CONSIDERATIONS REGARDING AGING POPULATION - manifestations, challenges and concerns in the medical-social field

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INTRODUCTION

Population aging, reflected in an increase in the number and proportion of older people in the total population, is a global phenomenon that affects and will affect the whole world in the coming decades. The process of demographic aging is of great interest today, through the many consequences and implications that it determines. Thus, the change in the ratio between the active and the passive population determines an increase in the number of dependent people, due to adult producers, a phenomenon that creates difficult economic, medical and social problems. Population aging has a negative impact on many aspects of society and the economy, such as social protection, the labor market, the demand for goods and services, the composition of families, living conditions, macroeconomic and fiscal sustainability. Related to the health sector, it has consequences on the structure of morbidity and mortality of the population and implicitly on the organization and provision of health services.

MANIFESTATIONS OF POPULATION AGING - demographic profile, health profile, consequences - at national and European level

Demographic profile. The demographic manifestations of the aging population described in the specialized literature consist in: increasing the number of the elderly population without maintaining a balance between the other age groups; increasing the number of families without children and those consisting only of elderly people or even only one person and those over 70-80 years; increasing consumption and the need for socio-medical assistance; decreased birth rate and fertility. [1]

According to State of Health in the EU - Romania - Country profile from 2019 in terms of health, in Romania, life expectancy has increased in recent years, from 71.2 years in 2000 to 75.3 years in 2017. However, it has remained low compared to many European Union countries, thus reflecting unhealthy behavior, socio-economic inequalities and deficiencies in the provision of health services. There are also major differences in life expectancy by gender (women's life expectancy is higher than in men) and level of education, especially for men (men with the lowest level of education are estimated to be live about 10 years less than men with the highest level of education). [2]

On January 1, 2018, the EU-28 population was about 512.4 million citizens, and people aged 65 and over had a share of 19.7% (an increase of 0.3 percentage points compared to previous and 2.6 percentage points compared to 10 years ago). In the same year, Romania registered a population of 65 years and over 18.2%, higher than in 2008 - 15.4%. [3]

The accentuated tendency of population aging, currently registered nationally and internationally, is a process with numerous consequences and implications, manifested on several levels, and current concerns in this area focus on identifying issues that can be addressed and developing recommendations to be undertaken to reduce the demographic, medical, social or economic consequences. Similar to other countries, Romania also faces this phenomenon of accentuated population aging, with consequences and implications that are common to other countries, but also with particularities related to the way and level of organization and functioning of the medical system, aspects cultural, social, economic specific to our country. Thus, the approach of this concern is currently carried out, both at European level (within European consortia and cooperation in the field, in which Romania is also a partner, ensuring that through active contribution will benefit from the results of collaborations), and at national level (through national policies and strategies in the medical and related fields, thus ensuring that the common European recommendations are adapted according to national particularities).

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Another aspect related to the aging population is the progressive aging of the older population, as the relative share of the very elderly grows at a faster rate than any other age segment of the EU population. The share of people aged 80 and over in the EU-28 population is estimated to increase twice and a half in 2018-2100, from 5.6% to 14.6%. People aged 65 and over will account for 31.3% of the EU-28 population by 2100, compared to 19.8% in 2018. [3]

In Romania, in 2018, the structure of households made according to the occupation of the head of the household shows that the most numerous categories are pensioners (43.9%) and employees (38.4), and the structure by age of the head of the household places on the second place the households led by those with a head of household aged 65 and over (34.6%), on the first place placing those aged 25-49 years (36.8%).[4]

The state of health of the population. The health status of the elderly is the consequence of a combination of
determining factors, among the most important being the level of demographic aging and quality of life as supported by the level of pensions and other social and economic support measures. In assessing health, epidemiological methods and health self-assessment are increasingly used. Self-assessment is based on the individual's ability to assess his or her own functional status and dependency / independence ratio in relation to daily activities. Healthy lifelong health is essential for a healthy, satisfying old age. [1]

The report of the European Commission on health in Romania (2019) shows that most Romanians say they are in good health, but the proportion decreases with age (from 94% of Romanians aged 16 to 44, to 69% of people between the ages of 45 and 64 and 23% of those aged at least 65). This decline is more pronounced than the EU average: 87.5% for people aged 16 to 44, 66.8% for persons aged 45 to 64 and 41.4% for persons aged 65 or over. [2]

It is known that the health status of the elderly population is directly influenced by social welfare and that diseases in the elderly have a high prevalence, showing a marked tendency to chronicity and associated diseases. In our country, chronic diseases or disabilities after the age of 65 affect women more than they affect men. After the age of 65, they live several years of life with a chronic illness or disability, a situation that places Romania above the EU average. In terms of healthy life expectancy, on average, women live only slightly longer than men in good health (5.1 years for men, compared to 5.9 for women in 2017). Among Romanians over the age of 65, 46% say they have one or more chronic diseases (compared to 54% in the EU), most of whom can still live independently until old age. However, 31% of Romanians over the age of 65 report that they face some limitations in their daily activities, such as clothing and food, the percentage being much higher than the EU average. [2]

Ischemic heart disease remains the leading cause of death, although cancer mortality is on the rise. Romania also faces challenges in combating infectious diseases, with the highest rate of tuberculosis cases in the EU. [2]

**Medical consequences.** The evolution of general and specific morbidity, as well as morbidity in the elderly are also greatly influenced by a number of socio-economic factors. The elderly are generally characterized by polymorbidity, which leads to an increase in the consumption of medical services (according to the World Health Organization only 2% of the elderly are healthy). [1]

The European Commission's EU Health Report, published in 2019, highlights the fact that older people, along with people with disabilities, those with mental health problems and those in need of palliative care, face difficulties in accessing in a timely manner to services adapted to their needs. [5]

A study conducted by the National Council for the Elderly, in 2019, shows that the most frequent accesses of medical services by the elderly in Romania were registered in the specialty of cardiology (68.60%), many people who were applied a stenting intervention), followed by those for annual services (according to the World Health Organization only 50.58%). By comparison, accesses for other services look like this: RMN and ophthalmology (7.56%), ultrasounds for various diseases (6.40%), diabetes (4.65%), gastroenterology (4.07%), radiographs and oncology (3.49%), neurology and rheumatology (2.91%), tomography and urology (2.33%), pneumology (1.74%). The study also revealed that ensuring a better quality of health of these categories of people, by accessing appropriate medical services, is mainly influenced by individual income. The medical needs of the elderly were measured by specific questions about mental health, physical health and social health/social support. Thus, it was highlighted that the diseases to which the elderly respondents are vulnerable are: strokes, panic attacks, cancer (colon, prostate, lung), depression, diabetes, glaucoma, hypertension, etc., included in medical specialties. A reported basic need, which is often neglected with aging and limited mobility, is the oral health of the elderly, an integral part of general health. Other specific problems faced by these social categories are related to tooth loss, tooth decay, periodontitis, gingivitis.[6]

The complexity of the diseases in the elderly and their particular evolution in the administered therapy make the ambulatory medical services, but especially the hospital ones for the elderly, to be very expensive. If we take into account that for health, spending has increased systematically in recent years in Romania, and that in 2017 they were the lowest in the EU, both per capita (EUR 1,029, the EU average being 2,884 EUR), as well as as a percentage of GDP (5% compared to 9.8% in the EU), we can be aware of the difficulties faced by the health system in our country in providing adequate services for the elderly. [2]

More than three quarters of health expenditure is financed by public funds (79.5%), in line with the EU average of 79.3%; direct payments accounted for 20.5% of health expenditure in 2017. Although the social health insurance system offers a comprehensive package of services, about 11% of the population remains uninsured and is only entitled to a minimum package of services. [2]

The health risks and the evolutionary peculiarities of the diseases in the elderly determine the need for specific geriatric services and implicitly the modification of the personnel structure in the health care system. It is undeniable that the increase in the number of the elderly population, according to demographic projections, determines an additional need for specialized medical staff.

The shortage of geriatricians currently registered in Romania compromises the medical care addressed to this population group, which requires an efficient management of somatic polypathology, cognitive, affective, functional disorders, as well as social, economic and physical environmental needs. [7]

In 2018, 242 doctors with geriatrics and gerontology specialty were registered, which represents only 0.4% of the total number of doctors of all specialties, existing in Romania. Out of the total number of existing doctors in 2018 (60585 - 3.4% more than in 2017), only 424 doctors (0.70%) provided medical care in units for people with disabilities and in those for the elderly, while a number of 253 doctors were working in residential units. There were 3229 doctors over the age of 65, representing 5.32% of all doctors. [8]

**Social consequences.** The social consequences derive from the loss of the autonomy of the elderly person, from the reduced financial possibilities and from the installation of
Elderly people with special needs, who which appeals to community health services, are assessed on the basis of a social survey by specialists. In this sense, in 2000 a national grid was established for the evaluation of the elderly (present diagnosis, relevant family history, personal history, skin and mucous membranes, musculoskeletal system, respiratory system, cardiovascular system, digestive system, urogenital system, sense organs, neuropsychic examination, specialized recommendations on hygienic-therapeutic treatment and recovery), self-management and self-service capacity, living conditions (light, humidity, hygiene), living facilities (household appliances), informal network (family, friends, neighbors), the economic situation (income from pensions, other income, movable and immovable property accumulated during life). [10]

Economic consequences. Both at the level of our country and at the level of the European Union, an ascending evolution has been observed for the two dependency reports in the last ten years. The total dependency ratio for Romania was, according to Eurostat, 51.1% (EU-28: 54.6%), and the dependency ratio of the elderly was 27.5% (compared to 30.5% in the EU-28). [3]

A first economic consequence of the aging and reduction of the total population is the decrease of the potential GDP, by diminishing the contribution of the labor force, but also of the capital, in the conditions of affecting the internal saving. Romania’s potential GDP fell to 1.3% in 2013, from 5% in 2004, due to the contraction of private investment. [11]

The second consequence is the growing pressure on the state budget (the pressure of an aging population will be felt mainly in the state social insurance budget), both on the revenue side, by affecting economic growth, and on the spending side, by increasing spending on social assistance and health. [11]

The third consequence of the aging and population decline is the impact on the internal saving rate and, implicitly, on investment. [11]

CURRENT CONCERNS REGARDING THE MODELING OF MEDICAL AND SOCIAL ASSISTANCE IN THE CONTEXT OF POPULATION AGING

Meeting the special needs of the elderly must be achieved through a coherent and integrative policy, in order to raise awareness among decision-makers about the fact that an aging population raises major health issues and coverage with services tailored to real needs.

From this perspective, the medical and social system should meet the needs of the elderly, which should be seen in terms of his needs in the living environment, home care needs, medical and social support and specialized geriatric and gerontology care, but also by creating around the elderly a friendly environment, which will help him to acquire and maintain a physical, mental and emotional well-being, which will help him to avoid the state of dependence, so expensive individually and at the level of society.

Measures in the medical sector. The aging population must play a key role in the process of developing and
adapting to the new demographic context of medium and long-term medical policies and strategies. Within the national plans for the provision of health services, the real knowledge of the health status of the population on different age groups and sex, through the development of scientific research, should be a key element in the elaboration and substantiation of health programs, resource planning and sanitary network optimization.

In the context in which the main challenges for the Romanian health system (identified in the State of Health in the EU - Romania - 2019 Country Profile in terms of health) are, on the one hand, remedying the imbalance between primary care and hospital health services and, on the other hand, in combating the growing shortage of health professionals, the results of the various studies analyzed highlight a series of measures to be taken for health system modeling, such as [2,1,7]:

- precise identification of the needs that should form the basis for planning and creating a care framework in healthcare facilities;
- legislative framework adapted to the needs of the elderly; to this end, a first step has been taken in the framework of joint collaboration and action at the level of the Ministries of Health of the EU Member States (ADVANTAGE consortium); [13]
- development of the ambulatory network of geriatric services, at national and local level, involving geriatricians and family doctors, knowing that the aging population increases the demand for geriatric and gerontological care, and now hospitals are often put in the situation of treating cases of the elderly that are in fact purely social cases;
- increasing the number of geriatricians at national level, by increasing the number of positions for training in this specialty within the residency;
- promoting patient-centered management managed or coordinated by geriatricians, which provides strictly necessary health services and avoids unjustified expenditure of resources (by reducing polypragmatism and simplifying treatment regimens);
- encouraging a healthy lifestyle through actions that convince and motivate individuals and population groups to increase their control over their own lives and health; [12]
- improving the lives and care of the elderly with the help of advanced technology (eg. telecare) and by implementing educational programs, whose main objectives are to prevent disease and maintain independence, trying to reduce the costs of health care. [6]

**Measures in the social sector.** In Romania, due to the lack of an integrated approach to medical and social services, access to such services for the elderly and those with disabilities is unequal. Changes in mentality and approach are needed, and proposals to improve medical and social services relate to: [1,9,6]

- scientific research in order to assess the needs of the elderly and their caregivers at local level;
- carrying out screening programs to identify the elderly with special needs that need to be cared for in residential institutions;
- social protection and health policies for "active aging", focusing mainly on the health conditions of the elderly population, in order to provide the means to maintain their autonomy for as long as possible;
- community facilities for families caring for the elderly with medical and social problems;
- the development of medical and social units in which to provide assistance for elderly people with chronic dependent diseases, in the counties where they are absent, and, increasing their number in the counties where the number of elderly people with such needs is increased;
- organizing outpatient community networks of home care and care services for the elderly;
- specific legislation for informal carers / simplification of procedures for their authorization and remuneration; a legal framework that obliges local public authorities to come to the aid of dependent elderly people and their carers;
- training courses for informal carers (especially in the field of healthcare eg. first aid courses) and their counseling / establishment of information and support centers at local level;
- setting up specialized compartments with trained staff within the Public Social Assistance Services (SPAS) to organize and monitor the activity of informal caregivers;
- reduction of bureaucracy regarding the preparation of the elderly person's file;
- setting up care services for the elderly in communities where young people go abroad to work and there are no informal caregivers for the elderly;
- the allocation of funds specifically intended for the care of the elderly that the SPAS can use, either for the training of their own staff in the field of social assistance for the elderly, or for the establishment of home care services.

Population aging requires urban measures appropriate to the specific needs of the elderly, such as a compact urban style (short and safe distances, meeting socio-economic needs in small neighborhoods; traffic regulations adapted to the specifics of the elderly, to avoid accidents) and finding resources for adapting the homes of the elderly to the degree and degree of dependency installed. [1]

The use of computers, laptops, tablets and the internet, leisure activities or trips are considered necessities, especially for people with higher education and above-average incomes, living in urban areas. [6]

**Measures in the economic sector.** To reduce the impact of aging on pension systems were detached as necessary measures: increasing employees' contribution to the pension fund; raising the retirement age; equalization of the retirement age (same for women and men); increasing the employment rate of the working age population, especially the female population which has a longer life expectancy than men; accepting an influx of foreigners (immigrants) of working age. [4]

As the number of older people increases and their participation in working life decreases, political decisions will have to be made on the employment opportunities
of adults of a certain age and "young seniors" in order to reduce the dependency ratio. Successful public policies in this sector involve raising the retirement age, supporting a flexible work schedule, improving the flexibility of the pension system and providing additional training and retraining programs to help older people become familiar with new technologies. [14]

Many EU Member States have already started raising the retirement age to keep older people working for as long as possible. The success of such a policy depends not only on the desire of the elderly to continue working, but also to have jobs appropriate to their needs.

The reactivation of specialist pensioners is a solution arising from the necessity, which employers turn to because the need for specialists is huge, they can not find good specialists (who knows profession), who train other specialists in turn. Seniors are a rich resource for employers who need to address the acute staffing crisis or who need trainers / mentors for young employees to create role models for their jobs. Numerous features, such as wisdom, strategic thinking, holistic perception, and the ability to deliberate, increase or appear for the first time as we age. Professional experience and expertise also accumulates with age, but certain functional abilities, mainly physical and sensory, deteriorate as a result of the natural aging process. Potential changes in functional capabilities need to be considered in the risk assessment, and work and work environments need to be changed to cope with these changes. Changes in functional capacity associated with aging are not uniform, as there are individual differences in lifestyle, nutrition, fitness, genetic predisposition to disease, educational level, work environment, and living environment. [14]

CONCLUSIONS

The current trend of aging at national and international level is a process with many consequences and implications on several levels, and current concerns in this area focus on identifying issues that can be addressed and developing recommendations to reduce the demographic, medical, social or economic consequences.

Regarding the medical sector at national level, the current recommendations include: remedying the imbalance between primary care and hospital health services with the development of an outpatient network of geriatric services, combating the growing shortage of health professionals, supplementing geriatricians, planning health services based on a needs assessment, the development of a legislative framework adapted to the needs of the elderly and the promotion of patient-centered management managed or coordinated by geriatricians; promoting health and a healthy lifestyle through actions that persuade and motivate the population to increase their control over health and their own lives: improving life and healthcare for the elderly through advanced technology and the implementation of educational programs, whose main objectives are the prevention of disease and the maintenance of independence, thus aiming at reducing healthcare costs.

In the social field, measures are needed to improve the integrated approach to medical and social services, requiring changes in mentality and approach, and in the economic field it is useful to identify successful public policies in the field and adapt measures to national particularities.

Therefore, it can be concluded that, for the moment, it is useful to continue addressing this concern, both at European level (within European consortium and cooperation in the field in which Romania is a partner) and at national level (through policies and strategies in the medical field and related ones, thus ensuring that the common European recommendations are adapted according to national particularities).

References

2. State of Health in the EU – România - Profilul de țără din 2019 în ceea ce privește sănătatea, ec.europa.eu › files › state › docs › 2019_chp_romania_romanian, accesat 20.03.2020;
10. Hotărârea nr. 866 din 5 octombrie 2000 pentru aprobarea Grilei naționale de evaluare a nevoilor persoanelor vârstnice. MONITORUL OFICIAL, nr. 507, 16 octombrie 2000;