

## BFHA 2020 Recommendations

Populations around the world are ageing faster than ever in the past. A constant and already impressive rate in the worldwide increase of life expectancy has led to the fact that the current proportion of the population above 60 years (17%) will double in the next thirty to forty years. In the next 30 years, every third person in the world will fall into the category of a senior citizen. This demographic transition will have an impact on almost all aspects of society and requires a complete and well-defined shift in the paradigm in the medical, social, and technological fields.

Ageing, although highly individual and not easily comparable among subjects and societies, is a major risk factor for age-related conditions and has been shown to be causal to many age-related diseases including osteoarthritis, osteoporosis, cardiovascular diseases, and Alzheimer's disease.

Ageing can be accelerated or decelerated by interfering at the cellular level with several mechanisms driving ageing including the accumulation of excessive DNA damage or misfolded protein or cells which have aged and are no longer functional but release inflammatory factors which are detrimental to the organisms (senescent cells). By decelerating ageing it is possible to reduce the risks of developing age-related diseases and improve health span. It is possible to decelerate ageing with public health interventions such as exercise and a healthy diet but also with the development of new drugs which have the potential to prevent multiple age-related conditions and improve the resilience of the older population. COVID-19 pandemic is an excellent example of how interventions improving resilience may protect older people from death.

Policies that will support the testing in clinical trials with new class of drugs and integrate their use with existing public health interventions are required. There are many issues with

establishing clinical testing for drugs targeting ageing in older patients with multiple chronic conditions. We do not know how to perform trials as this group of people is often excluded or under-represented in drug testing trials. Due to the lack of knowledge and clear route to market pharmaceutical companies do not invest in the testing of these drugs and therefore governmental funding are required to risk their investments and open a new market which will bring both better health and great economic benefit and competitiveness in Europe.

Today, we are facing healthcare challenges as the result of the rising and potentially unsustainable health and care costs, due to the increasing prevalence of chronic noncommunicable diseases, to an ageing population requiring more diversified care and to increasing societal demands.

Particularly there is the need to emphasize the importance of raising awareness and encouraging education on the brain and the repercussions of neurological and mental health conditions on society as a whole considering that the vast majority of brain disorders are strongly influenced by an ageing population, where an increase in healthy ageing is desired. The promotion of healthy ageing will have massive implications not only on health care costs but also on the quality of life for the older persons. As an example, as demonstrated by European Brain Council, in Europe it has been estimated that the total cost of brain diseases on a yearly basis amounts to around 798 billion euro; for dementia only, the cost is 22.000 euro per patient, per year. Considering the costs of dementia for the European society and that these costs will increase considerably in the coming years due to the ageing of the European population, one way of curbing this increase and eventually decreasing the costs is via intensified research. Only by improving the insight into the basic functioning of the brain and translating this knowledge to the disease state, understanding the causes of the disease process and paving the way for better targeted and improved treatment can the upwards spiral of the costs of brain disorders can be stopped. Furthermore, there is a constant need for strengthening the information flow and accelerating the exchange of experience on the on-going and future projects as well as maintaining continuous dialogue between all the stakeholder groups at the

national and European level and initiatives to allow that objectives are aligned, and needs are met.

By thinking strategically, we must clearly distinguish a) strategies aimed at the individual level to slow down ageing in the biological system and b) strategies aimed at the population level to define and pursue societal initiatives and policy changes to establish clear and effective approaches to address the public health impacts of an ageing society.

From the biological point of view, it is challenging to link age-related diseases to general principles of ageing, which means that discovering approaches to decrease the rate of protein damage could have beneficial effects on all age-related diseases. There is good evidence, shown in animal models, that ageing is a risk factor and decelerating ageing has potential to decrease risks of developing disease. These approaches include maintaining body composition (reducing obesity), good nutrition (less meat, more fruits and vegetables, e.g. Mediterranean diet), more exercise, healthy sleep habits, moderate alcohol consumption (glass of red wine taken with meal), intake of probiotics.

The scientific multidimensional concept of healthy ageing is defined as the process of developing and maintaining the functional ability that enables well-being in older age. As people age, their health needs tend to become more complex determined by specific health issues and specific health demands of older patients. Again ageing has been shown to be a risk factor for frailty, a common clinical syndrome in older adults, defined as an accumulation of deficits and loss of resilience to adverse events and increased risk for poor health outcomes including incident disability, higher hospitalization, and mortality rate. There is evidence that by targeting mechanisms such as senescence it prevents or reduce frailty and improve the ability to overcome adverse events such as fractures and infections.

Equally complex as biological ageing is defining and promoting actions towards filling societal needs caused by ageing processes. Apart from the need to bridge biomedicine and social sciences, it is important to focus on a macro, mezzo, and micro level scope when investigating ageing phenomena.

It is important not only to focus on an already aged population but also on those who will inevitably enter this stage. Ageing is a continuous process starting in utero, and interventions should be focused across the life course. There is a clear need for the medicine of the 21st century to focus not only on persons with existing problems but also to shift its focus to presently healthy individuals which are soon entering the senior category. Similarly to focus on preventing certain diseases by applying standards of health promotion such as a healthy diet and exercise, we need to become aware of the need for programmes that will move us into pursuing the goal of healthy ageing in all its elements. These should include prevention of injuries, an individual approach to cognitive and mental health, prevention of chronic diseases, and general social engagement.

Most health services and health systems are well designed to cure acute conditions or symptoms and tend to manage health issues in disconnected and fragmented ways. Lack of coordination across care providers and health services settings as well as not optimal time-management could be especially dangerous for organizing optimal care for older persons. Health systems need to be transformed so that they can ensure affordable access to evidence-based medical interventions and timely organized shared care to address older people with specific needs according to their social determinants of health.

Health care and social care should be connected. The single disease model of care should be replaced by a more holistic approach where older people with multiple conditions are managed by team of specialists and where the geriatricians is at the centre of delivering care, involved in much earlier stage. It is the only way by which health care can prevent further health deterioration, disability and prevent complicated care dependency later in life.

We recognize an urgent need to define clear goals, both for caretakers and caregivers. What are the expected outcomes? For a person impaired by joint pain, healthy ageing should focus on “active ageing”, while for a socially isolated person, it should include an element of community and social involvement. A retired person who is feeling superfluous should be able to attend a supportive programme to facilitate the transition from work to retirement, and one who is

diagnosed with dementia should get adequate and quality support to better manage with this specific condition.

We often ask ourselves the following questions: Are we attempting only to promote longevity without an increase in the quality of life? Or are we also concerned with reducing costs linked to ageing? What are the final goals and measures that will tell us whether the users of our healthy ageing programs are successfully treated? However, there is no healthy longevity without increase of quality of life on all stages.

Considering this idea, our health systems will need to become more aligned with the needs of an older population with the introduction of special programs to prevent the onset of diseases. The focus of the health service provision needs to shift from treating illness in clinical settings to preventing it by integrating care to include health promotion activities, and by including the often-overlooked mental health services, as well as non-clinical and non-pharmacological interventions, such as community and social services, as well as self-care practices. This would bring us closer to achieving a healthier population with an improved quality of life, which is one of the fundamental goals of a health care system.

We recognize a need for coordination among different caregivers as a prerequisite to offer complete care and this is a natural and logical complement to integrated care. Creating age-friendly environments requires actions to combat ageism and abuse, enable autonomy, and support healthy ageing in all policies and at all levels of government.

An integrated approach to ageing targeted at all the segments of health care is also likely to reduce the need for an expensive, interventionist hospital to be used most intensively in the senior population and particularly at the end of life care, thereby reducing costs. As health includes more than medicine, the integration of non-pharmacological, self-care interventions with medical services in the care of the senior and pre-senior population would improve the efficiency and sustainability of health care systems that are continuously facing increased costs partly precipitated by extended ageing demands and increased costs of advanced health care technologies.



While limiting cost is one approach to ensuring the sustainability of the health system faced with the challenge of extended ageing, creating innovative funding schemes to address differing needs caused by ageing is also important and a challenging prospect that requires a different perspective. When making policy recommendations, national governments need to consider the implications of these on general health, including healthy ageing, as defined by the WHO framework for country action.

Modern Information and Communication Technologies (ICTs) can play a key part in helping older people to lead more independent and healthy lives and to improve social participation. Age-friendly technologies and ecosystems allow older people to live independently, monitor their health, create and maintain social networks, stay in contact with friends and family, have access to goods and services, and engage in work or voluntary activities. Smart ICT solutions and advanced artificial intelligence (AI) implemented in homes, communities, and cities can be used to provide personalized healthcare and social services, solutions to overcome lack of mobility, cognitive and visual problems. They also can improve the general quality of life by providing interactions with family, friends as well as health care and social care providers through telehealth. Digital technologies can encourage all groups of patients, and the older persons, to take a more active role in their health management.

Regarding the scientific approach to ageing research, we must improve measurement, monitoring, and understanding of that field. Focused research, new metrics, and analytical methods are needed for a wide range of ageing issues. This work builds on the extensive work WHO has done in improving health statistics and information, for example through the WHO Study on global ageing and adult health (SAGE). The examples of proven and good practices of using advanced technologies to increase the functionality and well-being of ageing citizens will contribute to a deeper understanding of how to adopt and implement these proven good practices in various European and International contexts.

Addressing the issues of tracing and assessing the use and impact of advanced technologies for the functionality and well-being of ageing citizens to the benefit of a transformative and

mission-oriented research and innovation agenda, is going beyond the traditional focus on the scientific impact of research.. On the contrary, it emphasizes societal impacts, structuring impacts on policymaking and policies as well as impacts on innovation and economy.

Every person – in every country in the world – should have the opportunity to live a long and healthy life. Yet, the environments in which we live can favour health or be harmful to it.

The quality of the living environment and spatial epidemiology play an important role in defining the health risks of the population. Especially in the face of rapid urbanization which is considered an important contributor to growing burden of mental health across European and world populations. Equitable access to high quality green spaces, in the light of new research as well as Sustainable Development Goals, becomes an issue of environmental justice and highly policy-relevant approach in the endeavour to mitigate the negative effects of ageing in the urbanized world. Another important factor is accessibility to quality health regardless of social determinants of health and other sources of vulnerability. These issues became more and more apparent when considering ageing of the population. Healthy ageing is about creating the socio-ecological climate and opportunities that enable people to be and do what they value throughout their lives.

Active and healthy ageing is a societal challenge shared by all European and other countries of the world, but it is also an opportunity. It is a chance for Europe to establish itself as a global leader that can provide innovative solutions. Considering the current context, it is essential to take the lessons from the Corona virus disease (COVID-19) pandemic which has a particularly high fatality rates among very old people, notably those living in residential care, and chronic patients. It outlines the importance of disease prevention using hygiene measures, well known long-ago. It also has shown us all the importance of every person's involvement in creating a healthy environment, healthy relationships and the importance of mental health, building solidarity, and social awareness of health needs of those who are in danger, especially senior citizens. The WHO Decade of Healthy Ageing (2020-2030) is offering a unique opportunity to make this narrative a true reality for older persons, their families, and communities.