

Ageing society – selected health and social policy challenges

Starzejące się społeczeństwo – wybrane wyzwania polityki zdrowotnej i społecznej

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Abstract

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. Health-care policy should respect certain principles, such as equal access to health service and social solidarity. The progressive ageing of the Polish society generates the need for necessary additions to the existing healthcare policy, such as measures designed to improve the demographic indicators. Adjusting the healthcare to the challenge that an ageing society presents will require a reinforced involvement of the state and encapsulate formulating goals, outlining priorities, and establishing ways to achieve them in a manner that lets the oldest groups of our population count on the comprehensive assistance of the gerontological care system. The government institutions are currently facing challenges which stem from the rising numbers of people in need for health care services, along with the increasing costs of both medical care and social services. A possible remedy to this situation is to introduce innovative technologies that could facilitate the management of gerontological care, including telecare, as well as the widespread introduction of medical robots. The measures listed above may reduce the negative consequences of demographic changes. (Gerontol Pol 2021; 29; 19-29) doi: 10.53139/GP.20212904

Keywords: health, health care system, health policy, population ageing, old age.

Streszczenie

Korzystanie z najwyższego osiągalnego poziomu zdrowia jest jednym z podstawowych praw każdego człowieka. Polityka zdrowotna powinna respektować pewne zasady, takie jak równy dostęp do opieki zdrowotnej i solidaryzm społeczny. Postępujące starzenie się polskiego społeczeństwa rodzi potrzebę niezbędnych uzupełnień dotychczasowej polityki zdrowotnej, takich jak działania mające na celu poprawę wskaźników demograficznych. Dostosowanie opieki zdrowotnej do wyzwania, jakie stwarza starzejące się społeczeństwo, będzie wymagało większego zaangażowania państwa obejmującego formułowanie celów, wyznaczanie priorytetów i ustalanie sposobów ich osiągnięcia w sposób, który pozwoli najstarszym grupom ludności liczyć na kompleksową pomoc system opieki gerontologicznej. Instytucje rządowe stoją obecnie przed wyzwaniami wynikającymi z rosnącej liczby osób wymagających opieki zdrowotnej oraz rosnących kosztów zarówno opieki medycznej, jak i socjalnej. Możliwym remedium na tę sytuację jest wprowadzenie innowacyjnych technologii ułatwiających zarządzanie opieką gerontologiczną, w tym teleopiekę, a także powszechne wprowadzenie robotów medycznych. Wymienione powyżej działania mogą ograniczyć negatywne skutki zmian demograficznych. (Gerontol Pol 2021; 29; 19-29) doi: 10.53139/GP.20212904

Słowa kluczowe: zdrowie, system ochrony zdrowia, polityka zdrowotna, starzenie się społeczeństwa, starość.

Introduction

Health, as stated in the Constitution of the World Health Organization, is defined as “a state of complete physical, mental, and social well being, and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the funda-

mental rights of every human being without distinction of race, religion, political belief, economic or social condition”. On the individual level, good health is a key factor determining the quality of life and bears significance for the proper functioning of individuals, their families and, consequently, society as a whole. Giving one’s best wishes illustrates how highly we regard health; often-

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times the wishes fall along the lines of “good health, happiness and prosperity”. Typically, the wish of good health occupies the first position in this triad. Elderly people usually promptly respond to these wishes with “Yes, most importantly, good health”, thus expressing the belief that health is essential to them [1].

Poor health plays a crucial role in the marginalization of individuals and can be treated as one of the most important causative forces of exclusion. People whose health condition is poor cannot undertake their expected professional or social roles, and cannot develop new social ties. Moreover, the poor state of their health often-times leads to dissolving of the existing interpersonal and social relationships. Consequently, such people face rejection; either formal — as in being refused employment, or informal — by being ostracized by the majority [2].

Considering the problems related to poor health, it is impossible not to notice that the four basic characteristics of the elderly subpopulation described in 2002 by prof. Błędowski are still valid: deterioration of health, singularization, feminization, and income drop [3]. As more and more people achieve the so-called third age, and even surpass the age of 80, currently regarded as the beginning of the late old age, the deterioration of their health and functional fitness occurs more frequently, as compared to younger age groups. This, in turn, translates into an increasing prevalence of disability, including prolonged immobilization and total dependency [4,5].

Demographic old age in Poland

The modern world, among many unprecedented opportunities, offers people a chance not only to reach old age, but to achieve longevity, which considerably surpasses the beginning of old age. The effects of this phenomenon can be traced on the example of the demographic threshold of old age, defined, according to UN standards, as a situation in which 7% of the members of a given society have reached or exceeded 65 years of age. Polish population have exceeded the demographic old age threshold back in 1967, and the advanced demographic age threshold (defined as a situation in which at least 10% of members of a society have reached or exceeded 65 years of age) in 1980 [6]. It is worth noting that a demographic forecast that was drawn up back in 1999 has assumed that the number of elderly people (65+) in Poland would reach about 5 million in 2010, which would amount to almost 13% of the overall population [7]. This prognosis has turned out to be true, as - according to the Concise Statistical Yearbook of Poland - in 2010, the number of people aged over 65 reached 5.2 million,

which accounted for 13.6% of the total population [8]. On the other hand, the data from, 2019 shows that the progressive ageing of the population is still on the rise, as the number of people aged over 65 peaked at 6.9 million that year, representing 18.1% of the total population [9]. The ageing of the population of Poland is a process characterized by several distinctive phenomena: an increase in the average age of the population, a growing percentage of people who have exceeded a certain age, described as the so-called ‘old-age threshold’, and an increase in the general number of older people as compared to the number of children and adolescents.

An ageing society - main causes and consequences

The first factor related to the ageing of the population is low fertility rate among females. The decline in the number of births has been a trend for almost 30 years now - since 1990 the fertility rate stays below 2, and as such, it does not guarantee the substitutability of generations. In 2003, the number of births reached 351 thousand - the lowest in the entire post-war period. At that time, both birth rate (9.2‰) and fertility rate (1.22) reached the lowest score ever recorded. Admittedly, in 2016 there have been 382 thousand live births recorded, i.e. 13 thousand more than in the previous year, and in 2019 approx. 375 thousand children were born, which is 13 thousand less than in 2018, when 388 thousand children were born. It is noteworthy that increase in the number of births, observed in the first few years after initialization of 500+ programme mainly applies to the second, third and subsequent children born in families, as opposed to firstborns.

Table I. Percentage of births of the first, second and third children in families in 2010 and 2017. Based on the data of GUS (Statistics Poland) 2018

Births	2010	2017
First child	50.1%	42.9%
Second child	35.1	40.4%
Third child	9.9%	12.4%

This may indicate the polarization of the reproductive behaviors, resulting in a decline in the number of firstborns and their share in the total number births, while the number of women deciding to have three or more children is on the rise.

This data suggests that increase in the number of births reached in early period of financial aid for women giving, has been achieved thanks to women electing

to give births to the second and third (and subsequent) child. As such, the number of women who do not have children and decide against giving birth has been on the increase.

Another factor contributing to the population ageing is the shift in the highest fertility rate from women aged 20-24 (as observed up to 1990s, to women aged 25-29). Therefore, in the last 15-20 years, the median age of women giving birth has increased by 4 years (up to 30 years); the average age of women giving the first birth has also increased by 4 years and stands at almost 28 years of age.

This phenomenon can be partly explained by the changes in the education level of mothers. In 2019, 51.5% of women who gave birth had higher education, i.e. almost nine times the percentage from the early 1990s, when it was only 6% (13% in 2000). The necessity to devote one's time to education may constitute a key factor in the women's decision to postpone pregnancy.

The above-mentioned state of decline in birth rates, in conjunction with the increase of people above 65 years of age in the population of Poland, causes considerable changes in the demographic structure of our country.

As a consequence of these changes, the number of elderly people (aged 65 or more) is steadily increasing. In 2019, compared to the previous year, this group grew by 215,000 up to more than 6.9 million total.

This increase is a direct result of people born in the 1950s entering the elderly population group. For this reason, the number of people in the so-called adulthood stage (15-64 years of age) has been decreasing over the last several years.

On the other hand, the number of children (0-14 years of age) has risen since 2015, up to almost 5.9 million, but is still 3.3 million lower than in 1990 and 1.3 million

lower than in 2000. This will lead to further reduction in labor pool, understood as human resources of working age, able and willing to work under typical conditions existing within the economy (labor supply), and, what is also important, to an accrued strain for the functioning of the social security system as a result of a growing number of elderly people.

Age dependency ratio (illustrating the amount of people of non-working age per 100 people of working age) correlates with the data provided above. This ratio stood at 67 in 2019 against 55 in 2010. However, the ratios between sub-indices (based on the ratio between the number of people of pre-working age to people of working age and between the number of people of post-working age to people of working age) carry more weight than the general age dependency ratio. The analysis of the sub-indices points to adverse changes in both groups.

In 2019, the ratio between the potential future manpower and those that, at least theoretically, have already left the labor market leans in favor of the latter. In 2010, the values of sub-indices reached 29 and 33. In the earlier years the ratio was considerably more favorable: in 2000, it was 40 to 24, and in the early 1990s – 52 to 22 [10].

One of the additional factors worth noting when analyzing the demographic situation of Poland is the feminization of the elderly population - for a group of people aged 50 or more, the feminization index (which determines the number of women per 100 men) amounts to almost 126, whereas in the oldest age group (75 or more) it rises up to 195 women per 100 men. Although these parameters have been on the decrease over the years, the feminization of the elderly population will still be an important factor in determining the needs and expectations towards the social policy of Poland. However, among

Table II. Changes in the number of people in old age compared to the number of children and in Poland. Based on the data of GUS (Statistics Poland) 2020

	1999		2019	
	No.	% of total population	No.	% of total population
People aged 65 or more (elderly people)	4644100	12,1	6947000	18.1
People aged 0-14 (children)	7581900	19.8	5888100	15.3

Table III. Age dependency ratio in selected years (people of non-working age per 100 people of working age) based on GUS (Statistics Poland)

Year	1990	2000	2010	2019
in total	74	64	55	67
People of pre-working age	52	40	29	30
People of post-working age	22	24	33	37

the rural population women start outnumbering men at around 64 years of age, albeit at around 41 in cities - which is a result of the emigration of women from rural areas to cities.

In assessing the demographic structure of the Polish society, one has to account for regional differentiation in the ageing process of the population. Currently, the Pomeranian Voivodeship has the youngest age structure. The values regarding the ageing of the population are the most favorable there, e.g. in 2019, the median age of the citizens stood at 40,0 and the percentage of people aged 0-19 years was 21,7% (whereas the parameters for Poland were 41,3 years and 20,0% respectively). A similar age structure can be found in Lesser Poland and Greater Poland. On the other hand, Opole Voivodeship have the least favorable values related to the age structure of the population with the median age being 43,1 years, and the percentage of young people sitting at 17,8% [11].

Health policy as one of the key tasks of social policy

Health policy is one of the elements of the social policy and, as such, it is deemed particularly important. This is due to the fact that in the modern world providing health security for the citizens lies within the responsibilities of a country, as expressed by appropriate passages in the legal acts of individual countries. The right to life and health is widely based and supported by international treaties which include them as fundamental civil rights. The International Covenant on Civil and Political Rights speaks upon this subject, stating that every human being has an inherent right to life that cannot be arbitrarily taken away, (Dz. U. [Journal of Laws] from 1977, No. 38, item 167;), so do both the Convention for the Protection of Human Rights and Fundamental Freedoms, according to which the right to life of each human being is protected and no one can be intentionally deprived of life, (Dz. U. [Journal of Laws] from 1993, No. 61, item 284) as well as the European Social Charter established in Turin on 18 October 1961 (Dz. U. [Journal of Laws] from 1999, No. 8, item 67), which specifies that everyone has the right to use all available means that enable them to achieve the best state of health possible [12]. These principles have become the source of generally applicable law that also functions within the Polish legal system [13].

After the accession of Poland to the European Union, the country had to adjust its policies, health policy included, to meet the EU standards.

In the consolidated version of the Treaty on the Functioning of the European Union from 2012, in article 168,

one can find a passage: A high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities. Union actions, which complement national policies, aim at improving public health, fighting human diseases and ailments, and removing the sources of threat to both mental and physical health. Point 7 of the same article 168 reads: Union action shall respect the responsibilities of the Member States for the definition of their health policy and for the organization and delivery of health services and medical care. The responsibilities of the Member States shall include the management of health services and medical care and the allocation of the resources assigned to them [14].

The right to life and health protection is also defended by the Constitution of Poland, which guarantees legal protection of life (Article 38) and health (Article 68), including access to publicly funded health care within the limits of the Act. Paragraph 2 of Article 68 requires the public authorities to provide citizens, regardless of their financial situation, with equal access to publicly funded health care. Moreover, paragraph 3 states that public authorities are obliged to provide special health care for children, pregnant women, disabled people, and elderly people [15].

The examples listed above indicate that securing the needs for health of the citizens, especially their right to life and health, is guaranteed by the Polish Constitution and international treaties ratified by Poland. At this point, it should be emphasised that health is not a commodity available just for select individuals. Health is a real social value, contributing to the national wealth and affecting the multidimensional activity of individual people, thus influencing the overall level of functioning and activity of the society. Moreover, members of society faced with the prospect of longevity are more likely to invest in any long-term endeavors, as they can expect to benefit from them longer in the future [16]. Lack of health however either marginalizes or excludes individuals from participation in various spheres of social and personal life. At the same time, the marginalization resulting from reasons other than poor health, such as lack of adequate education, lack of resourcefulness, or inability to use available sources of information, can significantly impede or even prevent the full use of various forms of available health care [17].

Health-oriented lifestyle, adequate physical activity and rational nutrition play a significant role in the welfare of individuals, and, therefore, societies. Nevertheless, one must not forget that the health of individuals, as well as the society as a whole, is also influenced by certain factors that people (especially the elderly) have little to

no control over. This has been taken into account by the World Health Organization, who supplemented their catalogue of health determinants by factors that an individual cannot influence [18]. Inappropriate policies of employment, housing, social security, as well as improper economic and environmental policies can all contribute to health deterioration. As underlined by WHO policy, poverty in particular, which is a phenomenon that poses a great problem for elderly people who lack support and security offered by state institutions, stands as the highest health risk factor [19]. Assuming that the factors that impact health, such as housing conditions, civil rights and freedoms, labor market situation, or the threat of unemployment are largely independent of behaviors and stances of the social units, it becomes problematic to impose on the citizens the exclusive responsibility for their health state.

This observation justifies the need for the state to undertake extensive and multifaceted actions in the field of social policy, including protection and promotion of health. Health and disease are not only a problem of the sole individual, but also their family, workplace, and social environment; health is a prized and real value which can be treated as a part of state's wealth. Only comprehensive measures will bring the efforts of the state, other entities and citizens together to maintain and improve the health of society. Coordinated and consistent action of state institutions may lead to equal opportunities for achieving health, regardless of social status, education, income or place of residence of individual citizens. These objectives can be accomplished by coherent and rational social policy, whose important element is health policy [20].

Despite the ongoing discussion on how to define social policy tasks, one can assume that at the core of said tasks are such actions of the state and its entities that pursue the creation of conditions for meeting the needs of society, including the need for health.

It is worth mentioning that health is identified as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO).

Maintaining current health status is a health need. The problem that health systems have long been faced with is that, regardless of the solutions adopted, the provision of services offered by the system is limited by the resources at its disposal. This situation requires solutions in which the resources allocated to the health security fund, through rational health policy, will be spent in a way that attempts to meet the growing health needs of a demographically ageing society to the fullest possible extent. Considering the responsibility of public entities to best

satisfy the health needs of a community under the care of a given health system, it is justified to treat health policy as one of the key sections of social policy [21].

Demand for health services in old age

As the organism ages, all the past injuries and diseases may lead to a drastic deterioration of health, which consequently does not allow for normal, independent functioning. The levels of disability determine the health condition of the society, displaying a noteworthy characteristic which is a considerable increase in the amount of disabled people in the subpopulation of people who reached the age of 50. People with disabilities are more prone to lingering health issues and chronic conditions. They also have to seek medical and social help more often. This group suffers the highest frequency of lesions and diseases of the locomotor system, cardiovascular system diseases and neurological conditions. Damage and diseases of vision and hearing organs, as well as mental disorders also become a serious issue. It is worth noting that women report long-term health problems and chronic diseases more often than men.

In both national and world gerontological literature, one can already find many reports about health status of seniors. The various specific aspects of the health issues of the elderly population have been studied multiple times, but also comprehensively and on the scale of the whole Poland. The PolSenior study qualifies as one of the most prominent research project of this type in the world literature [22]. The Geriatric Section of the Union of European Medical Specialists defines the so-called geriatric patient as an elderly person (most often over 70 years of age) with multimorbidity, or any person aged 80 or more, because of the age-related increased risk of complex pathologies. In Poland, according to the European Union Statistics on Income and Living Conditions, more than two-thirds, or 67.7% to be precise, of people over 60 years of age admitted having long-term health issues or chronic diseases that have lasted (or are expected to last) at least 6 months. Women (69.6%) declared having these issues in more cases than men (65%). A higher proportion of people with long-term health problems or chronic diseases was recorded in cities (69.3%) than in rural areas (65.1%). The results of this study correspond to the results of the European Health Interview Survey conducted in 2014, which proved that chronic diseases and ailments plague the majority of elderly people (on average, only one person out of nine declared no such problems). More women than men admitted to having chronic diseases or ailments and this pattern has remained consistent throughout all age

groups. More than half of the research group of elderly Poles suffer from high blood pressure, which makes it the most commonly occurring health condition among this group. A lot of older people complained about lower back pain; this ailment occurred in more than 40% of the population. Third most commonly reported health issue was osteoarthritis, which occurred in almost 40% of the elderly, followed by neck pain or middle back pain (29% each), as well as coronary disease, which occurred in every fourth person of old age. Other common conditions were: diabetes (18%), urinary incontinence, thyroid diseases and migraine (about 12% each). Judging by the sex of the subjects, older women suffered from osteoarthritis, thyroid diseases, neck and back pains, hypertension, migraine, and urinary incontinence more often than older men did. Whereas older men more frequently experienced heart attacks, strokes and their negative consequences, as well as chronic bronchitis, chronic pulmonary disease, emphysema and cirrhosis [23]. Such people need dedicated health (preventive, therapeutic, rehabilitative) and social-oriented action, thus covering all the aspects of diseases in elderly patients. It is also noted that in order to provide care for geriatric patients, a team of professionals capable of delivering comprehensive diagnostics and therapy focused on improving functional efficiency, as well as covering wide spectrum of activities ranging from preventive measures to palliative care is required [24].

It is widely recognized that a programme of systematic action for the fulfillment of medical and social needs of the elderly population needs to be developed and implemented in a way that would simultaneously keep it separate from and integral to the health system. The NIK (Supreme Audit Office) Report from 2014 confirms this, emphasising that a well-organized geriatric care system and an adequate valuation of benefits are more effective for the patient and cheaper for the payer [25]. This model of health care organization is referred to as geriatric care. It is a fact, however, that an elderly patient is a person exhibiting somatic, emotional, and social polypathology. Therefore, in this case, it would be more beneficial to devise a set of procedures adjusted for the patient within the scope of gerontological care. At the same time, it is impossible not to mention that the Standards of Practice in Geriatric Care do exist, developed by a gerontology panel which was summoned by the Minister of Health in 2007, however, they were not introduced into everyday practice in the form of applicable law [26].

Challenges for the health care system

Health care policy should respect certain principles, such as equal access to health service, social solidarism involving accessibility and mandatoriness, use according to needs, lack of wastefulness and purposeful action. Moreover, it is believed that health protection contrary to the principle of business as usual (profit maximalization) should function on a non-profit basis. Nevertheless, in view of the fact that the amount of services and benefits that can be offered by a health protection system is limited by the amount of resources the system possesses, it appears desirable to have at least partial elements of self-funding and self-organization of particular services within the health care system.

This is, of course, a certain ideal; difficult to achieve, since many issues arise from the fact that some of the commonly accepted values are not compatible with one another, which begets various kinds of dilemmas. For how to harmonize the principles of solidarism and fair access to services with macro- and microeconomic efficiency, the principles of autonomy of medical personnel, patient autonomy, or the sphere of political game revolving around the health policy. A game which is characterized world-wide by volatility of goals and superficiality of values, manifested in the form of ever-changing declarations, among other things, which depend on social sentiments.

Furthermore, an important challenge in health policy planning is to ensure the availability of services by adjusting;

- a) the size and structure of resources to the size and structure of population's needs;
- b) how the process of providing medical services is organized to the capabilities of patients using them;
- c) the costs of medical services to the financial ability of the patients;
- d) spatial distribution to the scale and structure of needs; patients' expectations towards service providers and the degree to which these expectations were met [27].

Health and social care systems, seeking solutions that increase efficiency or complement existing solutions, attach growing importance to the support offered by the advancements in the field of medical automation and robotics. The development of technology oriented towards helping people with disabilities and the elderly allows for expanded automation and robotization of the environment that supports them. Modern gerontology, which focuses on finding an answer to health, psychological and social problems thanks to the Japanese pioneering solutions, is progressively turning towards robo-

tics and automation. Among many solutions from these branches, one should mention smart clothing, or *i-wear*. Taking the form of underwear or pajamas (primarily for bedridden patients), smart clothing is equipped with sensors of the telemedical systems which are part of the round-the-clock telemonitoring (monitoring of vital signs) and alarm system (in case of set threshold values being exceeded, respiratory arrest, fall, etc.). Sweatshirts and jackets (for outdoor use) are also available; equipped with above-mentioned sensors and identification, communication and geolocation systems, useful for patients suffering from memory loss.

Robotic and/or intelligent equipment in the patient's room in the form of a robotic anti-decubitus bed with telemedical functions, and bedside robots equipped with a medication dispenser as well as a communication system may all provide a new quality of life for patients in advanced old age and those who are not self-reliant. Another breakthrough for the widespread application of this equipment may come in the form of smart houses, which can foster independence of the patient by offering patient support and 24-hour monitoring, including medical and telemedical modules that ensure the patient's safety. It is worth noting that the functions of a smart house can be customized and configured to fit the needs of an individual [28].

For years now, smart home systems have been considered a good alternative (in case of the elderly) or an auxiliary solution (in case of more severe conditions, even neurological) for traditional forms of care, both home and institutionalized [29].

Not refuting any of the above possibilities, one has to pay attention to the increasing feeling of discomfort and the fading sense of security present in health care workers when assessing the current state of the health care system. The issue of stress and its impact on the frequency of accidents at work, as well as on the health status of people working in various health care institutions has been mentioned and remarked upon in a publication commissioned in 2014 by the Social Insurance Institution, Prevention and Rehabilitation Department [30].

Judging by the stress-inducing factors of individual professions, divided into different stress categories, in order from most to the least stressful, health care workers (e.g. paramedics, doctors, nurses) were listed in the top twenty among thirty-seven professions evaluated in the above-mentioned publication. However, paramedics took the first spot in the general stress category, whereas doctors were fourth, and nurses ended up in eighteenth place. In an assessment of external stress, which is understood as;

a) feeling unfairly judged by other people in different contexts (e.g. at work or at home);
 b) feeling helpless and increasingly exhausted when defending one's own point of view on various matters;
 c) experiencing anxiety resulting from a sense of being used by others;
 d) feeling frustrated and exhausted at the lack of one's capability, skills or resources needed to meet the requirements and demands made by others,
 the third, tenth and nineteenth place was taken by paramedics, doctors and nurses respectively. In contrast, in the study of the level of emotional stress during work, defined, as;

- a) a sense of anxiety, excessive nervousness; frequent difficulty in relaxing in various everyday circumstances;
- b) fatigue combined with a tendency to avoid taking up or completing various tasks;
- c) a tendency toward an excessive irritation in various interpersonal relations; frequent fatigue with no apparent cause [31].

Paramedics, doctors and nurses have taken the first, second and thirteenth place respectively.

Naturally, one should bear in mind that an occupation defined as a doctor or nurse requires qualities found in various subcategories of a medical profession. Although the work of a primary care doctor or nurse differs from that of an anesthesiologist or nurse anesthetist, or a surgeon or perioperative nurse, and thus is subject to varying degrees and types of stress, all health care employees tend to be susceptible to the burnout syndrome, which includes emotional exhaustion, depersonalization, and depreciation of their own professional achievements, occurring in people who work with others, balancing on the edge of their endurance. According to the research conducted by the Polish Chamber of Physicians and Dentists, occupational burnout affects around 40% of doctors [32]. Meanwhile, reaching health limits has been confirmed in recent years by multiple media reports on doctors dying while being on duty.

Equally, if not more disturbing symptoms of problems within the health care system are reports about cases of belittlement, or worse, of ignoring the needs of helpless people in situations worse than the socially acceptable average. In their most drastic form, these situations are exemplified by the death of patients who were sent home from a medical institution, from which they did not receive proper diagnosis and help. In such situations, not everything can be explained by superordinate determinants, such as scarcity of funds, outlying contracts with the National Health Fund, medical personnel shortage, or inadequate qualifications and ethical attitude of

human teams. Modern health care, not only in Poland, gradually loses sight of the patient. There is a reason for WHO's mantra: putting people first. It becomes necessary to upgrade the health care system with mechanisms designed to enable widespread, and free from victim-blaming, preventative and therapeutic measures, as well as health promotion, conducted on many levels of health care. It is equally important to spread awareness among health care professionals that people have different ways of achieving health, and experience various obstacles on their way to recovery. As long as the health care system is focused on diseases and not on people and effects understood in terms of health, we will witness events that are both tragic and appalling to the public eye [33].

The conflicting interests of parties involved in the realization of medical services, already described in 2001, still have relevance and continue to hinder the development of coherent health care policy. From the country's point of view, it is important to ensure macroeconomic efficiency, understood as the allocation of such amount of funds for medical services that will fulfill the needs for health assistance without compromising economic equilibrium and microeconomic efficiency, understood as achieving the best effects health-wise and satisfaction of consumers at the lowest possible cost. From the point of view of the payer, in the case of the National Health Fund, it is important to manage the funds in rational and economical manner. For the citizen, however, it will be crucial to obtain the fastest access to the services of best possible quality [34].

These interests, although having a common objective of providing the public with a comprehensive health care system, remain in conflict with each other in terms of the implementation, resulting in the need to resolve emerging tensions and conflicts between the various parties involved in the development and functioning of the health system. It is a difficult task, especially as the ageing of the society imposes an increasingly difficult to achieve, yet necessary, obligation to provide a state-guaranteed and publicly funded health care service.

Summary

The fundamental objectives of the health policy, such as improving the health of the population, facilitating access to health care services, taking actions designed to increase citizens' responsibility for health, will probably remain unchanged. It can be assumed that it will be necessary to accelerate and reinforce actions that take into account the demographic and epidemiological changes associated with the ageing of the population, and the

need to provide long-term care, especially for the elderly.

The progressive ageing of the Polish society generates the need for necessary additions to the existing health care policy, such as measures designed to improve the demographic indicators. These indicators depend on improving the financial condition of families, the state of the labor market, employment stability, easier access to housing and the reduction of negative aspects of moving abroad for work, which not only makes Polish citizens postpone starting a family, but also encourage them to do it abroad or even stay abroad permanently. In this case, population policy can assist couples in implementing their procreation plans (removing obstacles that hinder the decision to start a family, such as the difficulty to fulfill a mother's role while also pursuing a professional carrier) or persuade them to make changes [35].

In the case of measures designed to correct the procreation plans in order to increase the number of children in the family, it may be helpful to combine the argument of the common good with the argument of the intergenerational solidarity. Thus far, this argument has been used in regard to the conservation of nature or natural resources. Nonetheless, the plea to the people alive today to leave the Earth in a serviceable state for the next generations could be expanded by spreading awareness that the current reduction in the number of children in the family will result in the subsequent, less numerous generations having to bear the consequences of these decisions [36]. In particular, it will burden them with the task of providing not only care, but also economic security for the generation of their parents and grandparents.

The diversity of factors influencing the transformation of the demographic state of Poland makes it necessary to take into account changes occurring at many levels, the most important being the level of society, basic social groups (family, couple) and individuals. However, certain decisions of Poles result not only from living conditions, but also from the transformation of patterns of behaviors and attitudes in the contemporary Polish society. Among others, these changes are expressed by:

- a) higher age of marriage, increase in the number of divorces, decrease in the number of people who remarry after divorce or death of their spouse, decrease in fertility due to the postponement of pregnancy and the increasing age of women at the time of their first birth;
- b) belittling parenthood and treating children as competitive goods in relation to the possibilities of pursuing a professional carrier, material prosperity, and even threatening the personal freedom of parents.

All these reasons, especially the decline in both fertility and the number of marriages, lead to the demographic ageing of Poland and other countries of the European Union.

Measures which in a strict sense relate to adjusting the health care institution as a whole to the challenge that an ageing society presents will require a reinforced involvement of the state in providing access to a sufficiently high level of human health protection. This task encapsulates formulating goals, outlining priorities, and establishing ways to achieve them in a manner that lets the oldest groups of our population, which, by nature, are characterized by increasing number of people suffering from polypathology of old age, limited self-reliance, and increased reliance on the external support, count on the comprehensive assistance of the gerontological care system. It is also important to organize and supervise the education system not only for doctors of various specializations, but also for other workers of the health care sector in conjunction with the needs of an ageing society. Adapting health care system to the pace of demographic ageing forecast is an important and urgent task for our country's political and government bodies, both at central and local level. The government institutions are currently facing challenges which stem from the rising

numbers of people in line for health care services, along with the increasing costs of both medical care and social services, which clearly implies the need for a comprehensive, internally coherent gerontological care system in the area of health protection. A possible remedy to this situation is to introduce innovative technologies that could facilitate the management of gerontological care, including the development and implementation of tele-care system adapted to Polish realities, as well as the widespread introduction of medical robots, especially those designed to assist with rehabilitation, and the care of elderly people. Robotization in various aspects would also allow the use of new technologies in order to stimulate and develop both prevention and health-oriented action in an ageing society.

The measures listed about may reduce the negative consequences of demographic changes, however, eliminating them permanently may prove difficult. In this context, the proposed recommendations on the development of a health care system dedicated for senior citizens gain particular importance, as it can directly reduce the increasing strain on the national budget [37].

Conflict of interest

None

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