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YOUTHFULNESS IS A CHOICE!

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The Geriatrics, the medicine of the elderly, delivers measurable results that optimize health and delay degenerative aging, using the precision medicine, the innovative technologies, the personalized treatments and the solid science.

The quality of life of the elderly is one of the priorities of social policies worldwide, as it affects not only individuals but also the whole of society, given longevity which is a remarkable collective achievement, supported by significant progress in economic and social development and health, which have greatly improved the quality of life and contributed to a 10-year increase in average life expectancy over the past 50 years [1].

***The training of all medical personnel, regardless of specialty, but especially of the physician, respectively the general practitioner, with knowledge related to the medical assistance of the elderly is required. If it is taken into account that geriatric care involves not only consultations, but especially care, usually complex, it is understood that the role of the physician and other medical personnel (nurses, carers) becomes very important, and the quality** of life of the elderly is one of the priorities of social policies, all over the world, as it affects not only individuals, but also the whole society.*

Keywords: Geriatrics and Gerontology, the quality of life of the elderly, social policy priorities.

CONTEXT / INTRODUCTION

"To be eternally young does not mean to be 20 years old, it means to be optimistic, to feel good, to have an ideal in life to fight for and to conquer"

Ana Aslan.

GERIATRIC AND GERONTOLOGY is the medical specialty dedicated to longevity, whose objectives are medical assistance in the acute, chronic, preventive, recovery and terminal care of the elderly, as well as the study of the aging process from a somatic, mental, functional and social point of view at an individual level, and of the issues related to this process at the level of society.

Geriatric Medicine (definition accepted in Malta, 03/05/08; extended in Copenhagen 06/09/08 by UEMS - European Union of Medical Specialists and valid for all countries in Europe) is a "medical specialty having as its object physical, mental, functional and social aspects of acute, chronic, recovery, preventive and terminal care addressed to elderly patients [2]"

The age is experienced differently depending on the perception of changes on one's own person, changes that manifest themselves at the level of autonomy, functional abilities, the social support we feel, the existence of a goal, self -evaluation of health, depressive symptoms, etc.

When we talk about the age we can refer to different types of age: chronological, biological, social, psychological, subjective, etc. Each type of age has its specifics. At the same time they intertwine, coexist. Sometimes they agree with each other, and there are also situations when there is a big difference with at least one of them.

The chronological age expresses the time elapsed from the birth to the present. In studies, it is used as a reference element in the research of physical and mental evolution in elderly adults. It also refers to the age that appears officially in the bulletin. The chronological age is most often used in geriatric research and in fields that study the life course [3].

The stages of the third age include: the presenescence - between 45-60 years; the senescence - between 61-75 years; the elderly - between 76 - 89 years old; the old - between 90 - 99 years old; the congener – over 100 years [4].

The biological age measures the body's functional capacity and is associated with the degree of preservation at the molecular and cellular level. In the field of gerontology, it represents an element that measures the speed of aging/evolution of the body. The evaluation is done in relation to specific criteria such as: bone maturity, development of the musculoskeletal system, maturity of internal organs etc.

The social age refers to the social roles we have depending on the chronological age stage at which the person is and how to adapt to them. It is seen as a kind of "cultural clock" that determines what is optimal to achieve at a certain time: at what age do you get married, when do you become a parent or grandparent, when do you start going to work, when do you retire or how is it indicated to behave in society etc

The psychological age: indicates the level of personality development, the ability to adapt to the environment compared to other people of the same chronological age.

The subjective age is the way a person perceives his own age. It is a factor that influences the choices we make. Fulfilling personal requirements and needs, determines a positive perception of age. It is a result of the process of adaptation and acceptance of one's own life. It can vary during the same days and in relation to the events, situations and activities that the person experiences. There is a universal desire to be younger than one's chronological age. It manifests as a dissociation from reality. This is also possible because it feels like time is becoming more and more limited and associates the aging as an unpleasant experience. Thus, the person seeks to avoid negative experiences perceived similar to a threat. Very frequently such a positioning towards age appears in areas where people can be affected by negative stereotypes and less so in areas where the image of the elderly is associated with something positive [5].

There have been studies in which researchers considered analyzing brain gray matter levels and subjective age as predictors of the brain age.

It was found that those who perceived their age as younger corresponded to those individuals whose gray matter volume was greater in the inferior frontal gyrus and superior temporal gyrus. They observed that from this information one could predict the age of the brain.

The personal experience of aging is related to the aging process of the brain and supports the neurobiological mechanisms of subjective age as an important element in the neurocognitive health.

However, the youthfulness is also an inner state that we can cultivate through the actions and attitudes we learn to choose and have day by day.

Trends in Modern Geriatric approach

The Modern Geriatrics involves both medical and social assistance of the elderly population, a fact that led to the development of "Age Management Medicine", a medical discipline focused on health and not on disease, which is rapidly taking shape in Romania as well. Age Management Medicine provides measurable results that optimize health and delay degenerative aging, it focuses on the needs of people who, with the passing of years, may accumulate various ailments and special needs may arise [6].

The difference compared to other medical specialties that adults can turn to as they get older, consists in the time allocated for:

- Special attention directed to well-being, to maintaining the quality of life, with active longevity as the objective.

- Approaching each patient from the perspective of various conditions, current medication and risks associated with aging.

- The geriatrician's attention to the patient's social life. For these reasons, the Geriatric Medicine goes beyond organ - or system - oriented medicine by additionally offering therapy within a multidisciplinary team, whose main objective is to optimize the functional status of the elderly person, as well as to improve the quality of life and their autonomy.

The quality of life of the elderly is one of the priorities of social policies, all over the world, as it affects not only individuals, but also the whole society.

Demographic trends

The data of the National Institute of Statistics (INS) show that on July 1, 2023, the largest share in the total population of Romania was held by the 45-49 age group (8.5%) and that the phenomenon of demographic aging has intensified, the elderly population of 65 years and over (3,934,000 people) exceeding by 785,000 people the young population aged 0-14 (3,148,000 people) [7].

The demographic aging process has intensified compared to July 1, 2022, by increasing by 0.4 percentage points the share of the elderly population (aged 65 and over) and by the slight decrease, by 0.1 percentage points, of the share of young people (0-). 14 years). The median age of the population was 42.4 years, up 0.3 years from July 1, 2022. The median age was 43 years, up 0.4 years from July 1, 2022.

This group of studies is considered to present a high degree of frailty and multiple active pathologies, requiring a holistic, global approach. Diseases can manifest differently in the elderly, are often difficult to diagnose, response to treatment is often delayed and there is often a need for social support.

Collaborative, integrated approaches. Initiatives. Policies in the field of geriatrics

The effective management of the elderly has been a permanent concern in the last decades, both at the international and European level, but also at the national or regional level.

Diverse structures, professionals and resources were aggregated and trained to identify elder-centered approaches and integrated care for the elderly.

In order to highlight the common and joint effort, as well as the progress made in the effective management of the elderly, we present one such initiative, carried out at the European and national level respectively.

- The European context

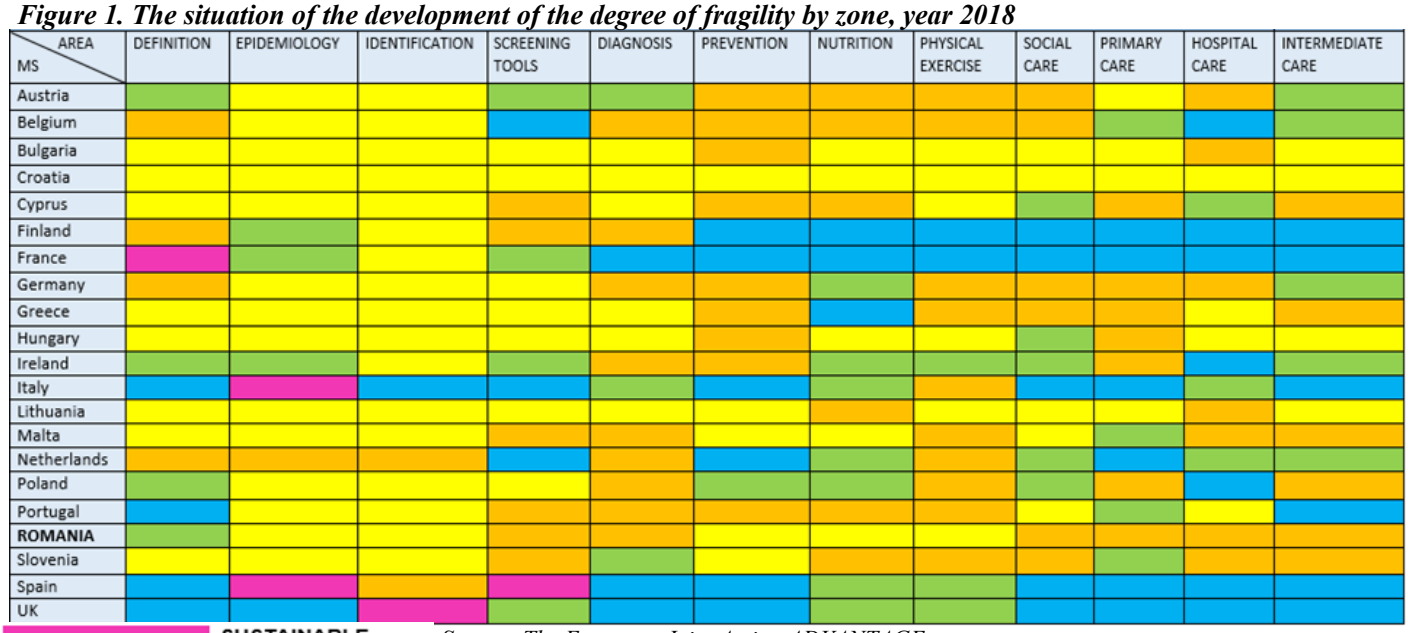
In the period 2017-2019, a joint action (JA- Joint Action) ADVANTAGE Consortium was carried out at the level of the European Union, which elaborated, starting in 2017, the Report on the current state in the field of frailty of the elderly. The conclusions of the report elaborated by the 22 members of the consortium from the Member States - MS in the EU support the idea that frailty is a priority in the field of public health and also brings the necessary information for the future planning of the prevention and management of frailty in the elderly [8].

Frailty is currently considered to be a distinct dimension, distinct from comorbidity and functional dependence, and is a pre-disability stage. It should be framed as a chronic condition, for which chronic care strategies (counseling, education and self-management support) should be adopted in an effort to promote participation, independence and well-being in the last part of life. Aspects that argue for placing frailty among of Public Health priorities are represented by the frequency of association with age. We should expect an increase in the number of new cases (incidence) of frailty as the European population ages. However, there is limited information on how many new cases we might expect in ADVANTAGE JA member states. Published data vary from 4% new cases in adults over 65 years of age in Germany to 8% in adults over 60 years of age in Spain after three years of follow-up.

Also, due to the negative consequences both for the individual (multiple hospitalizations, disabilities) and for society (economic consequences, costs for the care of frailty cases), frailty is a Public Health priority.

- Frailty is a Public Health priority, thus:
  - ⇨ from an epidemiological perspective through
- High prevalence of frailty and risk factors that increase the risk of becoming frail.
  - ⇨ from a preventive perspective
- May be reversible by implementing specific interventions, including exercise, proper diet, and nutritional supplements. Identifying frailty in routine care to implement preventive interventions against age-related conditions is essential from a clinical perspective
- Confers a higher risk of adverse health outcomes such as falls, hospitalization, disability and death.
- An integrated holistic approach rather than a disease-centred approach is required to address frailty prevention adequately and effectively.
  - ⇨ from a societal perspective

Figure 1. The situation of the development of the degree of fragility by zone, year 2018



Source: The European Joint Action ADVANTAGE

- Identifies groups of people who need additional clinical and social attention and support and care because of the high risk of addiction.

    ⇨ from a financial perspective

- Better allocate resources and support prevention programs and effective management programs.

Frailty is a potentially reversible condition that can spontaneously regress to a robust (non-frail) state, particularly in its early stages, although little is known about how often this can occur without intervention.

More advanced frailty states are less likely to be reversible, difficult to quantify, but present in the form of: potential disabilities, multiple hospitalizations and death, at the level of the individual, but also economic consequences highlighted by losses at the level of the patient/their families, respectively of the cost for the subsequent care of cases with fragility.

In terms of integrated care models for the frail patient, there are four essential points where the frail elderly person can be encountered: at home, at the family doctor's, in the hospital or in the nursing home.

For all these points, at the EU level there are models of care to be followed, which have components, somewhat diverse, but adapted to the environment in which the patient finds himself, with his disease state.

-Thus, for example, in the UK there is the concept of HOME HOSPITAL at the patient's home, where an entire interdisciplinary team is moved to provide services such as: education, prevention, patient empowerment, medical care services, support services.

The concept of HOME HOSPITAL is derived from the results of studies that show that the elderly can be cared for much better in their family environment, and hospitalization can induce pathological discomfort for the elderly, with an increased risk of developing delirium, mortality, rehospitalization rate, degree of institutionalization, functional decline and cognitive functions.

As a result of the data collected in 2018, within the ADVANTAGE JA project regarding the current state, at the level of each participating country, with the help of a questionnaire that was received and completed by decision-makers, professionals and stakeholders, the consortium was able to make an analysis point-by-point analysis of the various components involved in the management of fragility, and following the analysis, the countries were divided into 5 clusters according to the level of policy development in the field of fragility - figure1.

Romania is above the cluster of countries grouped in the BASIC group (in which we find countries such as: Bulgaria, Hungary, Croatia, Lithuania), and we are in the same group as Cyprus, Greece, Malta, Germany, Austria, Slovenia, Portugal) - figure 2.

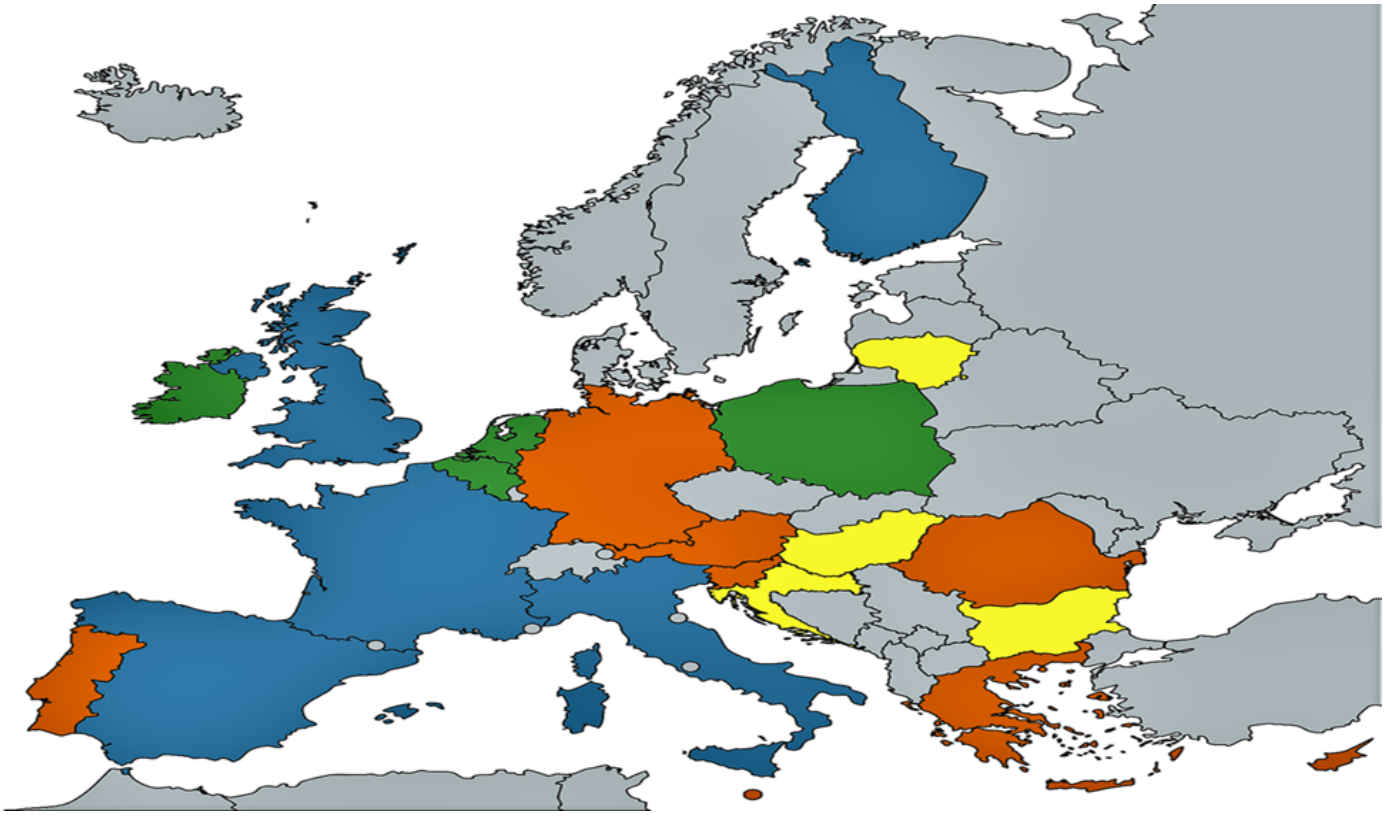
It should be noted that no country was included in the highest level, the advanced countries in this field being those in the north and west of the EU (France, Spain, Italy, UK and Finland).

The 5 clusters according to the level of development of the fragility policy are:

- Basic: nothing happens in the MS about that element.
- Fair: Something is being done in some places in MS.
- Well developed: relevant interventions/programmes are being implemented in many parts of MS.
- Advanced: There is a national strategy for that item.
- Sustainable: there is an assessed national strategy or an agreed plan to support it.

The overriding importance of understanding context and adopting both a person-centred and a population-based approach is clear in all cases.

Figure 2. Cartogram of the development of the degree of fragility by area



Source: The European Joint Action ADVANTAGE

The following enablers were common in models of care presented in the ADVANTAGE JA report and had common elements of success:

- Strong political support.
- Legislative frameworks.
- Financial incentives.
- Leadership and support for professional culture change.
- Screening and risk prediction tools to select frail older people for interventions.
- Holistic and person-centred approaches.

Taking into account the fact that each country in the consortium, a member of the project, developed its own ROADMAP, the ADVANTAGE consortium recommended 5 strategic development directions: prevention, screening, case management, care models, education and research.

Although all effective care models have their starting point in primary care, the management of established frailty and multi-morbidity requires a more intensive multidisciplinary approach that is well integrated with hospital services

AVANTAGE JA's recommendations for action towards an EU without fragility are summarized as key messages:

- Make frailty prevention an EU public health priority.
- Involve civil society and a wide range of stakeholders.
- Ensure that the Policy is both person and population centric.
- Incorporating systematic screening to enable timely identification of frail elderly people.
- Provide prevention and early intervention based on CGA to optimize function.
- Design and deliver integrated person-centered support and service models.
- Supporting the appropriate training of the health and care workforce.
- Invest in research and assessment of fragility.
- Support the adoption of ICT and technological solutions.

For a multidimensional approach, such as chronic care, the following should be taken into account:

- Family doctor = the only entry point (identifies health problems, risk, monitors frailty).
- Unitary detection methodology (1 single screening test).
- CGA + Individual care plan (e.g. physical program, nutrition, polymedication reduction).
- Appropriate interventions (interdisciplinary team), at hospital or community level.
- Case management + Support coordination + Ongoing care.
- Effective transfer management (care teams / care units).
- Electronic solutions (communication) and technological solutions (independent at home, self-care, home monitoring, decision support, etc.)).
- Policies + Procedures for eligibility of necessary services and care processes [9].

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-The National context

At the national level, within the Ministry of Health, a project "Increasing the institutional capacity for the coordinated national development of palliative care and home care (Acronym: PAL-PLAN)", Code MySMIS/SIPOCA 129439/733, implemented during: March 2020- February 2023

The results of the project, together with other national initiatives, led to:

- a national program for the gradual development of home care;
- a national quality assessment system for home palliative care, outpatient palliative care and home care services;
- analysis and harmonization of the legislative framework, reporting and financing mechanisms and standards and procedures for palliative care in different locations (units with beds, outpatients, day centers, home) and home care between the public institutions involved in the project – Ministry of Health, Ministry of Labor and Social Protection, National Health Insurance House, National Health Quality Management Authority.

The training and training of the decision-making and execution staff from the central and local authorities regarding palliative care and the monitoring of the quality of services in the field of palliative care were also considered.

Through this project, the aim was to identify the access to medical services of the elderly from rural areas and those with low incomes [10].

DISCUSSIONS

Romania is one of the countries where geriatrics has continuously concerned specialists in the field and even politicians, having internationally recognized achievements.

Since 1949, Romanian medicine has benefited from pioneering research in geriatric medicine by Prof. Dr. Ana Aslan, who began her work as a gerontologist at the Institute of Endocrinology in Bucharest, at the Department of Physiology, where she studied procaine (local anesthetic) in rheumatic conditions.

The great discovery, "the anti-inflammatory effect of procaine", was communicated to professors Constantin Ion Parhon and Daniel Danielopolu.

Prof. Dr. Ana Aslan and continued the research, the results he had were remarkable. Thus, the invention of the "elixir of youth", Gerovital H3, which has prophylactic and curative effects on aging and age-related diseases, is also linked to the name of the Romanian doctor Ana Aslan. Among the effects discovered are: antidepressant effects, skin rejuvenation, hair repigmentation, improving the health of Parkinson's patients and those with vitiligo.

Gerovital H3 was invented by Prof. Dr. Ana Aslan in collaboration with pharmacist Elena Polovrăgeanu. The indicator H3 highlights the vitamin-like action of the product.

During a congress in Germany, in 1956, the international medical world is informed about the new discovery, made in Romania by Dr. Ana Aslan. Gerovital H3 is a gerontological medicine by intervening in the mechanisms of aging at the molecular level and a geriatric medicine by intervening in mechanisms common to chronic degenerative diseases, specific to the third age.

In 1960, Prof. Dr. Ana Aslan began experimenting with a new eutrophic product Aslavital which, in addition to procaine, contains an activating and antiatherogenic factor, effective in therapy aimed at the nervous system and the cardiovascular system.

In 1978, "Aslavital for infant use" was developed, successfully used in the treatment of children with mental deficiencies.

Prof. Dr. Ana Aslan is the one who creates and implements on a national scale the concept of "prophylaxis of aging".

Member of the Academy of Medicine since 1944, in 1974 Ana Aslan was elected a member of the Romanian Academy.

The Institute of Gerontology and Geriatrics was founded in 1952 by Government Decision of the Council of Ministers and became a National Institute in 1974, and in 1992, the name "Ana Aslan" was added to it. The institute has been led since its foundation by the renowned doctor, Prof. Dr. Ana Aslan [11]. Also, thanks to Prof. Dr. Ana Aslan, the institute is known internationally.

Great personalities have benefited from Gerovital treatments: Salvador Dali, Charlie Chaplin, Onassis, Charles de Gaulle, Claudia Cardinale, Marlene Dietrich [12].

In Romania in 2023, a number of 20,271 patients benefited from geriatric medical services, compared to 2022 when 14,523 patients benefited, an increase in patients' interest in this medical branch was noted [13].

"You don't die of old age, but of disease" is another assertion made by Prof. Dr. Ana Aslan who warns about the attention that must be paid to the diseases associated with old age and the status of the elderly in society.

The reputation gained over time in the field of geriatrics must be maintained and doubled through specific activities and concerns that lead to the improvement of the Management of Geriatric Diseases at the level of hospitals in Romania (the main medical unit for providing specific care), and the steps must take into account :

Current Issues in Geriatric Disease Management, such as:

- Long duration of hospitalization: for the main geriatric diseases (heart failure, hip fractures, dementia).
- High costs: also determined by the high level of comorbidities.
- Frequent readmissions: due to complications and lack of adequate post-hospitalization care.
- Lack of Rehabilitation Programs: the insufficiency of programs dedicated to functional recovery in the elderly, which can lead to further deterioration of health.

Strategies for Improving the Management of Geriatric Diseases, such as:

Improving Care Coordination: Integrated programs to ensure an efficient transition between hospital care and

care at home or in rehabilitation centers. Here, multidisciplinary teams (doctors, nurses, physiotherapists, social workers) play an important role.

- Reducing Readmissions: Post-hospitalization monitoring programs, including home visits and telemedicine to prevent readmissions due to complications.
- Prevention Programs: Focus on preventing complications, for example by preventing fractures (screening for osteoporosis) or improving the management of heart failure to prevent exacerbations.
- Palliative Care: Integrating early palliative care into chronic disease management in elderly patients can help improve quality of life and reduce unnecessary hospitalizations.

Health Policy Recommendations, such as:

- Collaboration: The progress made in the geriatric field must be adapted, and various collaborations support the approach of permanent adjustment of the direction and the way forward.
- Scientific support: The decision-making act should be based on scientific records and advice from geriatrics networks.
- Investments in Geriatric Care: the need for additional investments in the training of medical personnel for the specific management of geriatric diseases.
- Optimizing the Use of Resources: Proposals for more efficient allocation of resources according to the severity of cases and the specific needs of geriatric patients.
- Support for Families and Caregivers: Recommending measures to support informal caregivers and families, given their essential role in caring for the elderly after hospitalization.

CONCLUSIONS

Gerontology and Geriatrics is a multidimensional medical specialty with as its object, the aspect (physical, mental, functional and social) that calls for complex and combined care of acute, chronic, recovery, prevention and terminal type addressed to elderly patients.

We predict that, this specialty will be one of the specialties that in the future will be of priority concern and will receive more and more attention from politicians, considering the longevity that is a remarkable collective achievement, supported by significant progress in terms of economic development and social and health, which have greatly improved the quality of life and contributed to a 10-year increase in the average life expectancy of men and women over the past 50 years; whereas between 2016 and 2070 life expectancy is expected to increase from 78.3 to 86.1 years for men and from 83.7 to 90.3 years for women; whereas the increase in average life expectancy must, in all situations, be regarded as a factor in the progress of civilization and never as a constraint; whereas there is a correlation between longevity and social status; whereas participation in various social activities, such as volunteering, sports or recreation, as well as regular contact with family and friends tend to have a positive impact on the general health of older people and prevent their isolation [1];

It is estimated that from the age of 65 (the beginning of the third age), 50% of the elderly need medical care, ambulatory or hospital. While the elderly represent about 15% of the total population, they consume 50% of medical benefits. We are actually witnessing a geriatricization of medicine.

Geriatricians are trained to diagnose, treat, and prevent disease in the elderly. They are experienced in the aging process and the various ailments that tend to affect the elderly. These medical conditions may include: dementia and Alzheimer's disease, diabetes, heart disease, epilepsy, osteoporosis, Parkinson's disease, stroke, sleep disorders.

It is necessary to train all medical and sanitary personnel, regardless of specialty, but especially the general practitioner, the generalist doctor, with knowledge related to the medical assistance of the elderly.

If it is taken into account that geriatric care involves not only consultations, but especially care, usually complex, it is understood that the role of the doctor and middle managers becomes very important, and the quality of life of the elderly is one of the priorities of social policies, all over the world, as it affects not only individuals, but also the whole society.

It can be built if we also consider that: age has no number, increasing life expectancy is the major achievement of humanity, and solving the consequences arising from these advances is actually the RESPONSIBILITY of both the government and the population, respectively the individual.

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