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HEALTHCARE SYSTEMS' REVIEW

# Current status and the future trajectory of geriatric services in Nigeria

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*Abstract*

The world population of people aged 65 and above, termed as older persons, is increasing rapidly. The number of people aged 65 years or older worldwide is projected to more than double, rising from 761 million in 2021 to 1.6 billion in 2050. The number of people aged 80 years or older is growing even faster. Population ageing is an irreversible global trend. It is the inevitable result of the demographic transition – the trend toward longer lives and smaller families – that is taking place even in countries with relatively youthful populations.

In 2021, one in 10 people worldwide were aged 65 or above. In 2050, this age group is projected to account for one in six people globally [1]. People are living longer because of better nutrition, sanitation, healthcare, education, and economic well-being. With increasing age, older adults become at greater risk for diseases, disability, and side effects of medications. The common geriatric syndromes suffered by older persons include degenerative joint diseases, falls and mobility issues, sensory impairments (visual and hearing), dementia, sleep disturbances, frailty, and urinary incontinence. These syndromes are described as 'Giants of Geriatrics' on account of the impact on quality of life, and functional status of older persons.

Geriatricians provide person-centered holistic care that attempts to preserve function and maintain a good quality of life by deploying the comprehensive geriatrics assessment and management approach which involves a multidisciplinary team (MDT). Nigeria has an increasing ageing population that will benefit from a healthcare system that is aligned to their peculiar care needs in the different settings care will be sought. This can be achieved by building capacity in the various disciplines involved in providing comprehensive care to older persons, and including geriatric medicine in the training curriculum for medical students, nurses and all allied health workers.

Keywords: *ageing*; *geriatric syndromes*; *older persons*; *patient-centered care*; *healthcare system*; *comprehensive geriatrics assessment*

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The world population of people aged 65, termed as older persons, is increasing rapidly. The number of people aged 65 years or older worldwide is projected to more than double, rising from 761 million in 2021 to 1.6 billion in 2050 [1]. The number of people aged 80 years or older is growing even faster. Population ageing is an irreversible global trend. It is the inevitable result of the demographic transition – the trend toward longer lives and smaller families – that is taking place even in countries with relatively youthful populations. In 2021, one in 10 people worldwide were aged 65 or above. In 2050, this age group is projected to account for one in six people globally. [1]. The fastest rate of increase in this number is taking place in Africa where the older person's population is expected to reach over 205 million by 2050. In addition, life expectancy at the age of 60 years in sub-Saharan Africa is 16 years for women and 14 years for men, suggesting that, for those who survive early life, a long old age is already a reality [2]. People are living longer because of better nutrition, sanitation, healthcare, education, and economic well-being. An ageing population poses numerous social and economic challenges, but the right set of policies can equip society to address these challenges in time [3].

Homeostenosis is the process by which every organ system in the human body gradually loses its reserve capacity. This process is present by the third decade of life and occurs at a different rate and time in each organ system and is influenced by genetic factors, diet, lifestyle choices, and environment [4]. With increasing age, older adults become at greater risk for diseases, disability, and side effects of medications. Diseases interact with pure ageing effects to cause geriatric-specific complications referred to as geriatric syndromes. Typical examples are delirium complicating pneumonia or urinary tract infections and falls, dizziness, syncope, urinary incontinence, weight loss,

and frailty which often accompany many minor illnesses in older adults. Ageing organs are also more susceptible to injury: for example, intracranial hemorrhage is more common and is triggered by less clinically important injuries in older adults [4]. Increasing age increases the risk for chronic non-communicable diseases such as hypertension, dyslipidemia, diabetes mellitus, stroke, and malignancies. Other common geriatric syndromes include degenerative joint diseases (affecting different joints), falls and mobility issues, sensory impairments (visual and hearing), dementia, sleep disturbances, frailty, and urinary incontinence. These syndromes are described as 'Giants of Geriatrics' as they impact significantly on the quality of life and functional status of older persons.

Geriatric Medicine is a specialty of medicine concerned with physical, mental, functional, and social conditions in acute, chronic, rehabilitative, preventive, and end-of-life care in older patients. [5]. Geriatricians are physicians trained to assess older persons, adults aged 60 years and above, for age-related challenges, and provide the necessary modalities for appropriate intervention where indicated. The United Nations in 1980 declared the chronological age of 60 years as the age of transition of people to the older adult stage. The World Health Organization (WHO) on the other hand has designated those above the age of 65 years as older persons. The field of geriatrics has evolved over the years, having been originally practiced 'traditionally' where patients were chosen by other clinicians for the geriatricians, usually patients in long-term care facilities or infirmaries. However, in the 1970s, two models of geriatrics emerged, the 'age defined' model, pioneered in Sunderland, and the 'integrated' model, from Newcastle Upon Tyne. The first is based on separate parallel hospital medical services for patients above and below an arbitrary age. In the second, consultant physicians trained in both geriatric and general medicine join medical 'firms' with physicians with other specialist interests, sharing wards and the same team of junior medical staff for acute work while retaining separate specialist rehabilitation facilities [6].

Geriatricians apply an evaluation process that involves a multidisciplinary approach, with emphasis on functional capacity, in assessing older persons, for optimal care. Care goals are established with consideration for the preferences of the patient and family [7]. The process includes:

1. Assessment of health status, diagnosis, prognosis, functional status, and resource base.
2. Care planning – agreement on the objective of care with the patient; what is feasible, what the patient desires.
3. Implementation of Care – specification of the management plan; therapeutics, changes to improve the health status and prosthetics where indicated to reduce environmental demands.
4. Monitoring & Evaluation – regular review with modification as necessary.

This care approach is encompassed in the comprehensive geriatric assessment (CGA) and management. CGA is a multi-dimensional multi-disciplinary diagnostic process focused on assessing an older person's medical, psychological, and functional capability, to develop a coordinated and integrated plan for treatment and long-term follow-up focused on the individual's needs. This assessment is followed by the development of a care plan, based upon the comprehensive assessment. The care plan must state explicitly what goals are being aimed for, who is responsible for achieving them, and a timeline for review of progress [8]. With appropriate and effective care, encompassing the four stages tallied above, older adults would have longevity with a good quality of life to continue their unmatched roles in society as custodians of culture, and tradition, providing knowledge and skills to bridge generational gaps.

## Benefits of geriatric care services

There have been variable findings from studies evaluating the benefits of geriatric services in different settings. Older persons will seek care in different settings: acute care, emergency care, primary care offices, rehabilitation centers, nursing homes, residential facilities, and at home for those who are very frail and home-bound, depending on the care needs, multi-morbidity burden, functional capacity, and dependence level. CGA has been applied in these different settings with varying outcomes. Studies have reported positive outcomes, and there are several benefits of geriatric assessments to healthcare outcomes [9].

Among these benefits are better diagnostic accuracy and treatment planning, improved patient functional and mental status, prolonged patient survival, and lower overall use of costly institutional care services [10]. Meriem Dawud et al. emphasized the benefit of training caregivers to provide person-centered, good-quality care, with reduced risk of burnout and elder abuse, making a case for structured geriatric services in long-term care facilities in Ethiopia [11]. Other studies also reported improved outcomes from CGA affecting nursing home resident satisfaction, prescribing, healthcare resource use, and objective measures of quality of care [12]. There were positive outcomes when certain older adults were managed with geriatric evaluation management (GEM), a term used for CGA in some literature [13]. GEM subjects, compared with usual care subjects, had significantly greater improvement in health perception, smaller increases in numbers of clinic visits, and instrumental activities of daily living (IADL) impairments, improved social activity,



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greater improvement in Center for Epidemiologic Studies-Depression (CES-D) scores, and general well-being.

## Needed scope of geriatric services

Geriatric service is a multidisciplinary team (MDT) approach, the team often consisting of a clinician (geriatrician), and other healthcare workers with training in older adult care: nurse, physiotherapist, pharmacist, medical social worker, occupational therapist, and nutritionist. The team also might include other specialists depending on the health needs of the older person, neurologists, speech therapists (for those who have suffered a stroke), cardiologists, nephrologists, and surgeons (orthopedic, ear nose, throat, and ophthalmologists). In the rural areas, at primary healthcare facilities, the team will include community health workers and volunteer community members. To provide good quality care to older persons, members of the MDT must be adequately trained in providing geriatric assessment and planning care around patients' goals. In consideration of the continuum of care, from curative through palliative care, to end-of-life issues, there is a need for a trained healthcare workforce (HCWF) including social services staff to provide these different brands of care.

## Current status of geriatric services in Nigeria

At the National Hospital Abuja, Nigeria, the geriatrics unit provides care to a large number of older people ranging in age from 60 years to 102, with varying medical conditions. These clients come from far and near because the National Hospital Abuja is the only hospital with a trained geriatrician in the entire northern zone of the country. These patients face several challenges: firstly, the lack of committed caregivers. With younger adults being mostly city dwellers, the older people who are mainly rural dwellers are left in the care of paid and often untrained caregivers. Secondly, poor access to adequate medical care remains a challenge. Nigeria runs a three-tier healthcare system: primary, secondary, and tertiary health systems.

Despite being the most populous nation in Africa, we have a huge HCWF gap, with a patient-to-doctor ratio of 10,000 to 1, compared to the WHO recommended ratio of 600:1 [14]. Of the approximately 35,000 doctors practicing in Nigeria, less than 20 are formally trained as geriatricians [15]. With a population of older persons of about 15 million, the ratio of patients to doctors is 750,000 [16]. Most of the trained geriatricians are unevenly distributed across the country, with a majority in the South-West region. Geriatric care centers are also unevenly distributed as a result. Until 2018, when the curriculum for training in the geriatrics subspecialty of Internal medicine was approved by the West African College of Physicians (WACP), no geriatrics sub-specialty training was available in Nigeria. Three training centers have subsequently been accredited, two in Nigeria, the National Hospital Abuja and the University of Port-Harcourt Teaching Hospital, and one in Ghana. Nigeria's first indigenously trained geriatrician completed his training in 2020.

The University College Hospital, Ibadan, established the first all-encompassing geriatric center in 2012 [17]. The following tertiary institutions also have geriatrics units, National Hospital Abuja, in the Federal Capital Territory(FCT), University of Port-Harcourt Teaching Hospital, Rivers State University Teaching Hospital, Rivers State, and the University of Benin Teaching Hospital, Benin City, Edo State. In addition, a privately owned gerontology and geriatrics center (JBS Gerontology & Geriatrics Center) was established in Lagos, in 2024 by a UK-trained Geriatrician. JBS provides a range of services for older persons, ranging from inpatient care, outpatient clinics, and seniors' day activities, to medical supplies and equipment for the elderly [18]. The Tony Anenih Geriatric Center at the UCH also provides a range of services (wellness, acute, chronic disease management, and palliative care services). In addition, UCH also boasts of an older adult-specific rehabilitation center – named after the philanthropist who donated the facility, the Sir Kensington Adebutu Geriatric Rehabilitation Center [19].

## Areas for growth and improvement

More doctors in Nigeria should be encouraged to train as geriatricians. Basic geriatrics training should be provided to the following cadres of students: medical, nursing, physiotherapy, pharmacy, medical social work, occupational therapy, and community health workers. To date, the curriculum for the training of medical students and other allied healthcare workers has not included a section on geriatrics. Internal medicine and family medicine residents' core rotations should include geriatrics. Geriatricians should be in adequate numbers to lead the care provided in the different settings where older persons require care. There is also a gap in the availability of a trained allied healthcare workforce. Untrained HCWF are less likely to treat older persons with the respect and dignity they deserve. A focus group discussion with older persons, that I facilitated, supported by the WHO in Abuja, 2018, as part of data gathering to finalize the National ageing policy, recorded long waiting times and lack of respect as major challenges older persons face when accessing healthcare [20]. These challenges discourage older people from using these facilities when they exist. A study spanning several communities in the Enugu North senatorial zone revealed that there is no healthcare delivery for the elderly and that older persons suffered problems such as loneliness, isolation, and abandonment (ageism) during healthcare delivery [21].

The primary healthcare centers, if and where functional, are often far from the communities they serve (particularly in the Northern parts of the country). Similarly, in acute care hospital settings there is little dedicated bed space for older adult care [22]. Facilities that look after older persons must be 'Age-Friendly'. These facilities should provide equipment (diagnostic and therapeutic) for age-related conditions, appropriate lighting, and signage to ease navigation for those using walking aids. The WHO has documented guidelines for making healthcare facilities 'Age-friendly' [23].

The capacity to provide the specific components of geriatric services is also lacking, and there is no framework for long-term and end-of-life care. The concept of advance care directives remains alien. Older person's perceptions about advanced directives and end-of-life issues in a geriatric care setting in Southwestern Nigeria' and their knowledge about end-of-life care and advanced directives as prescribed in high-income settings were sparse and did not include choices about treatment options or any medical directives [24].

Capacity needs to be available at the community level for providing home-based care for home-bound frail older persons, and support for family members who are caregivers, such as respite care, and social insurance to provide income to the same family members. Senior centers should also be available in the communities to provide a platform for recreational purposes and allow engagement and experience sharing by older persons. Functional older persons who are willing should be given opportunities to work at these centers to support their less functional peers. Younger adults should be part of the workforce in the senior centers to allow for inter-generational synergy and engagement, facilitating bidirectional learning.

Teachings on the use of technological equipment and devices should be incorporated to reduce the digital divide. Additional services at the community level should include training on new skills and vocations as might be desired by older persons: carpentry, bead making, the arts, and playing a musical instrument to name a few. If we are to make greater strides at achieving the sustainable development goals (SDG) leaving no one behind, we must have in place services that are required to cater to the social, economic, and health needs of the almost 15 million older Nigerians in our midst and for the 50 million we are estimated to have by 2050 [16].

Geriatric centers such as the Tony Anenih Geriatric Center, of the University College Hospital, Ibadan, provide patient-centered one-stop care, friendly in eliminating the burden of patients visiting different specialist clinics at different locations for care. Such a center also provides intensive care and theatre facilities in the same location. The multi-specialty clinics are housed within the center making the model quite Age-friendly. Such centers should be made available in every geopolitical zone of the country.

Geriatric units equipped with facilities for acute care, physiotherapy, occupational therapy, medical social work, and dietetic services, should be established in every tertiary institution to provide patient-centered and age-friendly services including long-term and palliative care. Additional services will include the provision of assistive devices for ambulation, hearing, and vision for those with impairments in these domains. In addition, the specialist clinics visited by older persons should intentionally prioritize older persons, a banner advertising this will sensitize the younger adult clients to accommodate the initiative.

Non-geriatricians who consult with older persons at these facilities should be trained to deploy the 5Ms of Geriatrics, a concept promoted by Dr Mary Tinetti, a geriatrician, since 2017 [25]. The Geriatric 5Ms is a communication framework to describe core competencies in geriatrics in a manner that those inside and outside the field will understand and remember. The 5Ms are Mind, Medications, Multi-complexity, Mobility, and Matters Most. Matters most is a core concept in geriatric practice, preferences of the patient and family members being prioritized in drawing up care goals for patients [25]. The Geriatrics 5Ms, which align with the goals for an age-friendly health system imperative concisely communicate the core competencies related to issues of ageing [26]. The Geriatric 5Ms focus on Mind (maintaining cognition, preventing anxiety, and depression), Medication (avoiding polypharmacy and adverse drug effects in older adults), Mobility (maintaining ambulation, with aids when necessary), Multi-complexity (paying attention to social issues, family dynamics), and Matters most ( deferring to the preferences of older persons and family members for care goals). Workshops conducted using the Geriatric 5Ms framework have been reported to increase primary care residents' self-efficacy and knowledge of tools in the care of older adults and geriatric competencies. One such workshop was conducted by Sarah Phillips and colleagues - the workshop was reported to have offered an innovative and efficient method to teach geriatrics to residents in primary care and prepare them to care for an ageing population [26].

## National policy

Nigeria has a National Policy on Ageing, launched by the President of the Federal Republic in December 2020. This is the road map being deployed by the National Senior Citizens Center (NSCC), an agency of government created to specifically identify and cater to all the needs of older Nigerians by an act of parliament, the National Senior Citizens Center Act 2017, and signed into law in 2018 [27]. These are the government's initiatives to improve the livelihood of older Nigerians by raising



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awareness of their challenges and ensuring all ministries, departments, and agencies (MDAs), actualize their specific mandates toward older adults. In addition, efforts are being made to include older persons in the universal health insurance coverage plan and integrate their care at the primary healthcare (PHC) level using WHO's Integrated Care of Older Persons (ICOPE) framework. The framework focuses on certain intrinsic capacity domains – vision, cognition, vitality, nutrition, hearing, and the psychosocial [28]. Assessing these intrinsic capacities at the community level helps to identify older persons of different functional capacity rankings and determine interventions for improvement in those with impairments. So staff at the PHCs should be up-skilled through training to use this framework, in addition to identifying common age-related chronic conditions in community-dwelling older persons plus capacity for efficient and prompt referrals for those who need them.

Many older Nigerians face financial challenges, with a significant portion living below the poverty line. The Nigerian Living Standards Survey (NBS) reveals that approximately 40% of older adult Nigerians live in poverty [16]. Insufficient income, lack of social security and limited access to pension schemes contribute to their financial struggles, making it difficult for them to afford essential healthcare and support. The provision of social security by the government of Nigeria for seniors is long overdue. A non-contributory social fund to make them less dependent on the meager family contributions that most older Nigerians currently rely on for their livelihood. Social security income in addition to free or subsidized housing, medical care, and all forms of public transportation should be provided. The involvement of all stakeholders in ageing issues has the potential to empower older persons in our country. For example, 'Kaleyewa', a private initiative in Ondo state caters to the needs of over 300 older adults above the age of 70 years. The older persons enrolled in this program are given free medical attention, food, and rent money provided to a few who are in dire need [29, 30].

## Conclusion

With the demographic population shift in Nigeria, increasing life expectancy, and the number of older persons, aged 60 years and above, increasing exponentially, it is expected that the consequences of ageing will be experienced by these Nigerians. To ensure that our older persons remain healthy to play their expanding roles in society, they need access to affordable, good quality, and person-centered care provided in an environment that embodies respect and dignity with zero tolerance for ageism and the risk of elder abuse. Older people's health is affected by social, economic, and psychological issues, all termed the wider determinants of health.

To holistically improve the healthcare provision to older persons, these other elements must be addressed: affordable housing, access to employment, income security, access to recreational facilities to curb loneliness, social isolation, and risk of psychological issues such as anxiety and depression. In addition, services must be provided to older persons based on their needs, functional status, and quality of life goal preferences. To achieve these, we need a trained HCWF, all members of the required MDT to provide care to older persons must have basic knowledge and skills for older adult care. This means that the training curriculum for these experts and disciplines must include geriatrics. Geriatric 5Ms workshops can be conducted for residents across different specialties to ensure they are empowered to provide care to older persons. In addition, we need more doctors trained as geriatricians to attempt to start bridging the gap, to improve the doctor-patient ratio from the prevailing abysmal 1: 750,000. To meet the needs of older adults needing care in different settings, the necessary facilities need to be put in place, acute care, domiciliary, long-term, rehabilitative, residential, palliative care, and end-of-life care.

Nigeria is making some strides toward improving the livelihood of older adults. The launch of a national policy on ageing, the establishment of an agency solely to cater to the needs of older persons, building capacity in the relevant MDAs, and raising awareness among the major stakeholders including older persons for ageing issues. Another step worthy of note is the availability of capacity locally for training Geriatricians through the postgraduate medical colleges (WACP and the National Postgraduate Medical College of Nigeria - NPMCN). The expectation is that the livelihood of older persons regardless of functional capacity, socioeconomic status, and geographical location will continue to receive priority attention to ensure that no one is left behind in the development agenda. Let me end with the meaning of the term 'Ki aleyewa', may our evening time (later years) be dignifying!

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