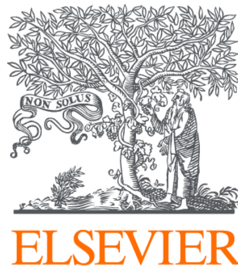

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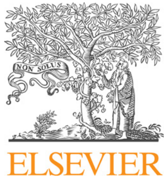

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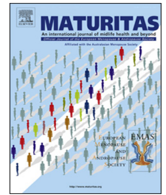

The World Health Organization (WHO) approach to healthy ageing

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ABSTRACT

The ageing of the global population is the most important medical and social demographic problem worldwide. The World Health Organization (WHO) has defined healthy ageing as a process of maintaining functional ability to enable wellbeing in older age. The WHO, Member States and Partners for Sustainable Development Goals have created a Global Strategy and Action Plan for Ageing and Health for 2016–2020 and its continuation with the WHO programme The Decade of Healthy Ageing 2020–2030. The WHO has established main priorities such as supporting country planning and action, collecting better global data and promoting research on healthy ageing, aligning health systems to the needs of older people, laying the foundations and ensuring the human resources necessary for long-term integrated care, undertaking a global campaign to combat ageism, and enhancing the global network for age-friendly cities and communities. There are several reports of coordinated preventive health and social health initiatives in well developed countries. However, there is little evidence on the application of the active ageing frameworks in developing countries. Greater national capacities and closer monitoring of the progress through age-disaggregated data is needed to effectively implement the intended programmes on healthy ageing.

1. Introduction

The old age of an individual has always been interesting and attractive and started in ancient times. Marcus Tullius Cicero wrote an essay entitled “De Senectute” (The Old Age) in 44BCE [1]. Cicero described ideas how individuals might preserve their health and vitality. That work can be understood as a presentation of the concept of “healthy ageing” but mainly focused on the individual.

The concept of an ageing population is a relatively new problem from the historical point of view. It can be observed that in 1950 no country had more than 11 percent of its population aged 65 and over. Looking at the year 2000, the highest was 18 percent. However, the problem will rise dramatically by 2050 when it could reach 38 percent [2]. Projections indicate that in 2050 there will be a larger number of older people aged 60 or over than adolescents aged 10–24 (2.1 billion versus 2.0 billion).

An ageing global population is the most important medical and social demographic problem worldwide. At present Japan, Finland, and Italy are countries with the oldest populations. Greece, Korea, Poland, Portugal, Slovenia, and Spain are classified as the fastest ageing countries in the OECD (the Organization for Economic Co-operation and Development) [3]. Regarding non-OECD countries, the fastest ageing countries are Brazil, China, and Saudi Arabia.

Addressing this problem is the highest priority for the care of the ageing population worldwide. In this article we describe the main objectives and priorities identified by WHO in relation to healthy ageing and the main obstacles to the implementation of this strategy.

2. Methods

The MEDline, Scopus, Embase, ScienceDirect, ProQuest and PubMed databases were searched to identify articles on healthy ageing in the context of the WHO recommendations. The official WHO websites were also searched. Four independent researchers used combinations of keywords such as healthy ageing and World Health Organization, and found 637 521 articles. After adding specific keywords including long-term integrated care, human resources, research, ageism, economic issues, investment, implementation and age-friendly city the search was limited to 856 studies. The search was also limited to studies of humans and articles written in English. After a careful review of their abstracts, the articles were identified as papers focusing on the researched topic. With this restriction, the search provided 303

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articles and after reading the complete texts, 46 of the most relevant articles were included in this review.

3. What is healthy ageing? The WHO definition

The World Health Organization (WHO) developed a definition of healthy ageing. It is the process of developing and maintaining the functional ability that enables wellbeing in older age [4,5].

Functional ability is having the capabilities to enable people to be and do what they value. It is referred to as the ability:

- to meet their basic needs,
- to learn, grow and make decisions,
- to be mobile,
- to build and maintain relationships, and
- to contribute to society [6]

WHO describes this functional ability as being formed by interactions between intrinsic capacity and environmental characteristics [7]. It is naturally understood that intrinsic capacity includes the mental and physical capacities of a person. The environmental characteristics are related to home, community and society as a whole.

4. WHO key considerations of healthy ageing

The WHO view on healthy ageing seems to be universal and characterized by two important aspects: diversity and inequity. The mental and physical activity of old people who are 80 years old is not equal. In other words, although older age is often associated with diminished intrinsic capacity, in some cases an 80-year-old person can present better or similar mental and physical capacities as a 30-year-old person. This can be perceived as diversity. Therefore, according to WHO, care should be addressed to a wide spectrum of older people.

Additionally, WHO stresses that this problem of diversity can arise from inequity, understood as the differential influences of such factors as genetics, sex, ethnicity, and environment on ageing [8]. These inequities should be reduced to help in the implementation of a programme for healthy ageing.

5. A global strategy (2016–2020) and an action plan for ageing and health developed by WHO in 2016

The World Health Organization, Member States and Partners for Sustainable Development Goals created a Global Strategy and Action Plan for Ageing and Health for 2016–2020 [9]. The vision of the five strategic objectives was identified in a world in which everyone has the opportunity to live a long and healthy life.

The first of the five objectives was a commitment to action on healthy ageing in every country. This goal was to create collaboration between governmental and non-governmental actors, including service providers, scientists, and designers to ensure the existence of political and operational platforms for successful multisectoral operations. The most important activities included the creation of a national framework for healthy ageing, extension, and enlargement of a country's ability to formulate evidence-based policies and actions that were clearly aimed at fighting ageing.

The second objective was to create and develop environments that could be friendly to older people. Close coordination between multiple sectors and departments was necessary, as well as cooperation with many environments, including, of course, older people to create friendly environments for the elderly. Creating such appropriate, friendly environments provides older people, who are beginning to be aware of their deficiencies, with the opportunity to maintain their own autonomy. These age-friendly communities ensure the promotion of health, the elimination of barriers and help the personal development and community involvement of older people.

The third of the five WHO global goals created in 2016 was to align all healthcare systems to meet the needs of older people. With age, the health needs of older people become more complex and chronic. It was necessary to change and modify the healthcare system to ensure free access to basic and complex medical services for the elderly. Medical care should be focused on the needs and rights of older people. This would often require significant changes in terms of organization and medical care, including financing.

The fourth point in the Global Strategy was to create reliable and appropriate systems for providing long-term care (home, community and institutional). Worldwide, an increase in the number of elderly people who have care needs and support was observed. Each country should have an integrated long-term care system that focuses on the elderly. Such a care system should function to provide the best and most efficient care for the elderly and to ensure they have a dignified life.

The fifth element of the Global Strategy is the improvement of checking, monitoring and studying of the topic of healthy ageing. Effective methods and indicators to evaluate these exponents are required to understand the health problems of older people satisfactorily and properly. Modern and effective measurements are necessary to assess the health problems of the elderly and to improve the current situation. The main activities include: developing agreed ways of measuring, analyzing, describing and monitoring healthy ageing, and developing opportunities for scientific research on this topic. In addition, evidence of healthy ageing should be collected and presented.

The Global Strategy underwent extensive regional and global consultation involving Member States, non-governmental organizations, representatives from United Nations agencies, technical and scientific experts, WHO departments, and the general public. The Global Strategy was adopted by WHO's 194 Member States at the World Health Assembly on 26 May 2016 [9].

6. The decade of Healthy Ageing 2020–2030 (a WHO programme) replaces active ageing

The World Health Organization set down ten priorities that provide concrete actions to reach the objectives of the Decade of Healthy Ageing *(2020–2030)*. The Decade is based on the Madrid International Plan of Action on Ageing (MIPAA) developed in 2002 by United Nations and on the WHO Global Strategy on Ageing and Health established in 2016 [9–11]. The draft proposal includes most of the 17 United Nations Sustainable Development Goals (SDGs) that all UN Member States have agreed to try to achieve by the year 2030. The high purpose of the agenda is a global pledge that "no one will be left behind and that every human being will have the opportunity to fulfill their potential in dignity and equality".

There we present the ten proposed priorities for the Decade of Healthy Ageing and the comments on the issues and difficulties that probably will be encountered during implementation processes.

6.1. Establishing a platform for innovation and change

The first priority is connected with the establishment of the Platform for Innovation and Change. The aim is to house the database of innovative practices, provide updates on research advances, evidence synthesis and evaluation results that will be effectively shared between stakeholders via diverse means of communications. To connect stakeholders, the WHO plans to create a virtual database covering all the evidence and innovative synthesis, as well as the results when they are reported. Moreover, the WHO will commit to organizing a biennial global conference on *Healthy Ageing.*

WHO plans to select the Pathfinder Countries. Intense and tailored technical support will be available to this limited number of countries identifying ageing as a priority, and then close monitoring of the progress will enable to strengthen the global evidence base. Such exclusive approach poses some danger. The implementation of healthy ageing

policies is very uneven and uncoordinated in global perspective, covering mainly developed countries and leaving behind low-income regions. Therefore, the selection of the Pathfinder Countries should be very careful, strictly controlled and cover countries with diverse capacities.

6.2. Supporting country planning and action

The second priority mostly concerns setting down strategies on *Healthy Ageing* at the country level. The stakeholders from various associations will be able to participate in a wide range of trainings, gaining knowledge to initiate national actions in accordance with the idea of the Decade of Healthy Ageing. Additionally, the countries will be provided with assistance on reviewing, evaluating and updating existing policies related to ageing and health.

Improvement in the course of projects that are planned or already under the way may be of much value. Even the OECD countries, with comparably high level of resources demonstrate substantial diversity in the development of age-relevant policies and programs [12]. The European Innovation Partnership on Active and Healthy Ageing (EIP-AHA) was launched in 2011 by European Commission to promote innovation in ageing research [13,14]. However, partners involved in different projects criticize the EIP-AHA model of being overly bureaucratic and insufficiently financially supportive [15].

Appropriate training and assistance may be not sufficient to help identify opportunities for action in global perspective. One of the main barriers in implementation of *Healthy Ageing* policy is the lack of sufficient capacity in many countries. In developing countries economic data is a major factor that can influence the decision of policy makers. The 2017 review of the implementation of the Madrid International Plan of Action on Ageing in Africa revealed that several countries have no running national programs on older persons [16]. The information from the countries with national programs on healthy ageing was in some ways patchy, generic and lacking richness of detail and specificity. Some countries such as Ghana, Mozambique, South Africa, Uganda, Kenya, Tunisia, Egypt and Tanzania ratified national policies on the ageing population, however meager resources are allocated to the implementation [16,17]. In other countries the period to legislation and then to implementation is very long, as these policies are not the priority for the governments [16,17].

6.3. Collecting better global data on healthy ageing

The evaluation and comparison of current data sources will simplify the identification of gaps in systems involved in ageing and will help to find solutions to fill those gaps. Moreover, the WHO underlines the importance of information exchange between Member States as the key factor in creating reliable data collection. Existing and upcoming statistics will be combined into WHO databases which will be aimed at the assessment of progress during the Decade of Healthy Ageing.

Globally, there is essential lack of crucial information on the health status and functioning of older people. Most European and North American countries are covered with some basic information on health, demographic and social status of older people [18,19]. However, even this region is characterized by large and growing differences in terms of how people age. The effectiveness of interventions relies on prompt screening and identification of older people status and needs. Assessment of the EIP-AHA frailty project revealed lack of consistency between partners in methods of defining, screening and measuring for frailty and pre-frailty [14]. Survey on the implementation of MIPAA in African countries showed that data on various indicators disaggregated by age and sex was limited and available only in close to one-third of the countries surveyed [16]. Only a few countries reported having data on demographic and health characteristics of older persons. The data on social characteristics was even more scarce. Similarly, although there has been concerted effort to harmonize data collection in some Asian countries (China, Japan, India, Indionesia, Thailand and the Republic of Korea) on demographic, health and social characteristics of older persons, ageing surveys from most Asia and Pacific countries are not available [20]. Longitudinal ageing surveys or ageing-related surveys are difficult to compare as they use different definitions and lack age disaggregation.

6.4. Promoting research that addresses the current and future needs of older people

WHO plans to stimulate and guide research on healthy ageing by establishing key topics, ensuring quality and comparability of the results and fostering collaboration between national funding bodies. Moreover, by establishing a Transformation Network on Knowledge Translation for Healthy Ageing WHO aims to foster research uptake into policy and practice.

There are several issues that are essential for the studies on *Healthy Ageing*. Medical research should be more concentrated not only on the diseases but also on changes before and after the onset of a disease that may help to prevent these processes and increase the intrinsic capacity of the elderly. Clinical trials need to identify how older people experiencing multimorbidities respond to various medications and interventions. Moreover, the outcomes of treatment should be assessed not only in terms of disease markers but also in terms of intrinsic capacity.

The implementation of an integrated care system for older people should include adequate planning for economical evaluation. So far, wide variability across study designs, measurements of costs and outcomes, as well as analytical approaches and presentation of results makes it challenging to draw conclusions and plan more effective actions in the future. Moreover, studies should include the costs of informal care provided by families and friends and focus on the wider quality of life including psychosocial functioning and the broader environmental context [21–23].

Future research should be directed towards developing methods and applications enabling a comparison between different interventions and crucial factors affecting the efficacy of integrated care [24,25]. Moreover, most studies on integrated care focused mainly on micro-clinical care processes with a relative lack of information on the meso-organizational and macro-system level care integration strategies [26,27].

6.5. Aligning health systems to the needs of older people

There is a strong need to redefine the approach towards the healthcare of older people in order to improve or sustain their functional ability. WHO plans to produce guidelines and tools for primary care providers as well as for health system.

In fact, the World Health Organization introduced the concept of the Integrated Care for Older People (ICOPE) approach, and offers schemes and guidelines for systems and services and for the primary care givers [28,29]. Moreover, the WHO Clinical Consortium on Healthy Ageing was founded to advance research and support building capacity of health professionals and clinicians on the issue [30].

There are several difficulties in adapting the health system to the needs of older people. This is generally agreed that older people require comprehensive assessment of their health and non-discriminatory access to good quality healthcare including prevention, promotion, treatment, rehabilitation, palliative and end-of-life care [31]. They also need adequately selected and effective, good quality essential medicines, vaccines and medical technologies which are within the financial reach of older people. However, many older people worldwide are without access to health system services. Moreover, many existing health systems manage the healthcare of the elderly in a disconnected and fragmented way and they are not prepared to deliver good quality care for older people that is integrated among providers and linked to the sustainable provision of long-term care [32]. For older people in low income countries, it is difficult to benefit from the healthcare

system even if it is available because of the cost of a visit or the absence of appropriate transportation.

Health services are generally directed towards dealing with acute conditions. With advancing age, health problems become chronic and the coexistence of many ailments and diseases is not uncommon. As people age, physical, sensory and cognitive impairments are more prevalent and disorders such as urinary incontinence, frailty and an increased risk of falling can lead to the loss of functional ability [33]. The training and adequate tools are needed to properly asses the medical, psychological and functional capabilities of an elderly person in order to develop a coordinated and integrated plan for treatment and long-term care [34,35].

6.6. Laying the foundations for a long-term care system in every country

The WHO plans to build understanding and commitment to developing long-term systems through global, regional and local policy dialogues to catalyze change. Moreover, to produce a baseline for the needed country action, the organisation plans to map the current situation. To build sustainable and equitable systems meeting the needs of older people appropriate guidance, tools and technical assistance is needed.

The issue of long-term-care system is very complex as it should be person-centred and integrated. Person-centred care admits the heterogeneity of experiences in older age and involves older people in framing the key issues. It enables older people to decide what measures are suitable for themselves rather than imposing decisions that are perceived as the most suitable from the perspective of the caregivers. Interventions should be adapted to individuals and their level of capacity in order to optimize their intrinsic capacity and functional ability.

Integrated care refers to services that coordinate different levels of care, including healthcare and long-term care, rehabilitation, palliative and end-of-life care matched to the unique, varied and often complex needs of people throughout the course of their lives [36]. Integrated care aims to shift from inpatient care to ambulatory and outpatient care, to more home-based interventions, to community engagement and to a fully coordinated referral system. Integration of care should occur at the level of the healthcare organization and the community, as well as at the level of policies, financing mechanisms and shared governance structures. Moreover, an integrated care system involves a variety of caregivers working in a wide range of settings.

Accessibility of formal long-term care services still remains the main issue. Almost half of the global population is not covered by any type of nationally legislated provision of services, and only around 6 per cent of people worldwide are covered by legislation that provides long-term care coverage for all [37].

6.7. Ensuring the human resources necessary for integrated care

This principle concentrates on developing a health labor market analysis toolkit, strengthening education and training, pilot projects of other social groups and associations taking responsibility for care giving and to build governance capacity.

Health workers are often trained to assist with current pressing health concerns, so there is a need to improve knowledge and skills in a holistic approach in geriatric care to deal with chronic problems and multimorbidity. Health professionals should also develop competency in communication, teamwork and overcoming ageist attitudes [9]. Multidisciplinary teams including geriatricians, general practitioners, nurses, social workers, pharmacists, dietitians, rehabilitation therapists, psychologists, community workers, and care coordinators are needed to provide integrated care. To ensure adequate number of caregivers, it is essential to improve the image and status of caregiving by increasing pay and benefits, working conditions, training and career opportunities. These issues are not properly covered in developed countries and the problem is even more severe in low income regions. In Africa, only few countries admitted to providing geriatric training to occupation and physical therapists, just under one-quarter reported having courses in gerontology and only nine countries have undertaken measures to develop training programs for formal or informal caregivers for older people [16]

Integrated care also includes family members, volunteers and other unpaid and often untrained caregivers. There is a great need for services that support caregivers and ensure the quality of care they provide. The support should provide training, information, education, accreditation and financing as well as offering respite care. There is a negative impact on the employment of family members (mainly women) when they adopt unpaid caregiving roles. Therefore, some governments have passed legislation to provide leave from work or part-time flexible working arrangements for family members so that they can care for older relatives. Several strategies to lessen the financial burden of long-term care on older people and their families are available, from the employment of family caregivers via their municipalities or tax credits.

6.8. Undertaking a global campaign to combat ageism

The priority for undertaking global campaign to combat ageism was established by the World Health Assembly in 2016. Diverse actions including legislation, education, social and media campaigns are needed to shift social norms and misconceptions and dismantle the discrimination of older people.

Neglect, abuse and violence against elderly occurs in every social, economic, ethnic and geographic sphere. Ageism is defined as stereotyping and discrimination against individuals or groups on the basis of their age. One of the fundamental steps in fostering healthy actions is to combat ageism. Negative attitudes and assumptions about older people can influence individual behaviour, social values and norms. Laws protecting against direct or indirect age-based discrimination have to be adopted [38–40]. Effort should be made in the media to present a balanced view of ageing, moving away from the conceptualization of older people as a burden and away from unrealistic assumptions that older people today can in some way avoid health challenges on their own without support.

Both older men and women encounter age-based discrimination. However, gender inequalities exacerbate vulnerabilities experienced by older women. This issue demands profound cultural and legal changes in many countries.

The COVID-19 pandemic, among many sociological changes, has brought outbreak of ageism. The media have been dominated by portrayal of those over the age of 70 as being all helpless, frail, and unable to contribute to society. Ageism and categorization can be overcome by stressing on solidarity between the generations and emphasizing that not only age is the critical risk factor making individuals more vulnerable to COVID-19 [41].

6.9. Defining the economic case for investment

The WHO admits that there are many gaps and limitations in our current understanding of the economic impacts of ageing and that there is a need to ensure stronger evidence for economic reasons for appropriate investment in older populations.

So far, economic evaluations examining whether integrated care interventions can achieve value for money are becoming increasingly common but systematic reviews or meta-analyses are generally inconclusive. The explanation of the inconclusiveness lies in the varying definitions and components of integrated care included in the studies as well as in the methodological quality of the evaluations

The shifts in the age structure of the global population raise the need to adapt economic regulations in most countries. One of the goals of the Decade of Healthy Ageing is to identify a range of models for financing long-term care systems for older populations, particularly in

lower resource settings.

6.10. Enhancing the global network for age-friendly cities and communities

One of the WHO goals included in the Global Strategy and Action Plan on Ageing and Health states that cities and human settlements should be made inclusive, safe, resilient and sustainable, by providing universal access to safe, inclusive and accessible green and public spaces, in particular for older persons. The WHO Global Network of Age-friendly Cities and Communities (AFCCs) was established in 2010 and now covering more than 1000 cities and communities provides an example how proper actions at different levels may be implemented [42–44].

While applauding the effort to build AFCCs, recent literature has highlighted gaps in actualizing the program. Some reviews point that initiatives are mostly small in scale, short term, and inadequately resourced [45]. There is a paucity of research on how to bring together the various disciplines involved in multidomain synergistic collaboration to create new living environments for ageing [46]. The programs are inequitably distributed within and between places and targeted to only particular groups of seniors. In some regions they are widely distributed as a part of national initiatives (e.g. the Age Friendly Ireland program) while there are almost no such interventions registered for African countries.

7. Implementation of the healthy ageing policies

The comprehensive guidelines established by WHO Global Strategy on Ageing and Health and the Decade of Healthy Ageing are the base for action. However, there are several obstacles in successful implementation of the programs and policies. While progress is being made in implementation of these frameworks in developed countries, there is still need for global approach covering different cultural circumstances and national capacities.

The Decade of Healthy Ageing goals and objectives are not mandatory requirements but rather a strategic framework enabling a diverse range of national policies on ageing. On one hand, this gives the advantage for all different range of country experiences to develop their own and unique policies. On the other side, voluntary implementation of the recommendations and the lack of clearly defined appraisal criteria leads to disproportionate submissions of descriptive, patchy and self-defined information, with little evaluation between outputs and policy impact. There is difficulty to get reporting from all the countries and to carry out meaningful comparisons and assessments of international progress.

There is necessity to develop multiple tools to reliably gather and analyze age-disaggregated data and next to monitor the progress of evidence-based programmes and policies. It has been proposed to identify clustering of countries with the help of their developmental context and comparability [20]. The issues proposed in the Decade of Healthy Ageing put greater attention on collecting better global data and supporting national planning and action which may enable to make goals more specific and impactful in terms of older people's lives. Moreover, the concept of a Platform for Innovation and Change may deliver more flexible approach for each country and community. Hopefully, implementation of the WHO projects will bring more specific aspects of the targets as well as pragmatic approach and continuous progress in improving all aspects of *Healthy Ageing.*

8. Conclusions

The global population is ageing rapidly. These changes highlight the need to adapt person-centred integrated care focusing on the needs of older people and their preferences and guaranteeing access to multiple age-friendly services closely engaged with families and communities. Public health policies should address the diversity of health and functional states experienced by older people and maximize the number of people who achieve positive trajectories of ageing. Integration initiatives need actions at macro-levels (legislation, funding), at meso-levels (age-friendly environment) and at micro-clinical levels. However, few countries have managed to sustainably deliver integrated care for older people and evidence for the effectiveness of integrated care approaches remains inconsistent.

Contributors

Ewa Rudnicka contributed to conceptualization, database search, analysis, and writing the original paper.

Paulina Napierała contributed to database search, analysis, and writing the original paper.

Agnieszka Podfigurna contributed to database search, analysis, and writing the original paper.

Błażej Męczekalski contributed to conceptualization, review and supervision.

Roman Smolarczyk contributed to conceptualization, review and supervision.

Monika Grymowicz contributed to database search, analysis, writing the original paper, and reviewing, editing, and revision.

Conflict of interest

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Ethics

Al the authors mentioned in the manuscript have agreed for authorship, read and approved the manuscript, and given consent for submission and subsequent publication of the manuscript. The order of authorship was agreed b all authors before submission.

Provenance and peer review

This article has undergone peer review.

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