

**THE AGING OF AFRICA: CHALLENGES TO AFRICAN DEVELOPMENT**

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The purpose of this brief discussion is to highlight issues of demographic changes associated with an aging population in Africa and what, I believe, must happen to avoid the next social crisis among African nations.

## Introduction

Since 1982 four major United Nations international policy initiatives have documented the aging of African populations and what should become national policy priorities to avoid human rights problems that have never occurred before [1]. The African Union, in collaboration with HelpAge International, has had the “Framework and Plan of Action on Ageing” available since 2002 [2]. Yet there is little evidence, on the ground, that senior policy makers, government officials, or social institutions have recognized the need to act. Some African countries have not progressed beyond developmental stages of political organization, war, civil war, post-colonial self-image, or efforts to reach economic autonomy. However, Kenya, Uganda, Tanzania, most of southern Africa, Nigeria, Ghana and a few others could quickly discover that success in economic and human development translates into surprisingly rapid population growth, survival of formerly vulnerable populations, and the inevitable increase in the median age of the population. These are predictable outcomes of even modest improvements in public health, food security, and other health-related infrastructures. In other words, better health measures, especially for the very young and the old, will keep many more people alive, thereby greatly increasing the population. Although it has been a matter of public record for nearly twenty years that this African population dynamic is a certainty, few seem to be listening. As noted in the AU-HelpAge International collaboration in 2002:

[In Africa] Over the next 20 years ...the population of older people will more than double in many countries...the majority of people in Africa will thus grow older and will, in all probability, live longer than previous generations....This increase in the number of older people provides a challenge for the continent as a whole, as well as for individual countries [2].

Such demographic transition has been seen in every developed, industrial nation during the last sixty years and poses a potential threat to sustained economic growth and even political stability among the most affluent nations; this demographic change, particularly if realized soon, could cripple an emerging or developing nation [1-6].

## The Focus on Infant mortality

Since pre-independence years, throughout Africa, internal and international attention to public health metrics has focused on key indicators to rank the health status of populations. The infant mortality rate, specifically, was useful because it reflected the broad spectrum of sanitation, prenatal care, nutrition, potable water availability, housing, and economic correlates of public health and Africa has had a history of being a deadly place for very young children [7]. The emphasis on infant mortality also was critical as the prime indicator of population growth when infant mortality rates were commonly

over 8-10% of live births. The statistical and policy emphasis by W.H.O., and all other global monitoring institutions, on maternal and child health and reduction of infant mortality has frequently been linked to economic aid, including industrial development. Ironically, some of the industrial development, designed for the economic advantage of the donor countries, resulted in degraded environmental conditions that subsequently threatened maternal and child health. Nevertheless, from the perspective of a poor country's development, the metrics for child and maternal survival reflect a necessary focus for dealing with the future when childhood survival is in doubt.

Reducing infant mortality and improving maternal and child health is the overwhelmingly dominant priority in all African countries. These priorities are based on general population mortality and longevity [8]. We know that most traditional African households view large families as a means of their social security in old age, because in many places the expectation of high infant and child mortality is motivation to have many children, to ensure that some will survive. This all gets turned around when early childhood mortality is reduced, but birthrates remain high. The reward for such positive changes in public health will increase longevity, with profound consequences, especially if birth rates are not reduced.

### **Chronic Disease Burden and The Need to Transform Health Care Systems**

African health care systems will need to experience fundamental transformation. The emphasis on acute care and infectious diseases will shift to chronic disease management and control. Because chronic diseases and conditions are not "cured" but, rather, are managed, these patients become permanently locked into dependence on medical attention, drugs, clinical testing and laboratory exams. This increases the economy of the health care system itself. The "health care load" is the sum of all people (patients) with ongoing dependence on medical institutions and services. With acute problems there is little ongoing dependence - the patient either is cured or dies - but with chronic diseases and illness the health care load is cumulative and can be exponential. For instance, before the HIV/AIDS pandemic could be attacked with effective anti-retroviral drugs, medical care systems provided as much compassionate care as possible and watched people die rather quickly. There was an unmistakable drain on the nation's economy, but the medical care system was not burdened by the ongoing needs of AIDS patients for many years. Once anti-retroviral drugs became available, however, the patients survived and became continuously dependent on the system, required expensive drugs for many years, and medical care systems faced the need to provide for the chronic management of HIV/AIDS instead of the acute care of patients who were bound to die.

This is the situation that all medical care systems will face with the inevitable shift in focus from acute medical care to chronic disease management. The desirable and important improvements in human development will come with a price. Health care systems, personnel, advanced laboratory and all other services will burden the medical care resources and the general economy. If the systems are not adequately resourceful and anticipatory planning is not successful (or not even done), then there will be no coping with the flood of chronically ill and dependent adults. The burden of chronic diseases has already been well-recognized and is associated with longevity; effective

public health programs, including clean water and sanitation, and diet; changes in patterns of work with fewer hazardous or toxic environmental workplace exposures; urbanization; and reductions in infant and childhood mortality. In addition, inpatient hospital care will increase with the additional need for long-term care, either in newly created institutional settings or through home-based services for frail, chronically diseased, and highly vulnerable elderly people. Failure to prepare for the shift in demographics to an older population will result in widespread misery, poverty and unmet needs within a much bigger population and will threaten economic and social advances. It is not clear to us if most African political institutions are prepared to respond to the needs of an aging society [9-11].

### **How Others have Responded**

Most industrialized nations have already made improvements in quality of life, work and home environmental conditions, availability and access to effective medical care, and public health-related infrastructures that lead to reduced morbidity and delayed mortality. All industrialized nations, however, now face the new reality that aging populations do come with a price. Longevity does not always mean that the surviving elders are healthy and vigorous. Longevity is directly associated with increased chronic disease morbidity, more frequent and costly medical care, inflation-prone prescription drugs, and dependence on both formal and informal caregiving. In fact, the period of dependency for frail elders can last longer, and be more costly, than the period of infant-to-adult dependency at the initial stages of life. In most industrialized nations well over 80% of an individual's medical costs are expended during the final years of the person's life. Chronic conditions, including AIDS, diabetes, some cancers, many cardiovascular conditions and even depression, are managed over time with prescription drugs. These drugs are often effective for control, but not for cure, thus making the recipient dependent for long periods of time and ensuring a lucrative market for the pharmaceutical industries.

Many other conditions common among aging populations increase vulnerability to injury, exacerbate other chronic conditions, and increase dependence on others. Changes in metabolism are common among the elderly, and late-onset diabetes is closely linked to obesity, a condition that is increasingly common among elderly people, especially in retirement or during recovery from a disabling injury. Obesity complicates cardiovascular diseases, increases the probability of dementia, reduces energy and physical activity, and makes management of most medical conditions more difficult. However, malnutrition due to inadequate or inappropriate food is also common among the poor elderly. Kwashiorkor, a condition usually associated with young children, is often found among elderly patients in badly managed nursing homes or senior housing centers, even in industrialized nations. Other health status changes due to widowhood, retirement, loss of job-related health insurance, reliance on inadequate national insurance schemes, reduced disposable income, and oppressive family dependence ratios of seniors and retirees fill the global health gerontology literature [12]. Because most of the research and documentation reflects the experience of industrialized nations for the last sixty years, developing nations and all African nations can anticipate similar challenges in the near future.

The shift of government priorities from health care services that focus on acute care (infectious disease burden) and the preoccupation of all African countries (as reflected in Millennium Development Goals) with pediatrics and maternal/infant health to the chronic disease burden is an inevitable consequence of development. Dealing with the chronic disease burden, however, requires change. In all industrialized nations the medical care enterprise represents infrastructure, resource, labor, health monitoring, and pharmaceutical supply systems required for caring for an older and health care-dependent population. These evolving needs create substantial shifts from the medical care, public health, and other infrastructures that have been established in most developing countries. Hospitals and fixed-site, institutional resources, often the only sources of medical care for the majority of populations in African nations, cannot provide ongoing care for chronic conditions while also serving as the source for primary care and all sorts of medical crisis management. Primary care, family medicine, and small and widely available outpatient services must be established to reduce the burden on larger medical institutions whose mission will shift to a focus on geriatric care and chronic disease management [12].

### **Current Status in sub-Saharan Africa**

Arguably, South Africa has the most well-developed and sustained economic success in sub-Saharan Africa, albeit at the enormous expense of the majority of the population based on generations of racial discrimination. The medical care system in South Africa is substantially more advanced and sophisticated than anywhere else on the continent for most medical needs and the most prevalent conditions; yet, in the face of the inevitable aging of South Africa's population, according to Kalula (2013):

There is scant evidence of South Africa's preparedness to meet the challenges of providing adequate and appropriate healthcare to the older population in the future. Of the eight medical schools in the country, only four offer some training at undergraduate and postgraduate levels in geriatric medicine. For the large part, healthcare professionals are inadequately trained in the care of older patients; they are poorly resourced moreover, and lack the knowledge and skills needed to manage unique medical conditions in these persons [13].

If South Africa is unprepared, then little wonder that most other emerging African nations are even less prepared.

Many interrelated consequences of an aging population affect all aspects of social and economic development. In industrially developed countries the gerontological literature has documented the aging of populations as a consequence of affluence, improved public health, a shift from labor-intensive to less labor-intensive employment, smaller family size and reductions in fecundity, food insecurity, and political instability [14-17]. Some nations, most notably Japan, have made the aging of society a centerpiece of national policy and have acted in sustained ways to ensure the dignity, safety, and respect to aging citizens that cultural traditions demand [18-20]. Other nations, facing dramatic population shifts, have not yet demonstrated the political will or economic need to

respond to the same situations; Russia and China now both face aging populations with far from adequate infrastructures or social institutions in place [19]. These industrialized nations have either made policy changes or encouraged personal economic decisions to slow population growth. Japan has negative population growth; the USA and Canada, like all European nations, have slowed population growth to the point of needing immigrant labor to fill the labor requirements of their economies.

All African nations face a somewhat different aging prospect because fertility rates remain high, as if infant and child mortality were still at levels from the last century. If a family's social security in old age is assumed to be solely the willing support of many adult children, then large families are desirable. This tradition has been exacerbated by low expectations for childhood survival. When infant and child mortality are reduced, while large family size is sustained, the obvious consequence is explosive population growth, as has been demonstrated in the most economically stable African nations for the last 25 years. It has been argued that in the near future the large numbers of 1-to-15-year-old children and youth will age into economically-productive years and provide economic strength to many African nations. This economic growth will be important to new service industries the vulnerable elderly require [21-22].

The perceptions of populations about aging societies and implications for political will to shift policies and program priorities is an important, but only recently investigated area. Little data are currently available; however, the Pew Research Center recently reported that South Africa, Kenya, Nigeria and Tanzania are aware of the aging of society and that service and policy responses to the new demographic will be important [23-24]. Most African peoples believe that the national governments should shoulder most of the responsibility for the aging in society; however, this is a political process. If the populace does not believe that the burgeoning aging population is an issue, then they will not support government-sponsored programs for the elderly. At the same time, African nations have chronically poor experience with uniform taxation, through income taxes or other sources of revenue which can support services. If African nations cannot agree to fair and uniform tax codes that distribute the burden of government support throughout the entire population, then it is unlikely that public resources can become available for the services that the people need [25-30].

Urbanization, particularly the movement of young adults from rural areas to urban areas, has been an important part of Africa's development for over a century. Initially because of European oppression and European-initiated wars for territorial control, the traditional and sustainable rural lives of millions of Africans were upended, and large populations were forced to seek work in mines or industrial-scaled agriculture. Often these kinds of employment took workers away from their traditional families and social order. Since the end of World War II and the independence of African nations, urbanization and urban migration have accelerated. Migration from traditional villages and impoverished rural areas to urban centers is generally motivated by the myth of opportunity. The megacities of Africa today are clear evidence that many migrants find themselves more destitute and desperate in the urban areas than they were before in villages or smaller cities. Also, the impact of this migration on rural areas is staggering, with fewer capable

adults to work the land and raise families, often leaving the youngest and oldest members of society to fend for themselves. Older people in rural areas as well as in over-populated urban slums face a harsh reality for housing, food, safety, and all other needs.

For the last thirty years, especially in southern and eastern Africa, the HIV/AIDS pandemic has made the circumstances of the elderly even more precarious. When the parents of children become disabled or die from HIV, the grandparents or even great-grandparents become the surrogate parents, often for many orphaned children. Surrogate child-rearing by the elderly places enormous burdens on older people who find themselves in this role at a time in their lives when they might have expected their adult children to be providing support. Instead, the elderly need not only to survive, often with reduced physical health and income, but also to provide for child-rearing, and to be responsible for transmitting culture and traditions to young children and youth. The numbers of such surrogate families is staggering in many African nations, leaving a substantial portion of a whole generation of children with less parental support and fewer opportunities than previous generations [31-33]. One cannot assume the physical and emotional energy of people who have lived a long life is equivalent to young parents' energy. The ability to respond adequately to children's needs for normal growth and development, education, socialization, and specific skills by no means exists among all frail or vulnerable elderly caregivers.

Similarly, a seemingly endless litany of violent conflicts--civil wars, jihadist insurgencies, ethnic and tribal-triggered violence, or proxy wars--are notoriously more lethal to the most vulnerable civilians than to the armed combatants. Elderly people in towns and villages caught in such conflicts are often the first to suffer losses, including homes and personal resources, leaving them destitute and still responsible for young children. Recent conflicts in Nigeria, Sudan, DRC, and Rwanda and episodes of violence in other nations may be the best-publicized of such traumatic events, but it is not difficult to document dozens of less widely-recognized incidents throughout Africa on a regular basis. Be it from the death of young adults and parents from HIV/AIDS, or from violence, or just the migration of these adults to urban centers in search of economic opportunities, the consequences to the elderly who assume responsibility for the youngest members of society are dramatic and very difficult.

It is also important to recognize the direct and indirect economic contributions of the elderly. Most concerns about the aging of society focus on the potential dependence of frail elders for services and help, but it is also true that they continue to serve the economies in important ways and to an impressive degree. Consider that the elderly assume social roles as surrogate parents and laborers with no prospects of a subsidized retirement. What would happen if the care-giving they provide to children and others were offset to the public sector? How much would African nations spend to replace the free in-kind services of the elderly?<sup>1</sup>

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<sup>1</sup> In fact in the US and throughout Europe families subsidize the caregiving of frail or sick elders with far more direct care than is provided by paid caregiving services, health care institutions, or formal programs.

Nutrition and well-being of the aged are as critically connected as are nutrition and the health status of young children. Poverty, isolation, seasonal shortages, failed harvests, and economic inflation for urban dwellers are but some of the problems that cause widespread malnutrition among Africa's elders [31]. It is well known that all of the chronic conditions that can disable and weaken the elderly are exacerbated by poor nutrition, insufficient proteins and trace minerals, and especially insufficient vitamin content. It is known, too, that the immune system is dependent on sugars and proteins to ward off infectious diseases. When elders raise young children, the caregivers' health and vitality are critical to successfully nurture the next generation. Hence (like every other aspect of the well-being of the elderly), nutrition must not be ignored or neglected.

Poor nutrition, however, is not simply a matter of poverty or the lack of access to a balanced diet. Poor nutrition is also associated with social practices and ignorance. The rural areas of many African nations, as well as the slums surrounding the emerging "mega cities," are equally likely to produce clinically malnourished elderly. Men who have lived their lives in traditional gender roles often find themselves helpless and hapless upon retirement. If they do not have a family or spouse to care for them they often find it difficult indeed to manage even basic food preparation, household tasks, or personal care.

How much more would unprepared, developing nations need to count on the free services of families when a significant burden of elder care is imminent? Inadequate pensions in some African nations can force retirees to find affordable housing in urban slums, where they are dependent on others for basic nutrition and often find themselves malnourished and vulnerable to a host of health problems [31-33]. Hospitalization for preventable health problems is often the consequence, putting additional unnecessary strain on overburdened institutional systems.

The customary assumptions throughout Africa have been that when older people are no longer able to care for themselves the extended family will embrace them, care for them, and provide for their needs. This assumption is being tested throughout the continent because of many factors. Emerging middle-class families in particular have smaller families, delay or avoid marriage, pursue professional careers, decide to invest in western-style family homes instead of multi-generation households, and/or may emigrate to developed countries. Public programs to replace the family are practically non-existent, however, and there are few entrepreneurial efforts to provide personal care for frail elderly that might appeal to the middle-class families who nevertheless are hesitant to forego their own careers and incomes to take care of dependent elders. Kenya and a few other countries have made small private efforts to answer this growing need. However, current availability of such services as assisted living, nursing home care, or home-based long-term care are rare, expensive, and far from sufficient to deal with the demographic changes that all African nations currently, or soon, will face.

Ethnic differences among the peoples of all African nations can complicate the development and provision of senior care programs. In most North American and European countries the staffing of assisted living and nursing facilities is heavily

weighted towards a labor force willing to do this difficult work for minimum wage. In other words, usually the more advantaged people are cared for by less advantaged people. Racial divides are obvious between the residents and caregivers in most American and European nursing facilities that care for the elderly. If this model is transferred to Africa, then tribalism inevitably becomes part of the dilemma faced by developers, entrepreneurs, or government ministries. Given status differences and generations of animosities, who will care for the elderly, frail and dependent in one ethnic group? Will people of the same ethnic identity care for the senior dependents, or will such services be staffed by members of other, perhaps lower status, ethnicity? It is folly to ignore such realities in Africa because all major social development has been challenged by the scourge of tribalism for at least the last century. How to get over, or get around, this issue will matter greatly if any African nation can develop private or public services to the elderly that successfully replace traditional family responsibilities [34-36].

The medically-based disabilities normally associated with aging are complicated by concurrent changes in mental ability, mental health status and dementias. Loss of memory and the panoply of behavioral and physical disabilities that affect aging populations present severe challenges in the best of circumstances. Few African nations could be remotely classified as being in the “best of circumstances,” because this is an area of caregiving and concern that even the most advanced industrialized nations have not yet fully addressed. Often dementias affect elderly people in reasonably good physical health, who will survive for many years, but with progressively reduced mental ability. There are no effective treatments to contain or reverse memory loss. Thus a growing tide of people will need continuous care and supervision for many years. It is a gross understatement to say simply that Africa is unprepared for this looming epidemiological reality; in most places there is no public recognition or effort to begin caring for people with memory loss and dementia [37-38].

Closely associated with all of the physical and mental health issues that affect dependent elderly people are the needs and problems faced by their caregivers. The physical, economic, and emotional stress of family caregivers is a major issue in the US that has been virtually ignored by both public policy makers and private services. In fact, in the US approximately 30% of family caregivers die before the person being cared for dies. Respite care, alternatives to family members who may be too old and frail themselves to do the hard work of caregiving, and avoiding preventable neglect and abuse (another issue in itself) are mandatory for nations who profess concerns about the aged. Supporting the family caregivers also can delay or mitigate the demand for institutional care or public services. It is cost-effective for governments to address and provide for families to do the work instead of institutions; if, that is, there are family members willing to do the work at all.

### **Questions for Decision Makers**

Finally, there are questions I can only pose in hopes that a discussion will emerge among those who recognize the need to prepare for an aging Africa. Rather than offer a conclusion, because this discussion is not conclusive, I have simply provided a platform

for recognizing many more unknowns. Among many other questions I offer the following:

1. How can African governments revisit national priorities (such as Millennial Development Goals) for health, economic development, growth of the middle class, and public health with increased attention, and investment in, the aging?
2. What should developing African nations do right away? How can the nations initiate and sustain sufficiently sound data collection to be able to plan with precision the near-future needs of an aging society and for the predictable future? What metrics can be trusted to use for planning, program design, health and welfare policy, and manpower needs?
3. How can early detection, health and wellness monitoring, and primary care availability become more focused on the aging populations in order to reduce the need for costly, and largely unavailable, hospitalization?
4. How can home-based chronic disease management and care be established within the labor, financial, and technical resource limitations of developing African nations?
5. Given that in many places the very young are being raised by the oldest members of communities, what is likely to happen when the elderly caregivers are unable to continue in the child-rearing role?
6. How will traditions of family-based care and filial responsibility challenge, or complicate social responses such as long-term care, chronic disease management, transportation and housing for the aging?
7. Should key parties in the stable African nations begin to consider continent-wide responses to aging in society? If so, how will the central issues of food security and justice-based development be financed, organized, and processed as societies change?
8. How can African nations address the inevitable needs of aging populations while also finding ways to reduce ethnic and religious conflicts, and sustain investments in other priorities such as housing, transportation and education? How will ethnic diversity, gender inequality, geography, religious conflicts, socio-economic disparities, and fragile political stability influence Africa's ability to prepare for the aging of the population?
9. How will the diaspora of African talent affect Africa's ability to take care of its own? Are there sufficient numbers of chronic disease specialists for an aging Africa? Are there specialists for the needs of the elderly in housing, transportation, and other essential service areas?



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