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**POPULATION AGEING IN THE CARIBBEAN:
LONGEVITY AND QUALITY OF LIFE**

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INTRODUCTION

In the end, it is not the years in your life that count, it's the life in your years.

Following global demographic trends, almost all countries in the Caribbean have experienced a rapid transition from a rather young population to an increasingly older population over the past decade. This so called 'demographic transition' began with continuously dropping fertility and mortality rates in France in the mid-eighteenth century and has now reached almost all developing countries, with the exception of a few.

Continuously improved health care, sanitation and nutrition result in longer life spans for many. Free primary health care in this part of the world, along with successful efforts to combat infectious diseases, malnutrition and hunger, the main causes of high mortality in young ages, have also contributed to longer life spans. Maternal and child care programmes have further played a crucial role in the reduction of death in early ages. However, fighting causes of morbidity and early death alone without looking at quality of life in later years is only half a victory. With the disappearance of the so-called 'old' and, thus, well known diseases which generally take their greatest toll early in life, new challenges have surfaced. Lifestyle related non-communicable diseases, various forms of cancer at an older age and new communicable diseases for which no remedy is yet available, such as the Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), have emerged to become a major threat to health and well-being in the Caribbean.

In addition to physical well-being, quality of life is very much dependent on the availability of a social network; a factor that becomes even more important as with older age and deteriorating health as the need for support through the informal family network increases. With globalization and changing socio-economic environments, past and present living and care-taking arrangements might no longer be efficient. Disintegration of families and informal community support systems, as a consequence of urbanization and migration, call for new approaches to cope with these changing realities. While children are left with grandparents, many oldest old can no longer rely on help traditionally provided by their grownup children and other family members. HIV/AIDS is taking its toll from the young and economically active population with the consequence that grandparents are called upon to take over family responsibilities, such as care and custody of orphans and the provision of economic security for entire households to compensate for the loss of one or more younger income providers.

Demographic ageing also implies a continuous decline in the size of that population and thus has tremendous impacts on the age composition of the population concerned. While younger generations tend to decrease, older generations are expected to grow considerably due to increased longevity particular in older age. Provided that the present trends continue, this intergenerational imbalance is expected to grow.

To respond to these rather recent, but nevertheless pressing, challenges while at the same time focusing on still common illnesses, such as infectious diseases, is critical for all governments in the Caribbean in order to build sustainable and viable livelihoods for the present and future.

Many countries in the Caribbean have already begun to recognize a need to mainstream ageing into their comprehensive, long-term development policies and programmes while others are re-examining already existing approaches to enhance the welfare and well-being of not only their elderly but also prepare the younger generations for their later life years (ECLAC/CDCC, 2004a).

The United Nations system has long recognized the need to support countries in their endeavors to cope with their increasingly older populations. In 1982, when ageing was still considered to mainly affect the developed world, the First World Assembly on Ageing was convened in Vienna under the auspices of the United Nations. Twenty years later, the international community reconvened again in Madrid to come up with the *Madrid International Plan of Action (MIPoA)*, a set of commitments to respond to the graying of their populations. Mandated by the Madrid Assembly, the Population Division of the Economic Commission for Latin America and the Caribbean/Latin American and Caribbean Demographic Centre (ECLAC/CELADE) organized in collaboration with the Government of Chile, the *Regional Intergovernmental Conference on Ageing: Towards a Regional Strategy for the Implementation in Latin America and the Caribbean of the Madrid International Plan of Action on Ageing* in November 2003. Coming out of this conference is a *Regional Strategy for the Implementation in Latin America and the Caribbean of the Madrid International Plan of Action on Ageing*, a regional framework to be used as guideline by individual countries in their efforts to translate the Madrid Plan of Action into national policies and programmes. Pursuant to the Madrid Programme of Action and center to the Santiago Declaration is the life-cycle approach and a long-term vision of understanding ageing as a process which spans an individual's entire life (MIPoA, p.9). The central role of the individual and his personal responsibility for active ageing is recognized, while governments are called upon to provide a conducive socio-economic framework to allow for ageing in grace and dignity.

The *Caribbean Symposium on Population Ageing*, the first such event at the subregional level held in Port of Spain in November 2004, provided Caribbean governments, civil society and academia with a unique opportunity to give an overview of existing policies and programmes and to learn about academic research on ageing in the region. The meeting was a timely, since Caribbean countries have been experiencing and will continue to see absolute and relative increases in the elderly population over the years to come. The main purpose of the meeting was to facilitate efforts undertaken by governments and other critical stakeholders to translate frameworks on ageing, developed and adopted at global and regional conferences at the national level into policies and programmes¹.

The present report is divided into an introduction, three sections and a summary of the main findings along with recommendations for further action. The first section provides an overview of United Nations global initiatives on population ageing. The second chapter presents a brief analysis of the major socio-economic trends in the region, providing insight into the possibilities and limitations for governments in the Caribbean to allocate resources to social policies and programmes for the elderly. Health and well-being of the elderly will be addressed in the following chapter. The first part is devoted to major health hazards threatening major

¹ For more information on the Caribbean Symposium on Ageing Please refer to www.eclac.cl/portofspain/.

achievements in quality of life of the older generation. The chapter continues with a discussion of life expectancy and healthy life expectancy before briefly elaborating the issue of abuse of the elderly and violence against older people. Ageing does not only impact on those who grow old and live longer, but it also has tremendous consequences for present and future generations to come. In order to assess the impact of these demographic changes on intergenerational relationships, the fourth chapter looks at two demographic concepts, the potential support ratio and the parent support ratio. This part also discusses the impact of migration on intergenerational relationships and discusses gender specific aspects of the same. The final section summarizes the major findings of the study and provides a set of conclusions and recommendations for interested governments, civil society and academia.

On a general note, not much is known of the lives of men and women over age 60 in the Caribbean. Due to the lack of consistent and coherent population household survey data, the United Nations Population Division estimates and projections are being used (United Nations, 2002) to discuss demographic indicators, while the rather limited information on living arrangements and health conditions from recent national population censuses will be used to assess the health status along with living conditions of the third generation in the Caribbean. Even less is known on violence against and abuse of this particular age group. Therefore the discussion of this topic has to be generic with the hope that further research will soon be able to shed more light on this area.

I. UNITED NATIONS GLOBAL INITIATIVES ON POPULATION AGEING

A brief overview is presented of the main global initiatives undertaken by the United Nations system to assist governments and other stakeholders in identifying the needs of ageing populations and to formulate adequate responses to the challenges laying ahead.

1. World Assembly on Ageing

Already more than 20 years ago with the *First World Assembly on Ageing*, held in Vienna in 1982, world leaders recognized the challenges this ‘silent revolution’ had begun to pose on many societies in the developed world. Ten years later in 1991, the General Assembly adopted a set of principles – independence, participation, care, self-fulfilment and dignity - that governments were encouraged to take into account when formulating national policies and programmes directed at older persons. A clear turning point in the approach to address the needs of the elderly was marked by the proclamation of the year 1999 as the ‘*International Year of Older Persons*’, with a conscious move away from considering elderly as an object of public policies towards recognizing this age-group as equal subjects of their own development and participants in all spheres of social life. The *Second World Assembly on Ageing* convened in Madrid in 2002 is considered by many to be a milestone in the path from the goal of protecting the elderly, as reflected in the Vienna Plan of Action, towards empowerment and full participation of all age groups in all spheres of their lives. Governments recognized that empowerment of their senior citizens can only be realized if an ageing perspective is

mainstreamed into their national development agendas. Also of critical importance is the fact that for the first time issues related to elderly neglect, abuse and violence were addressed at the highest governmental level.

Two official documents were adopted in Madrid: the *Political Declaration* and the *Madrid International Plan of Action on Ageing*. While the first document outlines the commitments made by governments to respond to ageing, the second text reflects recommendations adopted in three areas of priority: (i) older persons and development; (ii) fostering health and well-being during old age; and (iii) the creation of an enabling and supportive environment².

2. Millennium Development Goals

The discussions on the various forums on population ageing have been guided by the Millennium Development Goals (MDGs), which emerged out of the Millennium Declaration of the year 2000³. To a large extent these goals include the main outcomes of the several United Nations global conferences convened in the 1990s to address social development, gender and population and seek to achieve the following objectives:

- (a) The eradication of extreme poverty and hunger;
- (b) The achievement of universal primary education;
- (c) The promotion of gender equality and the empowerment of women;
- (d) The reduction of child mortality;
- (e) Improvement in maternal health;
- (f) Combating HIV/AIDS, malaria and other diseases;
- (g) Ensuring environmental sustainability; and
- (h) The development of a global partnership for development.

In addition to the eight goals mentioned, there are 18 corresponding targets and some 50 indicators designed to measure progress towards the achievement of the various goals during the period 1990-2015⁴. However, while the MDG agenda per se does not specifically address the needs of elderly persons in its eight development goals, it has been clearly recognized that addressing living conditions of old adults is crucial to effectively and fundamentally reduce poverty and to accelerate progress towards achieving the MDGs. The role of the elderly not only as an additional burden on the household they live in, but as caregivers and financial contributors

² More information as well as access to background documents can be found on the following web-sites: <http://www.un.org/ageing>, <http://www.madrid2002-envejecimiento.org>

³ More information on the Millennium Development Goals can be found on the following web-site: www.un.org/millenniumdevelopmentgoals.

⁴ A complete listing of the goals together with the corresponding targets and indicators are set out in the Annex 1.

in many instances considerably enhances living conditions of all members of a household and/or a family. Given the fact that this region in particular is experiencing a rapid demographic transition, there is a clear need for incorporating ageing issues into any national MDG development agenda if the goals set are to be met in due time.

3. The International Conference on Population and Development (ICPD)

The Cairo Programme of Action (United Nations, 1994) recognizes the fundamental changes in the age structure of the populations of most societies and the challenges to promote quality of life by enhancing and maintaining self-reliance of elderly people through adequate support systems. It further points to the particular situation of women in both of their roles as the majority of the elderly as well as care-takers of other dependants, such as children, grandchildren and elderly parents and other family members in need of support.

In the framework of the Caribbean-wide review and appraisal of the implementation of the Cairo Programme of Action 10 years after its adoption conducted in 2003, the responses to the questions on the situation of the elderly clearly showed that population ageing has emerged as one of the critical areas of concern for Caribbean countries (ECLAC/CDCC, 2003a). This was particularly expressed in the declaration adopted at the *Caribbean Subregional Meeting to Assess the Implementation of the Programme of Action of the ICPD 10 years after its adoption*.

II. THE SOCIO-ECONOMIC CONTEXT

Population ageing is a global phenomenon, but the specific economic, environmental and social vulnerabilities characterizing Caribbean Small Islands Developing States (SIDS) convert these demographic transformations into a major challenge for this region.

1. Economic trends in the Caribbean

Caribbean economies are characterized by small domestic markets, insularity and remoteness and the dependence on a narrow range of goods and services produced. The recent globalization process poses significant challenges to small developing economies, which are already dealing with a number of issues in their pursuit of sustainable development (ECLAC/CDCC, 2002, 2004(b)).

Performance in terms of economic growth rates (measured in GDP per capita) has varied considerably over the past decade, with the average growth rates declining in eight of the 13 countries with data available⁵. The decline was particularly evident in the countries of the Organisation of Eastern Caribbean States (OECS) (a relative success story of the 1980s), with only Dominica managing to achieve a higher growth rate in the 1990s. Among the other OECS

⁵ The countries with data available are Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

countries, growth was down sharply in Antigua and Barbuda, Saint Lucia, St Kitts and Nevis and St Vincent and the Grenadines.

The growth performance of the larger economies was mixed. Guyana and Trinidad and Tobago and, to a lesser extent, Barbados recorded an important upturn in growth. On the other hand, growth slowed in Jamaica and, even more so, in Belize. For the entire region⁶, GDP grew by 2.4 in 2003 and is expected to increase at 3.5 for 2004.

In general terms, during the 1990s unemployment rates remained high, although they did fall slightly, from an average of 15% to 12%. On the sectoral level, the effects of globalization have shifted employment opportunities away from the agricultural and manufacturing sector towards the services industry. There, the tourism industry has been a considerable contributor to employment and growth. Particularly affected by unemployment are women and youth. Contrary to the situation in many other developing regions, unemployment is found to be generally higher in urban rather than in rural areas and underemployment is substantial in rural areas, as a consequence of the highly seasonal nature of the jobs available. For the years 2002/2003, the rate of unemployment increased slightly to reach an average of 15%. The female rate of unemployment, which is twice that of the male unemployment rate (21% and 11%, respectively) represents 61% of the unemployed labor force⁷.

Poverty in the Caribbean has been predominantly a rural phenomenon, however, recently there have been rising levels of urban poverty. In 1996 the World Bank (World Bank, 1996) estimated 38% of the total population (or 25% including Haiti) in the Caribbean or more than seven million people to be poor. This ranged from 65% in Haiti to a low of 5% in the case of the Bahamas. More recently country poverty assessments report an average of 30% of the population living below the poverty line (CDB, 2002)⁸, with the highest percentage of the population living under the poverty line in Guyana and Grenada and the lowest poverty levels in Barbados and Jamaica. Income distribution appears to be quite uneven, particularly given the relatively high per capita income in the Caribbean. The average Gini coefficient for those countries with data available⁹ is approximately 46, with the most uneven distribution found in St. Vincent and the Grenadines, Belize and Saint Lucia and a more equal distribution in the case of Anguilla, Dominica and Jamaica (CDB, 2002; UNDP, 2002).

Seeking lucrative jobs abroad to advance one's life is not a new phenomenon in the Caribbean. Intra-regional labour flows have been growing within the last decade, with migrant

⁶ In addition to the countries listed above (see footnote 5) this also includes also Anguilla, Aruba, the Bahamas, British Virgin Islands, Montserrat and excludes Haiti.

⁷ Employment and unemployment data were not available for the aggregate level for the Economic Survey 2003-2004 (ECLAC/CDCC, 2004b).

⁸ More recent data are available for Barbados (1997, 13.9%), Grenada (1999, 32.1%), Guyana (1999, 35.0%), Jamaica (2001, 16.8%) Nevis (2000, 32.0%), St. Kitts (2000, 30.5%).

⁹ Income distribution data for the Caribbean are derived from country poverty assessment (CPA) studies conducted by the CDB. The countries with income distribution data available are Anguilla (31/2002), Barbados (39/1997), Belize (51/1996), British Virgin Islands (0.23/2002), Dominica (0.35/2002), Grenada (45/1999), the Dominican Republic (47.4/1998), Guyana (40.2/1993), Jamaica (37.9/2001), St. Lucia (42.6/ 1995), St. Kitts (40/2000), Nevis (37/2000), St. Vincent and the Grenadines (56/1995), Trinidad and Tobago (40.3/1993).

labour tending to flow from lower-income to higher-income countries (for example, from Haiti to the Bahamas and the Dominican Republic and from Guyana to Trinidad and Tobago). Migrant workers within the Caribbean island archipelago are mainly unskilled agricultural workers or workers in construction and service industries. Extraregional migration flows have been motivated by other considerations and comprise a larger share of skilled workers, such as teachers, nurses and IT specialists, who move to North America and Europe. These flows are determined by push factors in many Caribbean countries, such as economic decline, high unemployment, political instability and increasing crime levels, and by pull factors in developed countries, particularly increased demand for skilled labour, better working conditions along with higher income and, quite often, the hope of a better future for oneself and the family. A major effect of labour migration has been the growing role of remittances. These flows have been significant in Haiti, Jamaica and the OECS countries, with the exception of Antigua and Barbuda. Remittances have grown in both absolute and relative terms. By 1999, such flows represented 17% of Haiti's GDP and 11.7% of Jamaica's. Remittances have also been significant in Grenada and in St Kitts and Nevis. Although remittances tend to be used largely for consumption purposes, there is evidence that they are also being used to finance housing and small businesses (ECLAC, 2000).

During the 1990s many Caribbean economies experienced a shift in the sectoral composition of output from agriculture and mining to the service sector, while the manufacturing sector remained stagnant. In terms of weighted averages, agriculture accounted for 13.5% of output in 1990 and 9.5% in 1999 (excluding Guyana).¹⁰ For the same years, manufactures represented 12.7% and 11.6%. The service sector increased its contribution to output from 39.1% to 46.6%.

In 1989, member States of the Caribbean Community (CARICOM) agreed to establish the CARIOM Single Market and Economy (CSME) to achieve a much broader and deeper integration than had been possible under the existing treaty. Its objectives included the free movement of goods, services, capital and persons; more intensive coordination of macroeconomic policies and economic relations and the harmonization of laws governing trade and other economic activities within the common market area. The creation of the CSME is also meant to enhance the bargaining position of CARICOM countries in international negotiations such as those at the level of the World Trade Organization (WTO) and the future Free Trade Area of the Americas (FTAA). However, progress towards regional integration has been slow and incomplete and CARICOM remains a fragile regional trade arrangement.

At the national level, policies have been undertaken to open economies to trade and in the context of economic restructuring, vast privatization programmes have been launched in Jamaica, Guyana and Trinidad and Tobago to decrease the role of government in the production of goods and services.

¹⁰ The data on agriculture exclude Guyana. This country experienced a 300% increase in sugar cane production from 1990 to 2000, which distorts the average for the region.

2. Social trends and their evolution: poverty, age and gender

Caribbean countries generally score relatively high on most of the human development indicators commonly used to assess progress made in various dimensions of development. According to the ranking of the Human Development Index (HDI) (UNDP, 2004) over the last 10 years, five countries in the Caribbean, Barbados, the Bahamas, St Kitts and Nevis, Trinidad and Tobago and Antigua and Barbuda have been in the group of those countries considered to be relatively advanced in their human development. All other countries, with the exception of Haiti, have reached levels of 'medium human development'. While, according to this indicator, some countries seem to have slightly improved their overall conditions¹¹, others have experienced slight fall-backs¹² over the past decade.

Despite the impressive success in improving overall living conditions in many Caribbean countries, poverty still persists throughout the region. Factors contributing to the persistence of poverty are low economic growth, macroeconomic shocks and inappropriate policy responses, deficiencies in the labour market and a deterioration in the overall quality in social services delivered. Changes in the family structure, growing violence and crime and a drop in the real value of social assistance benefits have further enhanced the exclusion of considerable segments of the population from social and economic development. The poor are heterogeneous and several common subgroups have emerged, which are, among others, the elderly, women, young males, unemployed youth and unskilled workers. In spite of the fact that the relationship between gender and poverty is not as straightforward as in many other parts of the world, there are several issues related to women which are linked to poverty. These are discrimination against women in the labour market, higher unemployment rates for women than for men, the increasing violence against women and the increasing incidence of teenage pregnancies, with the consequence that young women quite often lose their opportunity to complete formal education and training.

In response to major external and internal shocks to their economic systems, several governments in the Caribbean in the late 1970s and early 1980s adopted structural adjustment programmes to change the course of their economies in the direction of faster growth and development. In spite of the shifts towards privatization of substantial public sectors and considerable decreases in overall public spending, governments in the Caribbean have remained committed to continue to provide basic social services for all. This is evidenced by the fact that public expenditures on health and education (as % of GNP) have remained constant over the last decade in almost all countries observed¹³. Though, with overall decreasing national outputs, resources allocated to the social sector have declined considerably in absolute terms. However, even under tight national budgets, some form of social safety net is provided by every country in the subregion.

¹¹ These are: St Kitts and Nevis, Antigua and Barbuda, Cuba, Belize, Dominica, Saint Lucia, Suriname, the Dominican Republic and Haiti.

¹² These are: Barbados, the Bahamas, Trinidad and Tobago, Grenada, Jamaica, St. Vincent and the Grenadines.

¹³ Public expenditures as % of GNP on health (1990 and 2002) and education (1995 and 2002). Figures taken from various UNDP Human Development Reports.

Social security schemes in the Caribbean are rather young, since, particularly in the case of the English-speaking Caribbean, most have only been established after independence in the late 1960s and early 1970s. The majority of these schemes are government funded, with some exceptions, particularly in the OECS countries, where contributions are to be made by employer and employee. The social safety net systems in the Caribbean countries typically combine three elements: (i) social insurance concerned with the provision of security and the spreading of income over a life cycle, (ii) means-tested social assistance designed to alleviate poverty, and (iii) categorical transfers directed at redistribution between specific groups. The benefits are granted as in-kind transfers, cash payments or the provision of services. On the whole, the existing social security schemes offer inadequate coverage and level of benefits. So far no systematic and consolidated reform programmes have been adopted to overhaul the social security schemes in the Caribbean¹⁴. The establishment of non-contributory pension schemes in several countries in the region, to provide benefits for those elderly who are not covered by traditional contributory systems, can be seen as an effort to enhance the outreach of social security coverage.

Over the past decades, Caribbean countries have generally experienced a comparably good health status and have managed to eliminate many of the basic health problems that are normally associated with the developing world. This is substantiated by achievements measured through various health indicators. Over the past years these considerably high health standards appear to have been faltering in several countries, with growing complaints about the deterioration in the quality of the services provided, coupled with the growing inability of health administrations to respond effectively to the changing needs of users. While all countries in the subregion are in the process of designing and implementing appropriate health sector reforms, the adoption of a management culture which places emphasis on improving the quality of services, the establishment of more effective budgeting and planning mechanisms has only begun. Better integration of primary, secondary and tertiary levels of care as well as more effective enforcement mechanisms for health legislation and regulation need to be put in place. The emigration of health professionals, particularly nurses and midwives, continues to drain the public health sector (ECLAC 2003b) with a rather negative impact on the timeliness, quantity and quality of the services delivered. Apart from the impact of the brain-drain, the major constraint to the full implementation of the health sector reform programmes have been the decreasing financial resources available.

Since absolute public expenditures on social services have been decreasing over the last decade, the quality of the services rendered has suffered considerably. Consequently the wealthier are increasingly shifting to private service providers, particularly in the field of education and health, an option not available to the more destitute and poorer segments of the society. Without an increase in the quantity and quality of public health services, the gap between those who can afford private health care and those who continue to depend on the deteriorating public sector service will grow.

¹⁴ A more detailed overview of social security and pension schemes in the Caribbean is provided in ECLAC/CDCC 2004a.

III. HEALTH AND WELL-BEING OF THE ELDERLY

1. Ageing and health

‘Health is a priority goal in its own right, as well as a central input into economic development and poverty reduction’. This is the core message conveyed by the first report of the World Health Organization Commission on Macroeconomics and Health (WHO, 2001). Individual well-being as the basis for quality ageing is also reflected in a rather pro-active approach towards ageing adopted by the World Health Organization (WHO, 2002a) on the occasion of the Second World Assembly on Ageing. ‘Active ageing’ is defined as ‘the process of optimizing opportunities for health, participation and security to enhance quality of life as people age’ (WHO, 2002a, p.12). This concept is reflected throughout the Programme of Action coming out of the Madrid Summit. However, still rather common is the perception of ageing as a process that starts later in life and is assumed to be related to a certain chronological age and/or specific life-course event, such as retirement or eligibility for age-related discounts or welfare benefits. In addition many understand the beginning of ageing as the onset of age-related and irremediable physical and/or mental deficiencies which are expected to become more severe with increasing age. This general tendency to relate ageing to becoming increasingly senile and frail has been challenged by most recent academic research. People at very advanced ages are quite often in better shape than the younger old in their late 60s or early 70s and a fair number of centenarians have been found to be active and enjoying their late life years (Perls, 2004).

Regardless of this rather common perception of ageing as an ‘event’ that affects humans generally later in life, it is a well established fact that ageing is a continuous process that begins at birth and ends with death, which gradually and irreversibly leads to the deterioration of our bodies, systems and mind. However, it is not a template, a ‘one size fits all process’, but takes distinctive paces at various stages in life for men and women depending on their individual health status, economic conditions and self-perception. While some people age faster, others are fit and healthy until their late 90s or even beyond. Consequently the question arises as to how much is genetically predestined and to what extent this process can be influenced to postpone or avoid altogether its negative side effects. So far there is evidence that a healthy lifestyle, a balanced diet and favorable genetic dispositions allow many to not only add numbers of years, but to also add quality to the extra years gained. To become less dependent on one’s lifestyle and individual genetic predispositions, the search for fast remedies and wonder-drugs against ageing and its accompanying ailments has begun. In an effort to try to understand why over the years, our bodies and minds degrade, modern science has provided an array of answers to these questions and quite a few have come up with the anti-ageing wonder-drugs to stop or at least to slow down this process. But, a group of the most renowned scientists who study ageing have issued a warning to the public that no anti-ageing therapy and/or remedy on the market today has been proven effective¹⁵.

¹⁵ The full position statement on ageing and further extensive reference can be found at: www.sciam.com/agingstatement.cfm.

2. Major health hazards in older ages

a) *Lifestyle related non-communicable diseases*

The WHO in its World Health Report 2003 (WHO, 2003) states that population ageing and changes in the distribution of risk factors have accelerated the epidemic of non-communicable diseases in many developing countries. While non-communicable and lifestyle related diseases used to be the plight of the developed world, they are increasingly becoming major health threats for people in the less developed countries. However, evidence from developed countries shows that the prevalence of chronic diseases and levels of disability in older people can be reduced with appropriate health promotion and strategies to prevent non-communicable diseases. Apart from enhancing quality of life through strengthening public health systems, engaging in healthy life style campaigns targeted at all generations and improving the response to the health needs of a graying population also makes sense in economic terms. Long-term care for patients with chronic diseases and other non-curable ailments is rather costly as are the direct and indirect economic shortfalls due to sick days and the loss of income of family members who have to stay home to care for elderly family members. Further, treatment of long-term chronic diseases might take away resources from other public health priorities, such as infant and maternal health and the fight against the HIV/AIDS pandemic with a negative impact on the socio-economic development of the region.

According to information published by the WHO, the leading causes of morbidity and premature death for people over age 60 worldwide are now chronic cardio-vascular diseases as presented in the table below (Table 2)¹⁶.

According to the WHO (WHO, 2003, p.87), these lifestyle related illnesses are mainly caused by five risk factors: elevated blood pressure, tobacco use, alcohol consumption, cholesterol, and obesity and overweight. The inflow of processed foods and the promotion of unhealthy fast food in many instances, diets poor in fiber, fresh fruits and vegetables and high in saturated fat, sugar and salt, along with increasingly sedentary lifestyles are also contributing to the further advancement of these illnesses in the less developed countries. Health and nutrition data for the Caribbean (see point d) below) indicate that the Caribbean seems to be no exception to this trend. One critical way out of this dilemma and to avoid the increased occurrence of such ailments is prevention through education early on in life to focus on quality life styles, including healthy diets and exercise.

¹⁶ The Disability Adjusted Life Year (DALY) is the only quantitative indicator to assess the burden of disease that reflects the total amount of healthy life lost, to all causes, whether from premature mortality or from some degree of disability during a period of time.

Table 2
Leading causes of morbidity and mortality and disease burden (DAILYs)
among adults, worldwide, 2002

Mortality - adults aged 60+		
Rank	Cause	Deaths (000)
1	Ischemic heart disease	5825
2	Cerebrovascular disease	4689
3	Chronic obstructive pulmonary disease	2399
4	Lower respiratory infections	1396
5	Trachea, bronchus, lung cancers	928
6	Diabetes mellitus	754
7	Hypertensive heart disease	735
8	Stomach cancer	605
9	Tuberculosis	495
10	Colon and rectum cancers	477
Disease burden - adults aged 60+		
Rank	Cause	DALYs (000)
1	Ischemic heart disease	31 481
2	Cerebrovascular disease	29 595
3	Chronic obstructive pulmonary disease	14 380
4	Alzheimer ad other dementias	8 569
5	Cataracts	7 384
6	Lower respiratory infections	6 597
7	Hearing loss, adult onset	6 548
8	Trachea, bronchus, lung cancers	5 952
9	Diabetes mellitus	5 882
10	Vision disorders, age-related and other	4 766

Source: WHO, 2003, p.17

At this point it is also important to mention that even in times where the availability of food seems to be abundant and obesity and overweight are becoming some of the major threats to health and quality of life in the Caribbean, particularly in rural areas, malnutrition and at times even under-nutrition are still prevalent. In addition elderly living in remote rural areas and the growing number of older men living alone quite often do not have access to balanced diets sufficient in calories and nutrients.

Box 1: Diabetes

Diabetes is a disease in which the body does not produce, or cannot properly use, insulin, an essential hormone needed to convert carbohydrates and other foods into the energy needed for daily life. After 20 years of diabetes without strict control of blood glucose levels, there is a 90 percent chance of developing eye disease. Other complications of diabetes include heart diseases, blindness, nerve and kidney damage and the damage of lower limbs, which in certain severe cases will require limb amputation.

Signs and Symptoms

Signs and Symptoms are: Frequent urination, abnormal thirst, excessive appetite accompanied by weight loss, fatigue, recurrent vaginal yeast infections and visual changes.

Treatment

People with Type I (insulin-dependent) diabetes, which generally occurs under age 30, must take insulin injections daily.

Type II (usually non-insulin-dependent) diabetes is 10 times more common and usually occurs in people over 40, particularly those who are overweight and inactive.

The cornerstone of treatment is diet modification. If diet alone fails to normalize blood glucose (sugar) levels, patients take a prescribed oral medication that stimulates insulin secretion or improves the body's ability to use insulin. Some people with Type II diabetes use a combination of insulin and oral medication.

In addition to diet and medication, exercise and stress management are important components of treatment for both types of diabetes. Environmental and lifestyle factors, as well as a family history of diabetes, seem to affect the development and control of the disease.

b) Cancer

Apart from lifestyle-related illnesses, several types of cancer are life-threatening in older ages if not discovered early and adequately treated. Various types of cancers could be easily detected at an early stage if screening programmes were in place. While certain cancer treatments are quite cost intensive and, at times, not very successful, as for example is the case of breast cancer, screening programmes are generally more cost effective. For example, studies show that cervical cancer screening once every three years could result in a 91% reduction in mortality and even screening women every 10 years resulted in a 64% decrease in mortality (Young, 1994). This is also due to the fact that, in comparison to other types of cancer treatments, cervical cancer treatment has comparable high succession rates. In order to enhance the likelihood of detecting cancers earlier, to reduce the costs for treatment and care and to consequently increase the chances for full recovery, feasible and affordable screening programmes need to be implemented. Such programmes should especially target post-menopausal women who suffer a higher risk of such cancers than younger women.

c) Mental health of the elderly

Data on the prevalence of mental illnesses in developing countries are in general rather difficult to obtain. Due to the lack of a mental health infrastructure, trained health personnel and stigmatization of mental illnesses, many cases are never brought to the attention of a professional health practitioner. Data provided by the WHO (WHO, 2003) point at considerable gender disparities in the prevalence of such disorders. Women tend to have a higher prevalence of

dementias, and among those, depressive disorders and Alzheimer's disease. Most health systems in developing countries have little to offer to deal with this 'stepchild' in health care, thus tranquilizers, sleeping pills or anti-depressants are the main 'remedies' being prescribed. Gender differences are smaller for psychotic illnesses, such as schizophrenia and organic conditions such as senile dementia. The gender gap is reversed in personality disorders such as psychopathic syndromes and drug and alcohol abuse. The question is: "Why are women more prone than men to become psychiatric patients?" Two answers are possible: First, women experience stress and hardship to a greater extent than men or are more often literally 'driven mad' by oppressive social structures. Second, professionals are more likely to label women than men as mentally ill due to the still widely held stereotype of the female neurotic. Perhaps the answer is found in blending the two ideas and the recognition that women's life experience makes them more vulnerable to mental distress (Young, 1994).

d) *Empirical evidence on health hazards and disabilities in the Caribbean*

As already pointed out, very little is empirically known on the health and quality of life of the people in the Caribbean and even less so of specific subgroups, such as women or the elderly. However, the 2000 census round collected information on disabilities which can be used as indirect indicators for a disease that might have caused it and allow some light to be shed on the physical conditions of the elderly in the Caribbean. For example, blindness can be seen as a likely consequence of diabetes (see Boxes 1 and 2). Census data are available for the Bahamas, Barbados, Belize and Saint Lucia. Since census data provide information on self-reported disability which was not verified by a medical exam, it may in many instances not reflect the true extent of a given handicap or disease. Whilst accurate data on these issues would be desirable, individual quality of life and the personal perception of the same is very much dependent on the awareness of functional disabilities and their impact on an individual's capacity to perform daily chores. Consequently, such self-reported data can, if used with caution, provide a reasonable insight into the health conditions of the population in question. However, in cases where a specific ailment does not or only to a rather limited extent affect a person's quality of life, chances are that such disorders are not captured in a quantitative assessment and therefore such diseases and handicaps will be underreported.

Box 2: Major vision impediments in old age

Vision impairments are a major source of disability among older persons in the Caribbean. Among elderly women, visual impairment is much more prevalent than in men. Trachoma along with diabetes related visual impairments, such as cataract and glaucoma are the main causes of blindness for many women. While trachoma and glaucoma require more costly interventions, cataract extraction surgery is highly effective and rather inexpensive with a great impact on the quality of life of the person treated.

Trachoma: Trachoma is an easily spread infection of the eye. Repeated occurrences scar the upper eyelid, eventually turning it inward. The eyelashes then scratch the cornea, leading to blindness. It is a gradual yet painful condition affecting the poorest of the poor.

Cataract: is a clouding of the eye's lens allowing less light to pass through.

Glaucoma: Glaucoma is a group of eye diseases that gradually steals sight without warning and often without symptoms. Vision loss is caused by damage to the optic nerve. This nerve acts like an electric cable with over a million wires and is responsible for carrying the images we see to the brain.

Both cataracts and glaucoma can be a natural part of the aging process. Many people over 60 may have both. Otherwise, the two are not associated. With the exception of glaucoma due to secondary causes such as trauma or steroids, glaucoma does not cause cataracts and cataracts do not cause glaucoma. Both ailments are serious conditions that lead to lose vision. However, loss of vision due to cataracts can be reversed with surgery. Loss of vision from glaucoma is, as yet, irreversible.

(Source: www.visionconnection.org, accessed on October 27, 2004)

Throughout all data sets available women are found to report more disabilities than men which leads to the conclusion that women seem to be more affected by chronic and lifestyle-related ailments than men. But it is also possible that women are more ready and willing than men to report any such handicaps. Concerning the need for aids to maintain mobility, census data for Barbados report that the older elderly (80 years and older) seem to be more in need of aids to cope with physical disabilities than the younger elderly (60 to 79 years). Most probably due to the easy availability and its low cost, most people of older age report using a cane and only to a much lesser extent seem to be using a walker or a wheelchair. In the case of Belize, about one third of the elderly report suffering from a disability and experiencing difficulties with sight, mobility and body movement. Less disability in older age groups is found in the Bahamas (22%) and half of those who report suffering from a physical disability (sight, mobility) in this country say that these ailments are impacting on their abilities to carry out major chores. Based on the assumption that trends observed elsewhere are also increasingly becoming reality in the Caribbean, it can be assumed that these handicaps, especially deteriorating vision and immobility, can be attributed to lifestyle-related diseases, such as diabetes II.

Census data do not provide much information on mental disorders, simply due to the fact that those suffering from such diseases in many cases are not able to participate in the survey. Also family members or other caretakers may not be able or willing to provide this information because the ailment has not been diagnosed or to avoid the stigma related to it. As a result mental disorders are to a large extent underreported in any type of quantitative assessment, such as household surveys or population census. Even with good will to provide the requested information on mental maladies, physical disorders are easier to recognize and to report while mental disorders are often not recognized as a disease but understood 'simply' as a natural

ageing artifact or even worse, at times understood as a bad character trait of an individual, and consequently not reported as a disease. Manifestations of certain mental diseases such as Alzheimer's and Parkinson's disease seem to be increasingly observable in the Caribbean, but so far information is lacking on their spread, the forms of treatment and the living-conditions of those affected.

Apart from census data on physical handicaps, some information is available on overweight and obesity as well as on the spread of cardio-vascular diseases from research conducted by the Caribbean Food and Nutrition Institute (CFNI) and others (Alleyne, 2003). In line with global trends, cardiovascular diseases have now also become the leading causes of premature deaths for women aged 65 and over in the larger Latin America and Caribbean region. It is further suggested that the changes in diet and increasingly sedentary lifestyles are having severe effects on the health status of Caribbean people. Particularly in the case of older women, poor nutrition practices plus physical inactivity have emerged as the major causes of this epidemic. Data from the CFNI show that almost 60% of Barbadian women are overweight and about 30% seem to be obese (Alleyne, G., 2003), with similar patterns for other Caribbean countries. These trends seem to confirm the conclusions derived from census data earlier in this chapter that diabetes, a major risk factor for cardiovascular diseases, has become a major cause of morbidity for women in the Caribbean.

3. Measurement of quality of life

a) *Morbidity and mortality*

Demographic data have shown that almost all over the world people are living longer lives than ever. Due to improvements in health care, sanitation and nutrition survival rates have been climbing for infants, children and women and even more so for those who have already reached older ages. The world has seen a continuous delay of mortality into old and even older ages. According to the World Health Report (WHO, 2003) 42% of adult deaths occur after 60 years of age in developing countries, compared with 78% in the developed world. Life expectancy at age 60 and even at age 80 has almost reached developed country levels (United Nations, 2002)¹⁷. Today a newborn in the Caribbean can expect to live on the average 67 years, a remarkable gain of 15 years over the last 50 years. Even longer lives are projected with an additional seven years to be gained by the middle of this century for the population of this region¹⁸. Further the male/female divide in longevity exists worldwide, and so in the Caribbean, where it is more marked in some countries than in others. The difference between life expectancy at birth for men and women in the Caribbean is presently 5.5 years, but the gap appears to narrow with increasing age, with a difference of 2.5 years at age 60 and less than one year at age 80.

A possible explanation for these gender-specific differences in life expectancy could be the fact that women seem to be generally more health conscious than men and consequently consult more frequently with a medical professional than men. Longer lives for women are also,

¹⁷ 2000-2005: Caribbean: e60 = 20.1, e80 = 7.7; more developed countries: e60 = 20.8, e80 = 8.2.

¹⁸ A detailed analysis of the demographic developments in the Caribbean can be found in ECLAC/CDCC, 2004 (a).

as mentioned earlier, the result of the rather successful implementation of maternal and child health care strategies and programmes in many parts of the world that have definitely advanced the health and well-being of young girls and women and have contributed to the reduction of female mortality particularly over the reproductive life span. However, the majority of these programmes focus on their clients during their reproductive years (generally below age 60) and do not have the capacity to extend their services to men in general or to women beyond menopause. Only recently, particularly with the onset of the HIV/AIDS pandemic have these programmes undertaken more serious efforts to reach out to men by providing services particularly tailored to the needs of sexually active men in all age groups. While the major female health threats are related to their sexual and reproductive functions and can therefore be addressed in a more straightforward manner, the variety of health risks for men, which arise from a much wider array of circumstances are much more difficult to approach. To target health hazards such as alcohol abuse, drunken driving and heavy smoking, which are commonly related to manhood and masculinity and in many instances positively sanctioned by the respective society, is a rather difficult undertaking. What makes this challenge even more complex is the fact that the negative consequences of many such risky behaviors will only emerge later in life. Apart from the male tendency towards riskier lifestyles, women are also more likely to be more health conscious than men. For example, many more women than men are found to eat healthy diets and, if you are a vegetarian, odds are you are a woman, according to a survey conducted by the North American Vegetarian Society (Vegetarian Times, 1995).

b) *Quality of life – health adjusted life expectancy*

In response to the need to assess not only the number of years gained, but also consider the prospective quality of these additional life years, the WHO has proposed a new methodology, *health-adjusted life expectancy rates (HALE)* to estimate the number of healthy years a person can expect to live at a certain age. HALE is based on life expectancy at birth and include an adjustment for time spent in poor health¹⁹ (WHO, 2003, p.137)²⁰. Therefore HALE can be understood as a measurement to assess the extent to which future life years will be spent in reasonable health. However, it is important to emphasize that the indicator does not express any value judgment but is only a statistical tool to express quality of life in terms of healthy life years.

As discussed earlier, people in this part of the world at age 60 can expect to live another 20 years, with the highest value for Barbadian and Cuban women (22.5 years) and the lowest value for men from Haiti and Guyana (less than 16 years additional years). In terms of HALE a person at age 60 in the Caribbean can look forward to spend on the average two thirds of his/her life expectancy in rather good health.

¹⁹ WHO provides two estimates for Health-adjusted life expectancy rates, one at birth and the second at age 60. Detailed information on the concept and methodology can be found in the WHO (2003), The World Health Report 2003, Geneva, p. 135 ff.

²⁰ HALE is most easily understood as the equivalent number of years in full health that a newborn can expect to live based on current rates of ill-health and mortality. The methods used by WHO to calculate HALE are explained in more detail in WHO, World Health Report 2003, p. 137 ff.

Table 2 - Health-adjusted life expectancy 2000 - 2005

COUNTRY	MALE		FEMALE		MALE	FEMALE	MALE	FEMALE
	<i>e60</i> (1)	<i>HALE</i> <i>60</i> (2)	<i>e60</i> (3)	<i>HALE</i> <i>60</i> (4)	<i>HALE</i> <i>loss</i> (5)	<i>HALE</i> <i>loss</i> (6)	<i>HALE</i> <i>loss %</i> (7)	<i>HALE</i> <i>loss %</i> (8)
Antigua & Barbuda		11.6		13.8				
Bahamas	18.3	13.3	22.1	15.6	5	6.5	27.32	29.41
Barbados	18.5	13.1	22.5	16.6	5.4	5.9	29.19	26.22
Belize	20.1	11.5	22	13.3	8.6	8.7	42.79	39.55
Cuba	20.3	15.2	22.5	16.7	5.1	5.8	25.12	25.78
Dominican Republic	17.4	11.3	19.4	13.7	6.1	5.7	35.06	29.38
Dominica		13.8		15.3				
Grenada		11.1		12.6				
Guyana	15.7	10.2	19	12.2	5.5	6.8	35.03	35.79
Haiti	15	10.3	16.5	11.7	4.7	4.8	31.33	29.09
Jamaica	20	13	22.4	14.5	7	7.9	35.00	35.27
St. Lucia	17.8	12.5	21.3	14.4	5.3	6.9	29.78	32.39
St. Kitts and Nevis		11.9		13.5				
Suriname	16.9	10.6	19.2	12.8	6.3	6.4	37.28	33.33
St. Vincent /Grenadines		12.6		14.2				
Trinidad and Tobago	18.1	11.9	21.2	14.1	6.2	7.1	34.25	33.49

HALE loss = $e60 - e60$ HALE: how many years spent in bad health; HALE loss % = $\text{HALE loss}/e60$: percentage of $e60$ spent in ill health. These calculations for life expectancy and HALE are approximations since the data come from different sources (UNPD and WHO) and might be based on different estimation and projection procedures.

While in absolute terms of overall life expectancy as well as in health-adjusted life expectancy women seem to be doing better than men (columns 1-4, Table 2), a closer look at this table suggests a less straightforward conclusion. In spite of the fact that women generally tend to surpass men in number of life years, this is not always the case with respect to HALE after age 60 (columns 5, 6, Table 2). The gender specific difference in the absolute numbers of HALE lost points to the fact that older women seem to be spending more time with illness and disease than men. This could be simply an artifact related to the fact that women generally live longer and thus are expected to also spend in absolute terms more time in ill health than men do, if the proportion of life time spent in less favorable physical and mental condition is the same for men and women. To test this assumption, a gender-specific analysis of the data was conducted by calculating the percentage of HALE lost for both sexes (columns 7, 8, Table 2). The data reveal considerable gender differences in so far as men in some countries in the Caribbean, for example, the Bahamas, Cuba, Guyana, Jamaica, and Saint Lucia, seem to be spending a larger proportion of their later life years in better physical and mental condition than women.

Why is this so? No research to answer this question has yet been conducted in the Caribbean, however, it might well be that, as presented earlier in this paper, the negative impacts of globalization and lifestyle changes affect women's health and well-being more seriously than men. In order to better understand the underlying causes for these gender specific developments, more research is needed and close monitoring of these gender specific indicators is needed in order to address the issue accordingly.

Research in the United States and elsewhere is supporting the hypothesis that older men, particularly men in the oldest age-groups, seem to be doing better than women in terms of physical and mental health and well-being (Perls, 2004). In absolute numbers, many more women than men are still alive at age 95, but in terms of average mental and physical health, men obviously seem to be taking the lead. Scientists explain this phenomenon partly with genetic preconditions to the effect that women are less susceptible than men, or only later in their lives, to certain more lethal diseases, such as strokes and heart diseases. Women on the contrary seem to suffer more from non-fatal disabilities, such as dementia, diabetes and cardiovascular disease and handicaps. Whilst these disorders are not life threatening at early stages and more women survive to older life years, they impact negatively on their overall health conditions. The National Institute of Ageing (Perls, 2004) found that men surviving to older age without major health problems often continued to live this way without the need for special care. This research also concluded that 44% of the men surveyed over age 80 were robust and independent compared with only 28% of women of the same age group. Additional research conducted by Duke University showed that men after age 85 could expect to live a longer, healthy and active life than women. The discovery that many people older than 95 are in good shape may mean that the approach to health care and disease prevention needs to be revisited to take these gender specific aspects into consideration. While in the Caribbean governments still need to focus on the immediate need for primary health-care and socio-economic support systems to cope with the incidence of degenerative diseases and chronic disability, the growing portion of oldest old with their specific needs which do not correspond to common stereotypes requires more attention.

4. Elder abuse and violence

“Elder abuse is a violation of Human Rights and a significant cause of injury, illness, lost productivity, isolation and despair. Confronting and reducing elder abuse requires a multi-sectoral and multi-disciplinary approach” (Active Ageing, A Policy Framework, WHO 2002b).

According to the WHO (WHO, 2002b), elder abuse is defined as: ‘either an act of commission or omission, and it may be intentional or unintentional. The abuse may be of a physical nature, it may be psychological (involving emotional and verbal aggression), or it may involve financial or other material maltreatment’.

Older persons with physical and mental impairments are dependent on their caregivers, which normally are family members and close relatives. The more demanding a person becomes and the more elderly persons suffer from helplessness, misconduct and behavior changes, which are commonly the consequences of dementia and Alzheimer’s, the more vulnerable and susceptible they become to abuse and violence. Research has shown that most violence and abuse occurs in the home and is conducted by immediate care takers.

While very little (and quite often only in the form of anecdotes) is known on violence against and abuse of the elderly in the Caribbean, research in other parts of the world has shown that violence can be a result of the interplay of various factors, such as stress and depression on the side of the caregiver, the relationship between caregiver and caretaker, the nature of the illness, the type and severity of the disease and the extent to which an elderly person is dependent on a caregiver. Further risk-factors are overcrowding and economic hardship in the household (WHO, 2002).

Of critical importance is the way societies view the role of women, the erosion of close bonds between various generations of family members due to migration, changing living arrangements and the loss of traditional domestic, ritual and family roles of older people (WHO, 2002). A matter of serious concern is the consequences of various forms of abuse for elderly and in particular for older women, who might suffer more serious forms of physical abuse from spouses and other family members. The lack of pension and welfare schemes, combined with dwindling opportunities to maintain economic independence, provide a conducive environment for abuse, maltreatment and violence. Due to their physical weakness, increased dependency and vulnerability, violence, maltreatment and abuse can become a vicious circle with no escape.

A global initiative to prevent elder abuse is the ‘*Toronto Declaration on the Global Prevention of Elder Abuse*²¹’, which aims at promoting a legal framework to respond to violence against elders at the national level and calls for advocacy and education programmes for caretakers and health professionals. It further emphasizes the fact that elder abuse needs to be addressed with advocacy campaigns combating stereotypes and stigmas and taboos on the topic.

²¹ More information on the following web-sites: www.who.int/hpr/ageing www.inpea.net, www.onpea.org

IV. DEMOGRAPHIC AGEING AND INTERGENERATIONAL SUPPORT SYSTEMS

1. Support systems and living arrangements

The core theme for the United Nations International Year of Older Persons in 1999 is intergenerational solidarity lived in 'a society for all'. Even in countries with full-fledged welfare and pension schemes, intergenerational support is vital and cannot be substituted by formal arrangements provided by the government or the private sector. All over the world the majority of the elderly live in private homes, and if not with their kin under one roof, have children or older grandchildren who step in to assist, when necessary. Institutional care arrangements are in most cases only considered if around-the-clock assistance and care is needed especially later in life. With the growing number of older persons and the steady increase of chronic diseases the need for long-term health care that cannot be afforded at home is expected to grow. While part of these services can be supplied through public or private institutions, the largest burden is to be taken on by relatives and family. Most developed countries have a set of policies and programmes in place to complement, or even replace informal support systems in case of severe illness and/or impairment through public or private sector service providers. Such logistics are generally not in place in the less developed regions as is the case of the Caribbean, where this responsibility is more or less entirely taken on by the family network, quite often supported through an informal community-based support system.

Decreasing economic opportunities for the young and the old and the changing labor market structure with less job opportunities in the informal sector put additional pressure on families, and even more so on the elderly who, in many instances, need to continue to work to survive. In addition, insufficient savings on the side of the older generation and the lack of adequate pension schemes and welfare programmes make the elderly quite often vulnerable and dependent on help from kin and close family. Involuntary living arrangements such as co-residence of two or even more generations out of dire economic needs, along with rising demands on caretakers may also result in increasing tensions over scarce resources and thus at times to neglect and various forms of violence against the elderly and other dependants in the household.

In order to balance the rather frequently biased view of the elderly as a burden and a drain on the immediate family environment, research has shown that many elderly provide critical support, both in cash and kind, to sustain the household they live in. Without the helping hands of grandparents, many families would find it difficult to arrange for childcare and house-keeping while taking up formal employment. Particularly in the Caribbean, where temporary and even long-term labor migration is a well-established way of making a living, grown-up children can take the opportunity to leave their offspring in the care of grandparents while seeking greener pastures abroad.

What do we know about existing support systems and living arrangements in the Caribbean? Very little research has been conducted on this topic in the Caribbean and with the majority of the 2000 census round data not yet available, empirical evidence is limited. Research conducted in the late 1990s by Palloni (Palloni, 2003) found that the elderly in the Caribbean generally tend to live with family and/or close relatives in one household. Only an estimated 10–20% seemed to have lived alone at the time of this study. Data from the most recent population census round²² on marital status and household composition confirm global trends among people over age 60; generally more men than women are married, while a higher proportion of women in these age-groups is reported to be widowed. Consequently, older men seem to be in a better position overall to attain help and care by a spouse than older women.

2. Measurement of intergenerational support

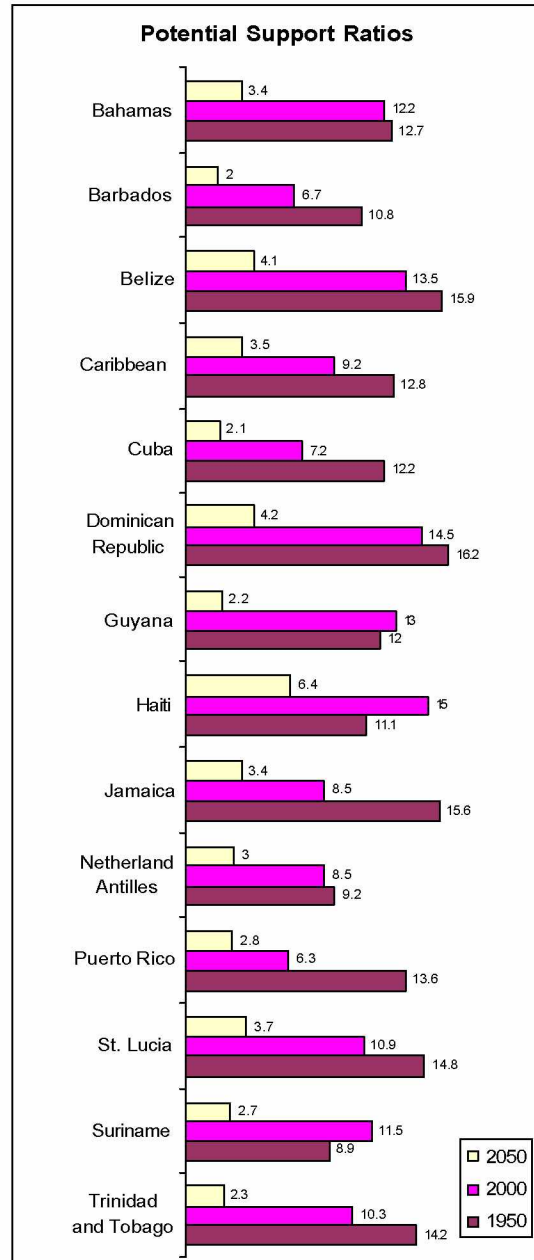
With declining fertility rates, increased longevity and high emigration rates of the working-age population, the question arises if Caribbean countries have the human and economic capacity to sustain their ageing societies. Will individual countries have sufficient manpower to afford economic security and to provide for informal and family support systems for their greying societies? In an effort to answer this question, two demographic indicators will be discussed: the *potential support ratio* and the *parent support ratio*, which both measure the statistical relation of two adjacent age groups.

²² Data available for the Bahamas, Barbados, Belize and St. Lucia.

a) *Potential support ratio*

The *potential support ratio* is defined as the number of persons aged 15 to 64 per 100 persons aged 65 or older. This ratio is used as an indicator to assess the demographic burden of the aged on the economically active generation. The higher the value, the more favourable are the ratios because fewer older persons fall on the younger age groups. With declining fertility and increasing longevity over the past decades, this ratio went down considerably in almost all Caribbean countries. According to United Nations estimates (United Nations, 2002), the countries in the Caribbean with still a rather young population and therefore at present rather favourable support ratios are Haiti, the Dominican Republic, Belize and Guyana. Comparatively high is the burden for support providers in Barbados, Cuba, Jamaica and Puerto Rico. Over the next decades this ratio will decrease to less than four younger persons to one person over age 60 for most of the region and is expected to decrease to a two to one ratio by 2050 for Barbados, Cuba, Guyana and Trinidad and Tobago (see chart 1). The only exception to these trends are Guyana, Haiti and Suriname, countries where earlier large birth cohorts are now moving into the labour force with proportionally fewer old and young dependants to support. The latter offers a unique window of opportunity to governments to invest now in health, education and job creation for the younger generations to ensure that the resulting economic gains will translate into a better life for all and provide favourable prospects for the presently younger age groups when they grow older.

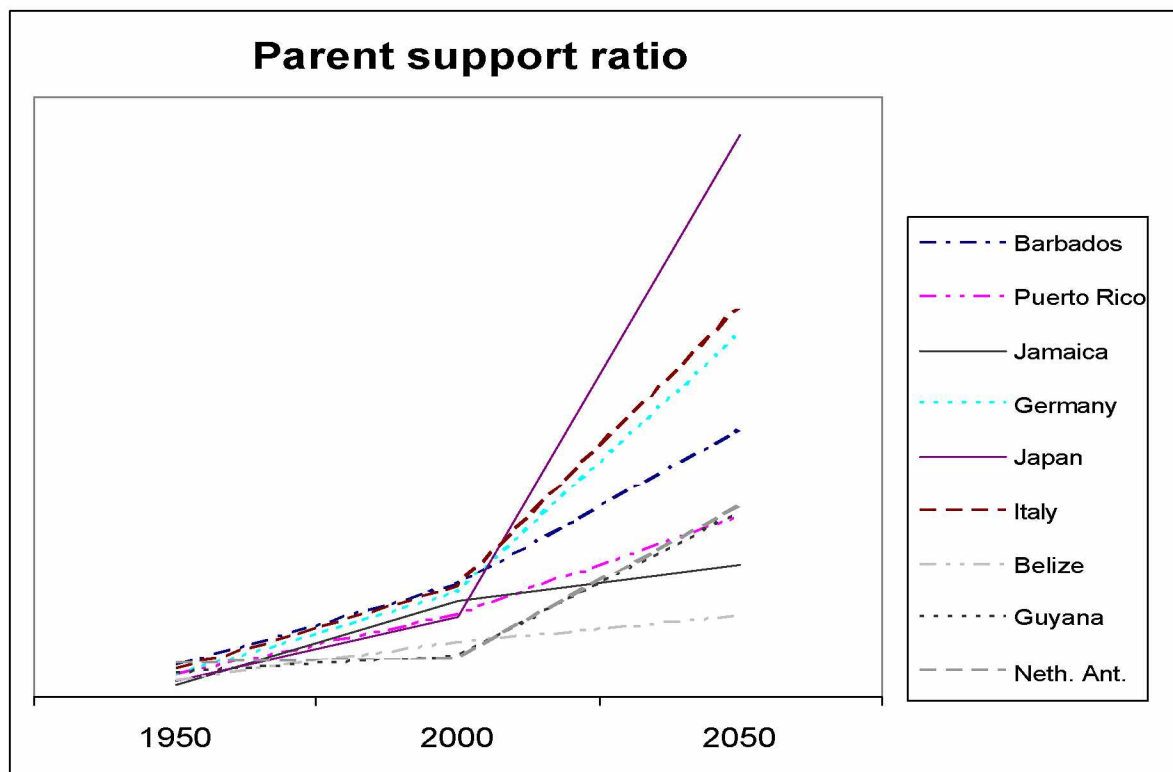
Chart 1: Potential Support Ratios



b) Parent support ratio

The *parent support ratio* is defined as the number of persons 85 years old and over per 100 persons in the age group 50-64 years. As discussed earlier, the majority of the potential caretakers are children, assumed to be on the average 20–35 years younger than their parents, therefore this age-bracket was chosen for the calculation of this indicator. With growing numbers of elderly and decreasing younger generations, the value of this indicator will raise indicating that the burden on the young will increase. To show the evolution of this indicator since 1950 and for the next 50 years, its values for a selection of developed (Germany, Italy and Japan) and developing countries from the Caribbean are compared in the following chart (Chart 2). Within the group of the Caribbean countries two sets of countries are considered: Barbados, Puerto Rico and Jamaica, where population ageing is already well on its way and Belize, Guyana and the Netherlands Antilles, countries at the onset of the demographic transition.

Chart 2: Parent Support ratio 1950 - 2050



The first interesting observation is the fact that in the mid-1950s, the parent support ratios were on the same level for all countries analysed, whereas already 50 years later a number of countries began to embark on a rapid transition and have been experiencing a considerable increase in the values of this indicator. Some countries in the Caribbean, Barbados, Jamaica and Puerto Rico, in particular, have reached at present similar ratios to countries in Europe or among the more developed countries in Asia. Important to mention is the fact that today the value of this

indicator for Barbados seems to have surpassed those for Germany, Italy and Japan. Over the next 50 years until 2050 even more dramatic transformations are expected worldwide, with Japan, Guyana and the Netherlands Antilles experiencing the most rapid transition while only slight changes are anticipated in the case of Belize and Jamaica.

In absolute terms the parent support ratio will be the highest for Japan, with an estimated 56 older persons per one person of the caretaker generation. Germany and Italy will follow with about 40 older persons and Barbados with about 25 older persons per one person aged 50 to 64 years. Much more favourable will be the ratios in the case of Belize, Puerto Rico and Guyana, countries for which parent support ratio of less than 20 are forecasted.

Not much is empirically known on the immediate impact of migration on the everyday life of the older generation. However, the latest information on living arrangements of the elderly in the Caribbean has been revealed in the recent assessment on the impact of Hurricane Ivan on Grenada (OECS, 2004)²³ which found particularly older men living alone without access to any formal or informal support system.

3. Migration and its impact on intergenerational relationships

A critical factor with respect to support ratios is migration, particularly return migration of the elderly and the continued departure of younger people. Over the past years the Caribbean has been seeing an increasing number of elderly retiring back home from jobs in the United States, Canada or Europe, while steady and even growing numbers of skilled younger people are leaving the region in search of a better life abroad. As migrants by and large remit in cash and kind, they are no longer available to assist in person the sick and frail in their country of origin. The fact that increasingly qualified women, particularly in the health sector, but also teachers and social workers, seem to be leaving their countries does not only deprive the region of the desperately needed health and social services providers but also families of their caretakers and mothers.

4. Gender and intergenerational support

The provision of care and support is not gender-neutral. Research conducted in other parts of the world (United Nations, 2000) shows that women seem to be providing the largest share of support and care to family members and relatives, whereas men tend to contribute more in terms of cash and less in kind. While in younger years women perform their roles as mothers and take care of their children, at the time the children leave home, these parents and/or grandparents are in need of care. Women in the age-group 50–64 are therefore often referred to as the ‘sandwich generation’. This burden is particularly heavy on Caribbean women. With about 50% of the households being female headed, women are, apart from being the main care provider for both children and the elderly, are also in many cases fully responsible for the economic security of their dependants.

²³ The macro-socio-economic assessment of the damages caused by hurricane Ivan in Grenada found that particularly elderly men were found to be living ‘in somewhat lonely and precarious circumstances’ (p. 11).

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

1. Summary and conclusions

Population ageing is well on its way in most of the Caribbean countries. Favorable economic conditions over the past decades, improved access to basic primary health care services, the eradication and/or control of major infectious diseases along with better nutrition have greatly contributed to the rapid increase in life expectancy over the past decades. However, the region at present is facing various challenges which could threaten these accomplishments. The recent economic downturn has been cutting public resources allocated to social and health care services. Steady high unemployment rates and increasing poverty in some countries make it difficult to either maintain or even improve the present conditions. Globalization and lifestyle changes, unhealthy diets and little exercise have now become the causes for new diseases, such as diabetes and cardiovascular disease, the major causes of morbidity and mortality in the region. The impact of these illnesses on the quality of the lives of the elderly could not be fully assessed due to the lack of comprehensive data. However, the limited information available points to the fact that men and women are differently affected by these ailments, as older women seem to be more severely affected than men by lifestyle-related diseases and disabilities. At present, for many countries, the analysis of the relationship in demographic terms between potential caretakers and recipients of care reveals unfavorable conditions, with the burden on the caretaking generation expected to become heavier in the years to come. Further, the discussions of various aspects of population ageing have shown the critical importance of a gender specific analysis. While women, by and large, tend to live longer than men, men seem to be spending a larger portion of their lives, particularly in their later years, in better health than women. In addition, due to the fact that women outlive men and men tend to marry younger women, married men are often more fortunate than women in the same age group, since they are often cared for by a spouse. With regard to the informal family support system, care of dependent family members seems to be mainly the responsibility of women, either in their role as mother to take care of children or in their capacity as daughter or spouse to help out with parents, grandparents or in-laws, while men, if at all, tend to contribute more in economic terms.

The present paper has clearly shown that very little is known on the elderly in the Caribbean. Timely population censuses and household surveys are desirable to provide baseline information which could be used for further analyses and research. More work needs to be done to look at qualitative aspects of the lives of the older generation with respect to health, well-being and living arrangements, partnerships, family support systems and the impact of emigration of family members as well as the HIV/AIDS pandemic. Without profound knowledge on only some of these aspects it will be difficult to design a coherent policy framework to address the needs of an ageing society and to formulate targeted, effective and sustainable programmes to make the late live years a joyful experience for the aged as well as for their families and caregivers.

2. Recommendations

The present paper has clearly identified areas of critical concern for the individual, but also for communities, the government, civil society, including academia and other research facilities. A list of key issues for further perusal by the various stakeholders at different levels is presented below.

a) At the individual level

- Adoption of a healthy lifestyle early in life;
- Adequate financial planning to ensure the availability of necessary resources later in life.

b) At the family/community level

- Recognition of the growing pressure on female family members in their role as caretakers of children and elderly parents, grandparents and in-laws;
- Provision of adequate support mechanisms to ease the burden on the informal family support system;
- Provision of education and training for family caretakers as well as for caretakers in institutions.

c) At the government level

- Establish attractive and efficient pension schemes;
- Provide necessary caretaking arrangements for the elderly in need, either by strengthening home care and/or by enhancing institutional support mechanisms;
- Provide medical facilities with specific equipment to deal with chronic diseases and other old age-specific ailments;
- Institutionalize training for medical personnel in the area of ageing and gerontology to raise awareness and competence in dealing with health-related concerns of the elderly;
- Provide legal framework to prevent abuse of elders and provide adequate support structure for those affected to access professional help;
- Encourage continuous learning and create employment and income opportunities for elderly citizens to provide economic security and sustain independence;
- Disaster preparedness also for elderly;
- Enhance collaboration with civil society;

- Promote ageing as a lifetime and lifestyle concept through IEC targeted at all age-groups;
- Sensitize the public on issues related to ageing, particularly to enhance and promote healthy intergenerational relationships and address violence and elderly abuse.

d) At the international level

- Strengthen South-South collaboration among countries in the Caribbean and the wider Latin American region through existing mechanisms, such as CARICOM, the Caribbean academic institutions or, as needed, design new mechanisms to enhance intraregional collaboration and cooperation.
- Seek technical and financial assistance through the United Nations system, particularly ECLAC, WHO/PAHO and the United Nations Population Fund (UNFPA) and other bi- and multilateral donors in the Caribbean.

e) Academic research

- More quantitative and qualitative data and research is needed on all aspects of population ageing. Of particular importance is the knowledge of living arrangements, quality of life and health and well-being of both, elderly men and women in the Caribbean.

On a general note, policies and programmes need to be developed and implemented to take advantage of the ‘demographic bonus’ and at the same time address critical issues such as improvements in living conditions of older persons, combating poverty, social inclusion, individual self-fulfilment, human rights and gender equality. To an increasing degree attention is needed on such holistic and overarching themes as intergenerational solidarity, employment, social security, health and well-being. The concept of ageing as a lifelong process needs to be incorporated into early education as well as promoted throughout the societies in the region. Nobody will be excluded from ageing, thus information, education and communication on all aspects of health ageing and lifelong well-being needs to reach out to all generations, the young and the old, since it is better to be prepared early in life than to seek remedies for missed opportunities in later life years.

Annex

a) **MILLENNIUM DEVELOPMENT GOALS, TARGETS AND INDICATORS**

GOALS	TARGETS	INDICATORS
Goal 1: Eradicate extreme poverty and hunger	<i>Target 1: Halve, between 1990 and 2015 the proportion of people whose income is less than \$1 a day</i>	<ul style="list-style-type: none"> • Proportion of population below \$1 a day • Poverty gap ratio (<i>incidence x depth of poverty</i>) • Share of poorest quintile in national consumption
	<i>Target 2: Halve, between 1990 and 2015 the proportion of people who suffer from hunger</i>	<ul style="list-style-type: none"> • Prevalence of underweight in children (under five years of age) • Proportion of population below minimum level of dietary energy consumption
Goal 2. Achieve universal primary education	<i>Target 3: Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling</i>	<ul style="list-style-type: none"> • Net enrollment ratio in primary education • Proportion of pupils starting grade 1 who reach grade 5 • Literacy rate of 15 to 24-year-olds
Goal 3. Promote Gender equality and empower women	<i>Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education no later than 2015</i>	<ul style="list-style-type: none"> • Ratio of girls to boys in primary, secondary, and tertiary education • Ratio of literate females to males among 15- to 24-year-olds • Share of women in wage employment in the nonagricultural sector • Proportion of seats held by women in national parliament

Goal 4. Reduce child mortality	<i>Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate</i>	<ul style="list-style-type: none"> • Under-five mortality rate • Infant mortality rate • Proportion of one-year-old children immunized against measles
Goal 5: Improve maternal health	<i>Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio</i>	<ul style="list-style-type: none"> • Maternal mortality ratio • Proportion of births attended by skilled health personnel
Goal 6: Combat HIV/AIDS malaria and other diseases	<p><i>Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS</i></p> <p><i>Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases</i></p>	<ul style="list-style-type: none"> • HIV prevalence among 15- to 24-year-old pregnant women • Contraceptive prevalence rate • Number of children orphaned by HIV/AIDS • Prevalence and death rates associated with malaria • Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures • Prevalence and death rates associated with tuberculosis • Proportion of TB cases detected and cured under DOTS
Goal 7: Ensure environmental sustainability	<i>Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</i>	<ul style="list-style-type: none"> • Change in land area covered by forest • Land area protected to maintain biological diversity • GDP per unit of energy use • Carbon dioxide emissions (per capita)

	<p>Target 10: <i>Halve by 2015 the proportion of people without sustainable access to safe drinking water.</i></p>	<ul style="list-style-type: none"> • Proportion of population with sustainable access to an improved water source
	<p>Target 11: <i>Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers.</i></p>	<ul style="list-style-type: none"> • Proportion of population with access to improved sanitation • Proportion of population with access to secure tenure (Urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum dwellers)
<p>Goal 8: Develop a global partnership for development</p>	<p>Target 12: <i>Develop further an open, rule-based, predictable, non-discriminatory trading and financial system (includes a commitment to good governance, development, and poverty reduction – both nationally and internationally)</i></p> <p>Target 13: <i>Address the special needs of the least developed countries (includes tariff and quota-free access for exports, enhanced program of debt relief for and cancellation of official bilateral debt, and more generous official development assistance for countries committed to poverty reduction)</i></p>	<ul style="list-style-type: none"> • Net ODA as a percentage of DAC donors' gross national income • Proportion of ODA to basic social services (basic education, primary health care, nutrition, safe water, and sanitation) • Proportion of ODA that is untied • Proportion of ODA for environment in small island developing states • Proportion of ODA for the transport sector in landlocked countries

	<p><i>Target 14: Address the special needs of land-locked countries and small island developing states (through the Program of Action for the Sustainable Development of Small Island Developing States and 22nd General Assembly provisions)</i></p> <p><i>Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term</i></p> <p><i>Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth</i></p> <p><i>Target 17: In co-operation with pharmaceutical companies, provide access to affordable essential drugs in developing countries</i></p>	<ul style="list-style-type: none"> • Proportion of exports (by value, excluding arms) admitted free of duties and quotas • Average tariffs and quotas on agricultural products and textiles and clothing • Domestic and export agricultural subsidies in OECD countries <ul style="list-style-type: none"> • Proportion of ODA provided to help build trade capacity • Proportion of official bilateral HIPC debt canceled • Debt service as a percentage of exports of goods and services • Proportion of ODA provided as debt relief <ul style="list-style-type: none"> • Number of countries reaching HIPC decision and completion points <ul style="list-style-type: none"> • Unemployment rate of 15- to 24-year-olds <ul style="list-style-type: none"> • Proportion of population with access to affordable, essential drugs on a sustainable basis
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	<p><i>Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communications technologies</i></p>	<ul style="list-style-type: none"> • Telephone lines per 1,000 people • Personal computers per 1,000 people
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1. Some indicators, particularly for goals 7 and 8, remain under discussion. Additions or revisions to the list may be made in the future.
2. Only one form of contraception condoms is effective in reducing the spread of HIV.

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