Perspectives

Response of Global Health Towards the Challenges Presented by Population Aging

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Adopted in 2015, the Sustainable Development Goals (SDGs) represent a global commitment to eradicating poverty, safeguarding the planet, and championing well-being, peace, and prosperity for all by the year 2030 (1). This advancement ties closely to the inescapable trajectory of the global population development and the significant challenges presented by population aging — a matter pertinent to every nation. The SDGs not only prioritize poverty eradication and healthy living at all ages, but also gender equality, comprehensive encourage productive employment opportunities, and the reduction of inequality both within and between nations. In addition, the goals advocate for inclusive, safe, resilient, and sustainable cities and human settlements.

According to the World Population Prospects 2022, published by the United Nations, the ratio of the global population aged 60 and above exceeded 10% in the 21st century (2). China, in particular, has a rapidly aging population, consisting of 264 million individuals aged 60 or older in 2020. This demographic represented an increase from 13.32% of the population in 2010 to 18.73% a decade later (3). Such growth poses a formidable challenge.

Looking ahead, the proportion of elderly pupulation within developing nations is projected to escalate rapidly. Remarkably, by mid-century, it is estimated that 80% of the global elderly population will reside in low to middle-income countries. Population aging, therefore, emerges as a critical facet of global health considerations. Accompanied by a rise in chronic disease prevalence, an increased strain on healthcare systems, and a deepening of health disparities, this demographic shift insists on apt preparation of healthcare and social systems across all nations to fully manage the transition.

Challenges to Global Health Stemming from Population Aging

The increasing aged demographic strain presents significant global health challenges, reflected in

amplified demands for healthcare resources, more diversified requirements for healthcare, and suboptimal health system responses. First, the escalating healthcare resource demands stem from various health concerns that accompany aging. Aging-associated complications, such as the increase in chronic diseases, functional deterioration, multiplicity of concurrent illnesses, and geriatric syndromes, emerge due to accumulated life-course risks. Therefore, population aging trend substantially raises resource demand exemplified by heightened necessity for emergency care, essential public health services, healthcare workforce, and long-term care services.

Second, healthcare requirements diversify due to dramatic variations in geriatric health states. Lifecourse risk accumulation leads to a diverse range of health outcomes over time. Health status transitions from uniformity to variety from early to later life stages, given that internal biological mechanisms interact continuously with external environmental influences throughout life, thus escalating health problem risks with aging (4). Consequently, aged health becomes highly differential, resulting in increased healthcare need diversity within the aging population (5). These evolving personalized healthcare demands encompass preventive care and regular screenings for age-associated health issues, communitycentered services promoting psychological well-being or community involvement, end-of-life care and pain management, and nutritional guidance necessitated by metabolic and health condition changes.

Third, challenges emerging from the scarcity of healthcare workforce and the deficiency of integrated long-term care systems and healthcare services emphasize policy inadequacies in elderly health. For instance, a significant shortfall in global healthcare workers is expected to peak at 15 million by 2030. The shortage gap is likely to progress predominantly in low-income regions, whereas middle- and high-income countries could experience a reduction, potentially exacerbating regional disparities (6–7). Furthermore, according to World Health Organization (WHO)

statistics (2009–2019), only three guidelines explicitly focused on geriatric intrinsic capacity domains, implying an undervalued and underserved global aging population. Hence, international developmental aid and investment in the aged population segment remain staggeringly meager.

Elements of Global Health Governance for Managing Population Aging

Promoting population aging through a life-course approach in global health governance currently focuses on addressing related health issues. The guiding principles are "empowering older persons, gender equality, eliminating age discrimination, ensuring equitable opportunities for healthy aging, and promoting intergenerational social solidarity" across generations. The Vienna International Plan of Action, the United Nations Principles for Older Persons, the Madrid International Plan of Action on Aging, international human rights conventions, together with the WHO's policy framework on active aging, are among the international policy tools that guide agingrelated actions. Key entities involved in the global health governance on population aging include the United Nations General Assembly, the United Nations Economic and Social Council, and the United Nations Secretariat, alongside their subsidiary organizations. Other crucial actors within this governance framework include specialized agencies such as the WHO, the International Labour Organization, the Food and Organization, World Agriculture the Bank, intergovernmental and national bodies, along with civil society, philanthropic organizations, academia, and the private sector.

Global Health Interventions for an Aging Population: A Case Study from the World Health Organization

The WHO, a leading entity in global health governance, plays an active role in devising governance rules and implementing strategies to address pressing health concerns worldwide. Specifically, in relation to elderly healthcare, WHO is dedicated to developing international policies and guidelines promoting healthy aging. It endeavors to foster activity and independence amongst the older demographic while ensuring their access to healthcare services and social support. To further this cause, the organization aids countries in creating age-friendly cities and offers training coupled with technical support to enrich the quality of life and

well-being of senior citizens.

In 2015, the WHO published the "Global Report on Aging and Health". This groundbreaking report suggested a new perspective on defining aging and health (8). It introduced the notion that healthy aging is a process of keeping and building the functional ability necessary for well-being during older age. The report emphasized a shift from focusing on diseases to concentrating on function when addressing senior health concerns. The major health challenges posed by an aging population can be addressed more effectively by placing individuals into three categories based on their functionality: a period of high and stable capacity, a period of reduced capacity, and a period of significant dependency. Specialized health services, care provisions, and supportive policies, tailored to these different stages, can promote capacity building, functional recuperation, preventative measures against decline, and compensatory measures for disabilities.

On December 14, 2020, the United Nations General Assembly put forth the "Decade of Healthy Aging Action Plan" that established four main areas of focus for the WHO: 1) Advocacy, which aims to shift perceptions and actions regarding age and aging; 2) Age-friendly environments, with a goal of making every community support the needs and abilities of older adults; 3) Integrated care for older people, which emphasizes the delivery of person-focused, integrated services with primary healthcare as core; and 4) Longterm care, which focuses on ensuring the accessibility of long-term services for older individuals when they are needed. These initiatives seek to steer global health governance towards addressing the challenges of an aging population and promoting healthy aging worldwide.

The global action plan known as the Integrated Care for Older People (ICOPE) program is currently a significant initiative aimed at promoting healthy aging (9–10). The WHO has acknowledged the importance of this plan, affirming its potential to enhance health outcomes, reduce dependency on care services, decrease costs, and defer or reduce hospital admissions or entries into long-term care facilities. ICOPE's primary focus is the health of older adults, integrating medical care alongside long-term and palliative assistance.

The program addresses a range of factors indicating declining intrinsic capacity in the older population, facilitating assessments and developing personalized care regimens. Furthermore, ICOPE ensures efficient referral conduits and orchestrated care coordination. On an individual level, its objective is to boost intrinsic

capacity and functional ability. With regard to services, the emphasis lies on creating community-based services, instigating community involvement, and fostering collaboration among multidisciplinary institutions.

On a policy level, ICOPE aims to bolster governance and accountability mechanisms, backing collaborations among institutions from various disciplines, thereby refining the healthcare system. As such, ICOPE stands as a vital strategy for enhancing health outcomes and offering inclusive care for older adults, thereby fostering their overall welfare and autonomy.

The governance of aging and health parameters by the WHO still leaves considerable room for enhancement. Among the myriad of guidelines issued by the WHO across multiple areas of expertise, merely three guidelines (comprising 14 recommendations) are directly targeted towards elderly individuals (9-11). Furthermore, only one of these guidelines, duly approved by the WHO Guidelines Review Committee, concentrates on diet, physical activity, cognitive decline, and dementia in the middle and later stages of life (12). This stark contrast in attention, compared to the over 10 guidelines for other stages like antenatal, infancy, and adulthood (and more than five related to the postpartum period and adolescence), signifies a severe insufficiency in response regarding health policies and guideline provisions for the geriatric population.

There is an apparent need for enhancement and boosted investment in international health development assistance across every stage of life. This is particularly accurate for the elderly demographic, given their relatively higher disease burden throughout their lifespan and the significant scarcity of development support aimed specifically at health and disease loads.

A survey encompassing 194 WHO member countries underscored the gaps across policy progress indicators for healthy aging: Only 63% possess a focused point on aging and health; 54% formulate national policies or action plans; 53% provide multistakeholder forums; a mere 46% enacted anti-age discrimination legislations; only 29% have instituted fostering age-friendly programs communities; 31% support comprehensive policy assessments; less than half, i.e., 49% have long-term care policies in place; and only 32% maintain crosssectional health data. Drastically, only 24% have longitudinal health trajectory data at their disposal (*13*).

Proposed Initiatives in the Global Health Sector for Addressing Population Aging

The substantial effect of an aging population on global health improvement and health equity cannot be overstated. One pivotal aim of global health strategies for counteracting the consequences of an aging population is to decrease the number of disability years experienced by the elderly and to increase their healthy life expectancy (14). Regions anticipated to encounter severe aging issues predominantly include middle and low-income countries where medical and healthcare resources are often limited, and notable regional disparities exist. Accordingly, addressing the aging population issue in such countries presents a significant challenge that urgently needs resolution.

Institutions involved in global health governance, such as the WHO, perpetually extend practical efforts towards resolving population development issues via comprehensive action plans and policy guidance aimed at promoting healthy aging and adequate care services. However, improvement opportunities remain abundant. As we move forward, the capacity of these institutions to manage aging and health issues holds considerable potential for enhancement. Pinpointing and promptly addressing existing gaps holds the key to improving governance capabilities.

The unflinching commitment to resolving these issues and bridging the identified gaps is instrumental in promoting the progress of global health governance and realizing equitable health outcomes for all.

Addressing the Challenges of an Aging Population in China

China has adopted a comprehensive approach in response to the challenges posed by an aging population. It involves shaping operative policies through hierarchical design, which entails inserting relevant content into national legislation, issuing directives to mould an effectual health service system for the elderly, and accentuating China's commitment to meeting the evolving needs of its senior citizens in the "14th Five-Year Plan".

Additionally, initiatives aimed at empowering older adults with proactive health capabilities are being introduced, with a particular focus on enhancing medical care, preventive care, psychological support, and palliative care services for this population. The necessity of strong statistical survey systems and specialized health service institutions focused on senior care is also emphasized, so as to address identified gaps

in healthcare.

Further, innovative practices like the amalgamation of healthcare and care services are being fostered through policy guidance and collaborative efforts between healthcare providers and caregiving institutions.

In tackling the health implications of an aging populace, there is a notable emphasis on integrating traditional Chinese medicine with Western medicine. Traditional Chinese medicine, in particular, has significantly contributed to the wellbeing of older adults in China, and stands to play a crucial role in global efforts to address health challenges stemming from an increasingly aged demographic.

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