing health services and health care infrastructure for elderly people adequate to their needs.

The Polish health care system is currently facing demographic changes causing the need to incur increasing financial outlays on health care.

3. Consequences of the aging process of people

Determining the needs of the elderly population in the field of health care requires the adoption of two perspectives: demographic and aging organism. However, the failure to take into account, even in the background, psychological, cultural and economic factors, all postulates change into a list of wishful thinking (Pabiś and Kuncewicz, 2016).

The number of older people is systematically growing in Poland. Population in post-working age (women + 60, men + 65) in 2016 was almost 7770 thousand persons (20.2 % of population). In 2000, there were two million less people in post-working age, and then they constituted less than 15%. If we take into account the population aged 65 and over, they constitute 16.4% of the general population (GUS, 2017b). Poland is one of the demographically very old countries. This is confirmed by the median age, which is 40 years (it is expected that in 2050 the middle age will increase to 48.8 years for men and 53.7 years for women). Among the elderly population, the majority are women (59%) there are 143 women per 100 men (107 for the entire Polish population).

The increasing share of women in the population with age is a consequence of men's mortality and diversification of life expectancy – women reaching the age of 60 have more than five years ahead of their lives more than men.

The numerical predominance of women increases with the transition to other older age groups, for example, in the age group 60-64, women constitute 54% of the population and the feminisation rate is 125, and among persons at least 80 years old, 70% are women and for every 100 men there are 228 women (GUS, 2016b). Feminisation is connected with singularization. It is a stay in a single-person household, often up to a certain age is a voluntary choice, while in later age often becomes a compulsive situation which occurs as a result of the death of the spouse. Singularization of old age means a high percentage of elderly people who run their own households alone. According to the forecasts of the Central Statistical Office in Poland in 2030, 53.3% of households will be run by people over 65, and 17.3% of those over 80 years of age. Women are more often in single-person households (Pabiś and Kuncewicz, 2016).

Over the next twenty years there will be a further rapid process of population aging. It is expected that the share of people in the post-productive age will be 26.7% in Poland in the perspective of 2035. In total, the number of people in retirement age in Poland will increase from around 7 million in 2014 to nearly 10 million in

2050. In the same year, the population of people aged 60 and more will amount to 13.7 million and will account for over 40% of the total population. A low fertility rate combined with a favourable phenomenon of prolonging life expectancy will result in a decrease in labour supply on the labour market and an increase in the number and proportion of elderly people as a result of the advanced aging process of Polish society. In 2014, both pre-working and post-working age constituted slightly more than 18% of the population. The remaining 63% are people of working age.

In 2050, potential labour resources will account for only 57% of the population (GUS, 2016c). This will trigger a specific perturbation for the labour market. It must be remembered, however, that extending life increases the profitability of investing in human capital. Man becomes a more valuable asset. As a result, the productivity of labour resources increases. A prerequisite for launching these mechanisms is a policy oriented towards future demographic changes. It should make the labour market more flexible, create an atmosphere of trust in the financial markets and shape an appropriate education and health system (Kurkiewicz, 2012).

With the aging of the population, the problem of health deterioration is inextricably linked. Among people aged + 65.5% of the population assess their health as very bad, and 25% as bad (GUS, 2017a). This is due to deterioration with age, especially after reaching 40 years of age. However, the highest severity of disability is observed in the elderly population. According to the results of the last list of population in 2011, almost 4,7 million of people (more than 12% of the population) in the general population of Poland described their health as unsatisfactory, that is, they found health problems (disability or chronic illness) long-term limiting the ability to perform everyday activities. Among this group of people, more than 2.5 million of people are older people – at least 60 years old, what in 2011 accounted for more than half (54%) of the disabled population.

Seriously or not seriously limited ability to perform daily activities (lasting for at least 6 months) in 2015, concerned nearly half of the elderly. The percentage of indications for limited ability to perform da activities (in serious or minor degree) was higher among the women than in men (GUS, 2016a).

The disabled people are more likely to have long-term health problems or chronic diseases, and more often they need to receive medical help. Over 70% of fifty-year-olds signal the occurrence of such problems, among sixty-year-olds this figure is already 85%, and in the group of the oldest people, this percentage is already over 90% (GUS, 2016d). The frequency of reporting chronic diseases also increases with age. Almost 83% of people over fifty-years-old and more claim that they currently have at least one disease or chronic disorder. The most common health condition of older people is hypertension, which occurs in more than half of this group. Very often, older people complain of lower back pain, which affects more than 40% of the population. The third most frequently reported health problem is osteoarthritis – it occurs in almost 40% of older people, followed by neck or middle-neck pain (29% each) and coronary heart disease, which occurs in every fourth elderly person. The following items occupy: diabetes (18%), urinary incontinence, thyroid disease and migraine (approximately 12% each). Older women more frequently than older men suffer from joint degeneration, thyroid disease, neck and back pain, moreover they often have hypertension, problems with urinary incontinence and migraine conditions. On the other hand, in older men, more significant is a heart attack or stroke and their negative consequences, as well as chronic bronchitis, chronic obstructive pulmonary disease, or emphysema and cirrhosis of the liver (GUS, 2016a).

These problems occur with uneven frequency. They increase as the years go by. As you get older, the efficiency of sensory and movement organs decreases. The vision is broken the fastest. Most often, 70-year-olds and older people have trouble in seeing, it is close to every other 70-year-old and older, and two-thirds of aged people (80-year-olds and older). Every seventh sixty-year-old man does not hear a conversation held in a quiet room, among the seventy-year-olds already every third, among old people every second person does not hear a conversation well. Problems with independent distance travel most often affect 70-year-olds and older people. In this age group, every other 70-year-old person and almost three-quarters of the oldest people have smaller or larger problems with independent movement. In 2014, more than 1.6 million people aged 65 and over had difficulty with getting down and getting up from bed or sitting or standing up from a chair. Also, nearly 1.6 million people had problems with washing themselves from head to foot, and over 1.3 million people with self-dressing or undressing. Almost 875 thousand elderly people had difficulties while using the toilet, and nearly 520 thousand while eating meals (GUS, 2016d). It should also be remembered that for maintaining good health and mental well-being one should also motivate the elderly to carry out check-ups, follow diet and physical activity.

As indicated with age, long-term health problems are growing. Chronic diseases accumulate with age. They are a factor that seriously hinders self-catering for needs and increasing the demand for health service. Therefore, older people are a group of special care in the field of health protection. The socio-economic development has awakened their needs, and the growing state of medical knowledge is constantly improving the quality of services. This results in the creation of claims. The result is ever stronger emphasis on access to services that not only save lives but, above all, improve their quality. However, the needs of older people are quite difficult to satisfy because the benefits for them generate significant costs.

4. Health benefits of older people

The frequency of using medical services depends both on the way of taking care of one's health and on the health condition of a human being in the case of healing (repairing) services. People who have health problems, both permanent and temporary, need medical help and they are more likely to use it than people who enjoy good health. It is not difficult to conclude that older people constitute a relatively large group of patients both in outpatient and inpatient care settings.

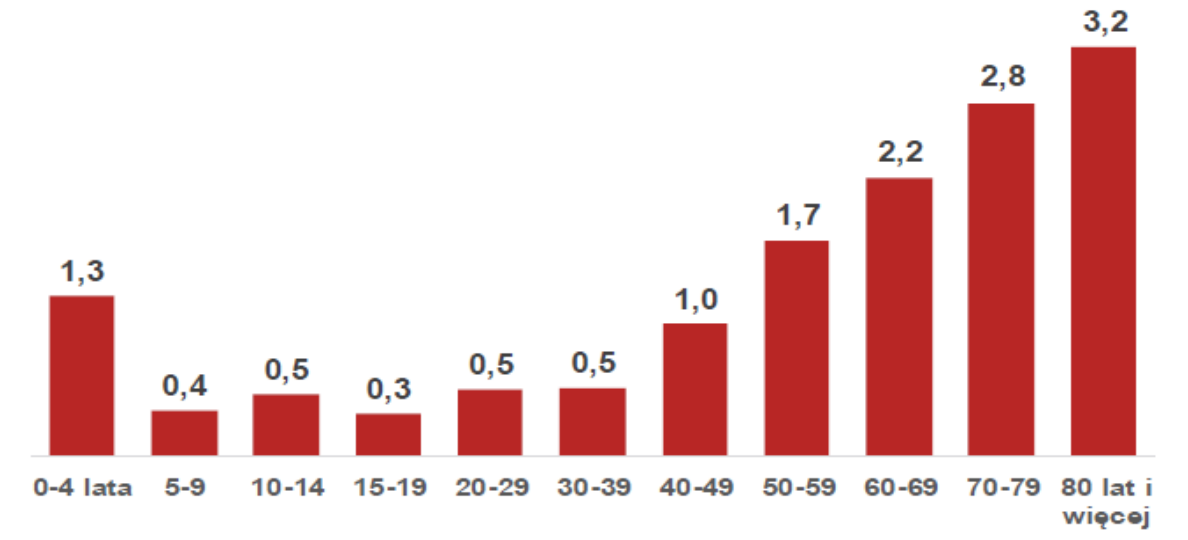
The growing demand for long-term care services is a trend in every aging society in the world, however in Poland particularly strong growth should be sought. This is influenced by the factors indicated above and changes in the family model resulting in the growing number of single-person households. Hence, an important form of stationary health care aimed in particular at older people is long-term care, which in the face of the aging process of the population plays an increasingly important role. Long-term care facilities are care and treatment institutions as well as nursing and care facilities with a general profile and care and treatment institutions as well as nursing and care facilities with a psychiatric profile. In 2016, there were a total 554 of them (Żyra and Malesa, 2017).

Another form of help for the elderly is offered by hospices and palliative care departments providing interdisciplinary care over patients in the end of their lives. The provision of palliative and hospice care is a comprehensive, holistic care and symptomatic treatment of patients suffering from incurable, unprotected, progressive, limiting the life of the disease. This care is aimed at improving the quality of life, aims at preventing pain and other somatic symptoms, and at alleviating and relieving mental, spiritual and social suffering (Regulation of the Minister of Health of October 29, 2013 on guaranteed services in the field of palliative and hospice care).

In 2016, a total of 155 branches of this type operated. An analysis of the age structure of people staying in these facilities indicates that 75.9% of patients (25.1 thousand) are people aged 65 and more, of which more than half (58.3%) were people in the so-called late old age (80 years old and older) (Żyra and Malesa, 2017). In 2016, the long-term care and hospice and palliative care facilities in total had 34.9 thousand beds. They provided 98.5 thousand people with stationary care. In addition to stationary activities, some establishments also run home and / or daily activities. A total of 7.5 thousand people were taken care of at the patient's care.

On the other hand, the analysis of patients using hospital services, taking into account the age, showed that older people are much more often and longer hospitalized. This is illustrated in figure 1.

Fig. 1 The average number of nights spent in hospitals during the last 12 months by age group



Source: GUS (2016d).

It should be noted that over certain age of 56, men are hospitalized more often than women. The reasons for this state of affairs can be traced to more frequent neglect of the health of men in the years of full professional activity. In addition, in recent years, there has been a significant increase in the frequency of cardiology, ophthalmology and diabetes in the group of patients aged + 55. In the case of patients over 70 years of age, internistic hospitalization begins to dominate, accounting for almost half of all hospital stays. It should also be noted that at the age of 80, already every second Pole at least once a year requires a stay in the hospital. Forecasts show that in the next dozen or so years, demographic changes in Poland will increase the demand for

hospital services, which will benefit the older part of the population. It will in particular concern treatment at internal, cardiological and surgical wards, as well as in the field of ophthalmology (mainly in the field of cataract removal) (NFZ, 2016).

Polish seniors are a small group of patients. Polish patients receiving stationary and outpatient treatment at the age of 65 and more constituted a group of 323.1 thousand people in 2015 (5.4% of the population of Poland aged 65 and more). In the care of the elderly, however, the basic health care plays a fundamental role, because the first-contact doctor, knowing the patients, their living and functioning conditions, has the opportunity to properly manage their care. In the elderly, the basis for treatment and diagnosis is, as already mentioned, a comprehensive geriatric assessment, in which the efficiency in everyday activities is additionally assessed. Among the advice given by primary care physicians and family doctors in cities, 31.4% were elderly people. However, in the case of the village, the share of people over 65 in primary care was higher and amounted to 32% (Żyra and Malesa, 2017).

An upward trend can be observed here, as well as the fact that the share of advice given to persons aged 65 and more was 15.4% higher than the share of this age group in the population. Only every 10 older people in the last 12 months were not even once in the first contact or family doctor, which means that 90% of Polish seniors on such a visit were at least only once. The oldest Polish residents used the services of the family doctor relatively often. Only one in twenty declared that in the last year he had never been to a doctor. In general, family doctor advice was more often needed by women than men of the same age (GUS, 2016a). Care for aged people is also implemented at the level of specialist counselling. Taking into account the typical disabilities of the elderly age, representatives of various medical specialities participate in their treatment. For typical problems with eyesight, hearing is needed: opticians, otolaryngologists and surgeons. The growing number of cancer cases typical of old age like digestive tract, prostate, increases the demand for gastroenterologists, urologists and oncologists. In contrast, neurological diseases such as Parkinson's disease, Alzheimer's disease and multiple sclerosis, also on neurologists (Halik, 2002). In the case of specialist advice, older people accounted for 27.5% of all beneficiaries. In their respective voivodships, their share ranged from 25.2% (Mazowieckie Voivodship) to 30.7% (Zachodniopomorskie Voivodship) (Żyra and Malesa, 2017). Over 70% of the elderly population in the last 12 months have been treated by specialists doctors. The most-frequent specialist advice was used by people aged 70-79 years old, much less often younger and older. As part of emergency medical services in 2016, 42.5% were people aged 65 and more. The elderly are merely consumers of medicine. 92% of all people aged 60 and over use drugs, both prescribed by a doctor and over the counter. Among the youngest seniors, drugs were used by 88% of this population, and among the oldest over 95%. Relatively more often the drugs were used by women than by men (GUS, 2016a).

The frequency of providing a service to an elderly person results more from the supply effect, for example, with the services of the provider resulting from the signed contract and the expected insurance reimbursement, and not the actual needs of the patient. There are also medically unjustified restrictions on the access of older medical patients to the resources of modern medical technologies due to an uneven regional distribution of modern technologies and economic resources (Gałuszka, 2013).

Defining the basic forms of health services for the elderly, one must first of all remember the specificity of morbidity in this age group. In order to determine the optimal forms of health care for this group of people, it is necessary to determine what changes they should meet, also including the large share of the disabled population.

5. Summary

Analysing the health needs of the elderly, one should take into account the quantitative changes and the pace of these changes as well as qualitative changes. The dynamics of demographic changes as well as changes taking place within the population of older people are reflected in the consequences of the aging of the population. It has obvious consequences for the health care system. Undoubtedly, it is necessary in connection with these processes to increase expenditure on health care. The emphasis should be on diagnostics, as many diseases detected in the early stages are cheaper to treat and prolong the life expectancy. An important aspect is also the integrated treatment of this population due to the many health problems often occurring simultaneously. This requires comprehensive changes and the creation of funds for these purposes. Moreover, it must not be forgotten that the aging of the population brings not only consequences for the health care system, but also for the pension system or the labour market.

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