Ageing of Jamaica's Population – What Are the Implications for Healthcare?

D Eldemire-Shearer, K Mitchell-Fearon, H Laws, N Waldron, K James, DL Holder-Nevins

ABSTRACT

The 2011 Census has confirmed the ageing of the Jamaican population. The over 60-year old population has increased while the under 15-year old population has decreased. Other demographic changes of note include the largest increase being in the old-old who are predominantly female. The demographic changes when considered with the increase in chronic disease indicate the need for consideration of healthcare specifically targeting the needs for older persons including increased prevention, continuous medical management, long term care and caregiver support.

Keywords: Chronic disease, demographic change, long term care, population ageing

Envejecimiento de la Población de Jamaica. ¿Cuáles Son las Implicaciones para la Atención de la Salud?

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RESUMEN

El censo de 2011 ha confirmado el envejecimiento de la población jamaicana. La población de más de 60 años de edad ha aumentado, mientras que la población por debajo de 15 años ha disminuido. Otros cambios demográficos notables incluyen un mayor aumento en el grupo de los ancianos mayores de 85 años, predominantemente femenino. Los cambios demográficos considerados junto con el aumento de las enfermedades crónicas indican la necesidad de tener en cuenta una atención de la salud dirigida específicamente a las necesidades de las personas mayores, que incluya mayor prevención, tratamiento médico continuo, así como apoyo a largo plazo a los cuidados y a los cuidadores de la salud.

Palabras claves: Enfermedad crónica, cambio demográfico, cuidado a largo plazo, población en proceso de envejecimiento

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INTRODUCTION

Population ageing has been noted to be one of the recent demographic achievements (1), but with it comes challenges which this paper will review with respect to Jamaica. While ageing is no longer synonymous with poor health and increased medical costs (2), it is associated with an increased chronic disease burden (3-5). Studies by Wilks *et al* have emphasized the importance of the role of lifestyle in the development of chronic diseases (6). Increasingly, health and social services are challenged to meet the needs of this increasing population especially in current economic conditions. Considerations about meeting the "needs" of older persons have extended beyond providing medical care to include reducing the burden of chronic disease *ie* increased emphasis on prevention while also focussing on the social determinants of health and their contribution to poor health (7). Health and social service providers are therefore embracing concepts such as "using a life course perspective, active ageing and successful

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ageing" when developing such services (8). Poverty alleviation is now recognized as an important component of health and improved health status (7, 9).

This paper discusses Jamaica's current census (2011) and the changes in the over 60-year old population since the 2001 census and the implications for healthcare. There is an emphasis on chronic disease reduction and improved quality of life for older persons.

Over the past 10 years, there has been increased awareness of ageing and its impact on the age structure of the Jamaican population (10, 11). The changed age distribution in the recent census (2011) draws attention to the urgency of the need for action [Tables 1, 2] (12). At the same time, the

Table 1: Distribution of Jamaican population (\geq 60 years) by age groups and gender

Age (year)	Male		Female		
	2001	2011	2001	2011	
60–64	31 827	44 407	33 468	43 150	
65–69	28 910	32 543	30 969	32 273	
70–74	24 856	24 627	27 244	26 325	
75–79	17 711	19 847	20 878	22 848	
80-84	10 302	13 258	14 249	17 480	
85+	9 278	10 502	15 141	17 903	
Total	122 884	145 204	141 869	159 979	

Caribbean Community (CARICOM) has been calling for more attention to be paid to reducing the burden of chronic disease, noting the link with ageing, and stating that more attention should be paid to population ageing and the needs of this age group (13). Age advocates have raised concerns about discrimination against older persons as the background documents for the 2011 United Nations (UN) Summit describes deaths below 60 years of age as premature mortality which they have interpreted as implying that deaths of older persons are not a priority (14).

The Jamaican census 2011 for the first time specifically drew attention to the ageing of the population, stating "the

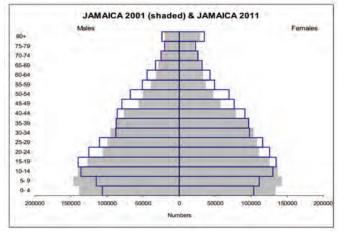


Fig. 1: Population pyramid for Jamaica: 2001 and 2011. Source: STATIN; 2012

pyramid shows the obvious narrowing at the base as the fertility declines take effect while increases at the older ages are evident" (12) [Fig 1]. Using 60 years of age and over to represent older persons (in keeping with the established United Nations definition), the older population in Jamaica increased from 264 755 in 2001 to 305 163 in 2011, representing an increase of 15.2% in numbers, while the under 15-year age group decreased by 16.7% during the same period [Table 2] (12). The

 Table 2:
 Demography of the Jamaican population by age group by census year

	Census		0/ Change	
	2001	2011	- % Change	
Total population Age groups (years)	2 607 632	2 697 983	3.46	
Under 15	843 572	702 835	-16.68	
15-59	1 499 305	1 689 983	12.72	
60 and over	264 755	305 163	15.26	

'dependency ratio', which is the number of young (0-15 years)and old (60+ years) people in a population compared to the working population, has been reduced and the age-related contributions changed (15). This ratio is an indication of the burden faced by the adult population to meet the needs of older dependents. Total dependency fell from 63.1% in 2001, to 59.7% in 2011, but the older person component increased from 12.8% to 18.1% [Table 3] (12). This is significant to planners

Table 3: Dependency ratio by age group, 2011

Dependency ratio %					
	Year	Year	Relative change %		
	2001	2011	enange / e		
Total	63.1	59.7	-5.4		
Youth	51.3	41.6	18.9		
Old	12.8	18.1	41.4		

as services developed for children do not meet the needs of older persons and are not easily converted into services relevant to the elderly. New services are therefore needed to address the demands of the growing older population, including health and social service related programmes.

While ageing does not cause disease, it is associated with longer exposure to the risk factors causing disease. Increases in age therefore mean more exposure and potentially more disease (16). Studies have shown that, in general, chronic disease morbidity has increased especially among older adults (3, 4, 10). A recent local study of older persons supports international findings, as hypertension and diabetes increased by 48% and 156%, respectively between 1989 and 2012 (17). Living longer with disease is also associated with increased disability and loss of functional ability (18), creating increased need for treatment and rehabilitation services. Functional status plays a key role in determining the relationship between ageing and healthcare costs (19).

In addition to the increase in the older population and changed dependency ratio, there are two other significant demographic changes influencing need; the first being the increase in the old-old and the second being the change in family structure. The greatest increase in the over-60-year old population is in the old-old [those 80 years and older] (Table 4); the

Table 4:Distribution of the Jamaican population (≥ 60 years) by age, gender and population and percentage change

		Census (year)			
Age (year)	Gender	2001	2011	Population change	% change
	Male	122 884	145 184	22 300	18.15
≥ 60	Female	141 869	159 979	18 110	12.77
	Total	246 753	305 163	58 410	15.26
	Male	19 580	23 760	4180	21.35
≥80	Female	29 390	35 383	5993	20.39
	Total	48 970	59 143	10 173	20.77

over-60-year age group increased by 15.26% while the over-80-year age group increased by 20.77% (STATIN 2012). It is widely accepted that the latter age group is most likely to develop medical issues and to suffer from the consequences of frailty, becoming increasingly housebound and immobile, and even requiring long term care. Currently, long term care services are not readily available locally. The issue is further complicated by the fall in family size from six to 4.2 over the past 29 years (12), therefore reducing the number of children available to take care of ageing parents. Additionally, many children are not physically available to care for older persons due to high levels of migration to city areas and/or other countries. Caregiving and the provision of such services including support of caregivers therefore represent very important needs.

The increase in the over-80-year age group has raised questions about the current 'active ageing' approach being used to develop health services for older persons which is traditionally based on a life course perspective with the initial three main ages (Fig. 2). This approach emphasizes maintaining functional independence as there comes a time when this ceases to be a feasible option due to advanced age and/or frailty. The 'active ageing' approach to date has emphasized reduction of chronic disease burden and the maintenance of functional ability; however, this is not achievable by all. Limitations are especially found in those with complex comorbidities and dementia; the absolute number of such individuals is increasing as life expectancy continues to increase. This results in greater numbers of older persons that are beyond prevention and treatment, and who need a culture of care which includes a focus on end-of-life issues rather than on 'active ageing'. Interventions when the body can no longer respond to care must be appropriate and must focus on the individual, not the disease nor the wishes of the family who may find it difficult to 'let go'. Healthcare providers need to determine whether a 'fourth age' covering this last period, that is, a period of irreversible illness and functional decline (20) should be added to the life course perspective to represent this need in the last years of life (Fig. 2).

Ethical considerations in the discussion of advanced care directives, living will and how to facilitate death with dignity need to be considered in ageing care. It is becoming a 'human rights issue' as it is argued that all have a right to appropriate care. Recently, a new phrase has been added to the ageing care vocabulary: 'high touch, low tech', suggesting less medical intervention and more non-medical support (20). This is important to the current discussions on end-of-life care to ensure that persons get appropriate and acceptable care.

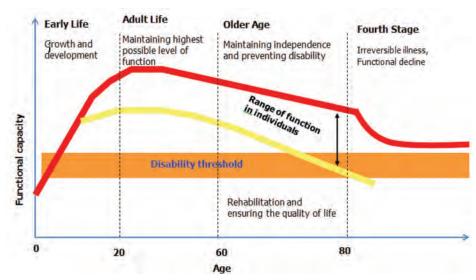


Fig. 2: A life course approach to active ageing plus a fourth age.

Source: Eldemire-Shearer D; 2013

There are other demographic changes which will impact the provision of care. In addition to the decrease in family size, female employment has increased, rendering the age-old tradition of a female staying home to look after old, disabled or frail family members no longer viable. Older persons are for the most part home owners [75%] (17) with this being where they prefer to stay; only 33% have an income (17) which could possibly allow them such independence. Both these factors will influence the type of care that is appropriate. The preference for home-based care is not necessarily a negative, as institutional care is expensive and not necessarily the best type of care except in special circumstances. The challenge is how to develop and finance models of home care by both private and public sector that will work best in terms of acceptability and affordability. The ideal model needs to ensure effective management of the frail-old who are unable or do not want to access institutional care.

The need for new models of home-based care is only going to increase over the next twenty to thirty years, given that the 45–64-year age group (*ie* those who will be 80 years and over, and who therefore have the greatest need in the next 15–30 years) is rapidly increasing. This group increased by 36.1% between 2001 and 2011, with this being attributed to the period of high fertility in the 1950s and 1960s. This reinforces the need to plan for the growth of the 60 years and over population with special focus on the over-80-year age group.

Finally, there are gender considerations due to the feminization of old age. Females represent 51.4% of the population 60 years and over, and increase to 59.8% in the over-80year age group (Table 4). Since females have traditionally been the providers of care, who then will provide care for the ageing caregivers themselves? The situation is complicated by females having less income in old age (21) and consequently more difficulty meeting the costs associated with increased health needs. Studies have raised concern about poverty in old age, noting that females are at greatest risk of same (21). Clearly, there is the need for developing programmes to not only help meet the existing needs of older females, but to also inform and assist those approaching middle-age (45–60 years) to make the necessary arrangements both financially and socially to have good quality of life in old age. Given the current low levels of pension contributions, this is a real concern when considering financial arrangements for 'old age'.

THE WAY FORWARD

Several domains are considered when measuring how a country provides for the well-being of its population including health status, income security, education and provision of a health enabling environment. The health of future cohorts depends on several actions including improving the health of younger generations. Efforts to reduce chronic disease prevalence need strengthening and expansion to include older persons as specific targets. Measures such as those, which reduce the risk of disease in older persons, support the concept of 'healthy ageing'. Scarce resources cannot be diverted from existing programmes into healthy- or active ageing- programmes, which begs the question: where will the funds come from to invest in programmes targeting the well-being of older persons?

To improve the lives and health of older persons, ageism needs to be reduced; removing barriers faced specifically by older persons when accessing care (especially preventive care) must be a priority. Ageism is encouraged in our society as descriptions of older persons many times tend to be widely generalized (ignoring the heterogeneity of this group), and many times negative (portraying older persons as non-contributors to society and a drain on resources). Such portrayals influence policy debates, resource allocation and policy outcomes, as programmes for older persons are thought of as resource intensive and simply needing "to provide care". Such ideologies are supported by dependency ratios, which erroneously assume that all persons over 60 years old are nonproductive, even though many continue to contribute to society through formal and informal avenues. Current models in fighting stigma exist in the mental health system (for example, those promoting good attitude toward persons with mental health problems) and may provide new avenues of how to address such forms of ageism.

The health and quality of life of the growing older population will not only be affected by ageism, but will also depend on current investments into health and social services. The demographic transition, which is well advanced but has another 10-15 years to be completed, provides a limited 'window of opportunity' (22) to undertake such investments. Also referred to as 'age structural transitions', and the 'demographic dividend', this 'window of opportunity' has been shown to have major implications for economic development. It is the period of time during which it is best to initiate programmes and policies aimed at capitalizing on the large size of the working-age population compared to the retired, and on the decrease in the 0-15-year old population (Table 2). The 'window of opportunity' therefore allows for capital investment in health and social services that may be beneficial for the growing older population.

Given the demographic issues described, maintaining good health and reducing chronic disease is critical. There is increasing evidence of the importance of prevention throughout the life course (23–25). Prevention has traditionally been focussed on the younger age groups but this needs to change and activities targeting older persons such as cholesterol reduction, and the provision of aspirin to prevent strokes, need to be included in routine care of older persons and in prevention programmes (26–28). Health promotion and improving health literacy for older persons is critical. Studies have shown that older persons need different messages and modes of communicating such messages. Such activities would be in support of existing programmes.

Disease prevention, including health promotion and health literacy activities may ideally be offered through primary healthcare (PHC). Access to PHC, coupled with the adoption of healthy living practices throughout the life course, is critical for older persons. The 'age-friendly' approach introduced by the World Health Organization (WHO), which moves beyond acute episodic care particularly of chronic disease to continuous chronic disease management and screening for geriatric conditions, provides a good starting point (8). Jamaica has the PHC base to initiate the age-friendly approach; however, a proactive rather than reactive approach to healthcare is what is needed (19).

Training of health and social work professionals in the peculiarities and specifics of ageing and older persons is also widely needed. The ageing process should be included in curricula, training and continuing education programme of these professionals. Positive attitudes to ageing and older persons are important tenets that must be embedded into these curricula.

Health of the older years begins at birth and is the product of the life leading up to age 60 years. Ageing needs to be added to family life education programmes so that persons are informed at an early age about ageing. Sexual health is not just about family relationships and reproductive health, it is also about navigating menopause and issues associated with mid and later life.

CONCLUSION

A continuum of programmes is needed to promote healthy ageing and to provide relevant care as persons age, thus maximizing function. The foundation of such programmes must be clinical services ranging from primary to tertiary. It needs to be supported by health promotion and preventive services to promote healthy lifestyle behaviours. As a population ages, as is happening in the Jamaican population, medical services to diagnose and manage acute and chronic conditions such as cognitive impairment and other mental health issues are vital and must include family support initiatives.

Health services will need several adaptations to cope with an ageing population. It is critical that these health services be delivered by health professionals trained in gerontology and geriatrics. Serious discussions on strengthening and focussing on 'age-friendly' PHC, financing options, public private partnerships and community services are needed. Any continuum of care needs to be supported by social and economic programmes developed and implemented during the 'window of opportunity'.

Programmes targeting only those already age 60 years and over will not be adequate. Adults of all ages need to be educated about ageing and the steps needed to promote good health in the later years. Additional health services and care will not be enough, they need to be supported by social services targeting poverty reduction and improving the social determinants of health specifically for older persons. As such, pension issues and social safety nets are important considerations. Research is also needed about models of effective acceptable home care. An integrated approach which incorporates ageing concepts into local and national policies and programmes is seen as the best approach. Mainstreaming ageing into the development approach was identified at the last "Summit on Ageing" as the only way to achieve success (29). Jamaica, like all developing countries, needs to shift the current approach of 'providing care' for older persons, to empowering older persons to provide for themselves and to adopt lifestyle practices to reduce and minimize chronic diseases and accompanying loss of function and independence.

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