SERIES

STUDIES AND PERSPECTIVES

111

ECLAC SUBREGIONAL
HEADQUARTERS
FOR THE CARIBBEAN

The ageing Caribbean

20 years of the Madrid Plan of Action

> Nekehia Quashie Francis Jones





Thank you for your interest in this ECLAC publication



Please register if you would like to receive information on our editorial products and activities. When you register, you may specify your particular areas of interest and you will gain access to our products in other formats.

Register



www.cepal.org/en/publications



www.instagram.com/publicacionesdelacepal



www.facebook.com/publicacionesdelacepal



www.issuu.com/publicacionescepal/stacks





www.cepal.org/es/publicaciones/apps

SERIES

STUDIES AND PERSPECTIVES

111

HEADQUARTERS FOR THE CARIBBEAN

The ageing Caribbean

20 years of the Madrid Plan of Action

Nekehia Quashie Francis Jones



This document was prepared by Nekehia Quashie, consultant, and Francis Jones, Population Affairs Officer at the Statistics and Social Development Unit of the Economic Commission for Latin America and the Caribbean (ECLAC) subregional headquarters for the Caribbean. Comments were provided by Dale Alexander, Lika Døhl Diouf, Jônatas de Paula and Elizabeth Thorne, of the same office.

The views expressed in this document, which has been reproduced without formal editing, are those of the authors and do not necessarily reflect the views of the Organization or the countries it represents.

United Nations publication
ISSN: 1728-5445 (electronic version)
ISSN: 1727-9917 (print version)
LC/TS.2022/225
LC/CAR/TS.2022/5
Distribution: L
Copyright © United Nations, 2023
All rights reserved
Printed at United Nations, Santiago
S.22-01179

This publication should be cited as: N. Quashie and F. Jones, "The ageing Caribbean: 20 years of the Madrid Plan of Action", Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean, No. 111 (LC/TS.2022/225-LC/CAR/TS.2022/5), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2023.

Applications for authorization to reproduce this work in whole or in part should be sent to the Economic Commission for Latin America and the Caribbean (ECLAC), Documents and Publications Division, publicaciones.cepal@un.org. Member States and their governmental institutions may reproduce this work without prior authorization, but are requested to mention the source and to inform ECLAC of such reproduction.

Contents

Abstr	ract		5
Intro	ducti	on	7
I.	Age A. B. C.	Adoption of national policies and laws on ageing and older persons	9 11 12 18
II.	Age A. B. C. D. E.	The epidemic of non-communicable diseases Promoting healthy ageing: national approaches to address NCDs Health care provision: equitable access and financing Long-term care services: residential and home-based care Palliative care Cultural attitudes toward health care professionals, dying and end of life care Limited availability of opioids for medical purposes within the public health system Limited development of palliative care services. Unmet palliative care needs.	23 25 27 31 32 33
	F.	5. Limited investment in palliative care research	34 34
III.	Ena A. B.	bling and supportive environments	39

		1.	Public transit	43
		2.	Community engagement	44
		3.	Lifelong learning and digital inclusion	
	C.	Olde	er persons in disaster risk management	
	D.	Prot	ection from abuse and neglect	47
IV.	Con	ıclusi	ons and key recommendations	49
Biblio	grap	hy		53
Studie	es an	ıd Per	spectives-The Caribbean Series: issues published	60
Table	s			
Table	1		National policies (or laws) on ageing and older persons in the Caribbean	10
Table			Life expectancy and healthy life expectancy at age 60 by sex	24
Table	3		Premature mortality from the four main non-communicable diseases	
			in Caribbean countries	_
Table	•		Adoption of national NCD policies, strategies or strategic action plans, 2021	26
Table	5		Cumulative total COVID-19 cases, deaths and vaccination rates	
T-61-	_		for Caribbean countries (as of 25 September 2022)	
Table	ь		Living arrangements of older persons	40
Figure	es			
Figure	1		Coverage of contributory and non-contributory old age pensions	13
Figure	2		Public expenditure on pensions: contributory old age,	
			public sector and non-contributory pensions	14
Figure	3		Average national insurance (contributory) retirement pensions	
			versus national poverty and indigence lines	
Figure			Value of non-contributory pensions versus national poverty and indigence lines	
Figure	-		Average national insurance (contributory) retirement pensions by sex	
Figure			Labour market participation of older persons	
Figure	7		General government, out-of-pocket and other current health expenditure, 2019	28

Abstract

This report assess the situation of older persons and reviews the actions taken in Caribbean countries and territories, particularly over the last five years, to implement the Madrid International Plan of Action on Ageing (MIPAA) and related regional agreements. It contributes to the global and regional reviews of the MIPAA, twenty years on from its adoption in 2002, and includes recommendations to further address population ageing and the rights of older persons in the Caribbean. In the economic sphere, the subregion's pension systems are providing economic security to more older persons but there are still major gaps in respect of formal social security coverage and, in most cases, non-contributory pensions do not provide sufficient incomes or adequately bridge the coverage gap. As a result, there are still significant numbers of older persons who receive little or no pension income. In relation to health, older persons are entitled to free access to public health care services, however, in many if not all countries, there are critical gaps in health service delivery that need to be addressed. The devastating impact of the pandemic on those with certain chronic health conditions reinforces the need for renewed attention to lifestyle-related NCDs while vaccine hesitancy emerged as a major problem which undermined the response to COVID-19. Ageing populations also create a growing need for long-term health and social care services and many Caribbean countries have developed home care programmes, but there is insufficient capacity to meet the demand for high-quality care, including care of older persons with Alzheimer's disease and related dementias. Meanwhile, the increased frequency and severity of natural disasters and their impact on older persons is an increasingly urgent concern which needs to be addressed through prioritization and preferential assistance for older persons in disaster risk management and response.

Introduction

Population ageing has been a major and growing concern¹ among policymakers over the last two decades since the adoption of the 2002 Madrid International Plan of Action on Ageing (MIPAA). This report reviews the actions taken by Caribbean countries and territories² to address the issue over the last five years and, more generally, over the twenty years since the adoption of the MIPAA. With the pace of demographic change continuing to accelerate over the next decade and the number of older persons continuing to increase in all Caribbean countries, further and more far-reaching actions will be required to realise the plan's vision of a "society for all ages" and to take advantage of the opportunities that ageing presents.

Ageing is a long-term demographic trend affecting virtually all countries across the world although the process is more advanced in some countries than others. In the Caribbean and Latin America, populations have a relatively young age structure compared to those in North America and Europe. In 2021, the old age dependency ratio $(65+/(15-64))^3$ was 14 for the Caribbean, 4 compared to 12 for Latin America, 26 for North America and 30 for Europe.

In the Caribbean (as in Latin America), the pace of demographic change is accelerating. The old age dependency ratio for the Caribbean increased from 10 in 2000, to 14 in 2020 and will increase to 20 by 2030 and 28 by 2045. Between 2020 and 2045, the number of persons aged 65 and over in the Caribbean will double while the size of the working age population (aged 15 to 64) will remain roughly unchanged.

Population ageing is relatively more advanced in Barbados and many of the associate member countries including Curaçao, Martinique and the United States Virgin Islands, while it is less advanced in Antigua and Barbuda, Belize, Grenada, Guyana, Saint Vincent and the Grenadines and Suriname. However, all Caribbean countries will see significant increases in their old age dependency ratios over the coming two decades and beyond.

¹ Twelve out of 13 Caribbean governments identified population ageing as a major concern, based on data from the United Nations Inquiry among Governments on Population and Development (2015) (up from 9 out of 13 in both 2005 and 2009).

Unless otherwise stated, the Caribbean here refers to the following member and associate member States of ECLAC: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Curaçao, Dominica, Grenada, Guadeloupe, Guyana, French Guiana, Jamaica, Martinique, Montserrat, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Suriname, Trinidad and Tobago, Turks and Caicos Islands, and the United States Virgin Islands.

The number of persons aged 65 and over for every hundred persons aged 15 to 64.

⁴ In the calculation of these dependency ratios, Puerto Rico is classified as part of Latin America.

Ageing is a consequence of the demographic transition from the high fertility, high mortality societies of the past to the low fertility, low mortality societies of the modern world. Along with increased life expectancy, the completion of this demographic transition also lowers population growth and leads, ultimately, to a more stable population structure. Demographic ageing should therefore be seen in a positive light and as a fundamental part of the development process.

The increasing number of older persons and their longevity present both new challenges and opportunities for societies and for policymakers. Challenges include increasing pension and healthcare costs, the greater need for long-term care services, and the increasing number of persons suffering from non-communicable diseases. There is also increasing recognition of the contribution that older persons can (and do) make to economic, social, cultural, and political life and the opportunity this presents. Fully realising this contribution will depend on stronger protection for the rights of older persons, including protection against age discrimination, social exclusion, isolation and elder abuse.

To take one example, the proportion of persons aged over 65 in Bermuda is projected to increase from 16.9 per cent in 2016 to 24.9 per cent in 2026 (Government of Bermuda, 2018). Pension and health care costs are increasing while Bermuda's workforce is in decline. The Minister of Finance described this as "perhaps the single most serious long-term issue Bermuda faces" (Royal Gazette, 2019).

The international community's priorities and objectives for addressing these challenges were set out in the MIPAA, adopted at the Second World Assembly on Ageing in 2002. The Madrid Plan identified three broad priority directions: older persons and development; advancing health and well-being; and ensuring enabling and supportive environments. It defined 18 priority issues, with 35 objectives and 239 recommendations for action.

Since 2002, there have also been a series of five-yearly reviews which produced the following regional agreements: the Regional Strategy for the Implementation in Latin America and the Caribbean of the MIPAA (2003), the Brasilia Declaration (2007), the San José Charter on the Rights of Older Persons in Latin America and the Caribbean (2012) and the Asunción Declaration (2017). These agreements reiterated member States' commitment to the Madrid Plan and incorporated actions to advance its implementation in the region, address emerging issues and, in some cases, expanded upon the commitments contained in the MIPAA. The San José Charter on the Rights of Older Persons was the most significant of these regional agreements, emphasising the rights-based approach and actions to increase protection for the rights of older persons.

The twenty-year review and evaluation of the MIPAA (the fourth five-year review) is taking place between 2021 and 2023. The regional review will be held in December 2022, within the framework of the fifth meeting of the Regional Intergovernmental Conference on Ageing and the Rights of Older Persons in Latin America and the Caribbean, at which member States will present national progress reports or statements. The regional conference will be held in Santiago, Chile between 13 and 15 December 2022. The global review will take place in 2023 within the framework of the 61st session of the United Nations Commission for Social Development.

This report provides an assessment of progress in the implementation of the MIPAA in the Caribbean and is intended to contribute to the regional review process which will, in turn, provide input to the global review. It considers the situation of older persons in the Caribbean subregion, reviews the policies and programmes implemented for older persons, and assesses the progress made by member and associate member countries in the implementation of the MIPAA and subsequent regional agreements. The report draws on national and international statistics, information collected about government policies, programmes and services for older persons and interviews with representatives of civil society organisations. The three main chapters of the report broadly correspond to the three priority directions of the MIPAA: older persons and development; health and well-being; and enabling and supportive environments.

I. Ageing, economic security and public policy

The first section or "priority direction" of the MIPAA, entitled older persons and development, starts by addressing the issue of "active participation in society and development." It includes objectives on recognizing the contribution of older persons and the inclusion of older persons in decision-making, and makes recommendations for action on barriers (or enablers) to greater participation such as those relating to attitudes, discrimination, lack of resources or information and the participation of older women. It then addresses a variety of matters which impact upon the economic security of older persons, including work, social protection and income security. The Regional Strategy for the Implementation in Latin America and the Caribbean of the MIPAA had as its first goal "Protection of the human rights of older persons and creation of conditions of economic security, social participation and education that promote the satisfaction of older persons' basic needs and their full inclusion in society and development".

The first chapter of this study reviews the development of policies and laws for ageing and older persons in the Caribbean, and the creation of government bodies and other organizations to address these issues. It then assesses the progress that has been made in improving public pension systems, the incomes that these pensions provide, and the fiscal challenges that population ageing creates for pension funding. The pension funding challenge is one which can be partially mitigated if older persons are given more opportunities for different forms of income-generating work (as advocated in the MIPAA), and this chapter reviews actions and considers policies to support older persons in combining economic activity with other life goals.

A. Adoption of national policies and laws on ageing and older persons

Over the last two decades, most Caribbean countries have developed some form of national policy on ageing (or older persons) or legislation for older persons (table 1). Since the last quinquennial review, a number of member States have adopted (or updated) policies or laws, or have published draft polices for consultation. In Jamaica, a new National Policy for Senior Citizens was recently adopted (JIS, 2022). This

was an update to the previous National Policy for Senior Citizens which dated from 1997. The new policy aims to strengthen the rights of older persons and has a particular focus on active and productive ageing.

Table 1

National policies (or laws) on ageing and older persons in the Caribbean

Anguilla	National Policy for Older Persons 2009
Antigua and Barbuda	National Policy on Ageing (2013); National Policy and Plan of Action on Healthy Ageing 2017-2027
Bahamas	Draft of Older Persons Legislation (in development)
Barbados	National Policy on Ageing: Towards a Society for all Ages 2012; The 2023-2028 National Policy on Ageing for Barbados: Making Healthy and Active Ageing a Reality for All (draft)
Belize	Belize National Policy for Older Persons 2002
Bermuda	National Seniors' Strategy (in development)
Cayman Islands	Older Persons Policy 2016; Older Persons Law 2017
Dominica	Dominica National Policy on Ageing 1999
Grenada	Grenada National Policy on Aging 2009; an updated policy is in development
Guadeloupe	Law on the adaptation of society to ageing 2015
Jamaica	National Policy for Senior Citizens 2018 (updating the previous 1997 policy)
Martinique	Law on the adaptation of society to ageing 2015
Montserrat	National Policy on the Care of Older Persons 2020–2026
Saint Kitts and Nevis	National Policy on Ageing (in development)
Saint Lucia	National Policy on Ageing (in development)
Trinidad and Tobago	National Policy on Ageing 2007

Source: Author's compilation.

In the Cayman Islands, the Older Persons' Law was passed and came into effect in 2017. This followed the development of the Cayman Islands Older Persons Policy in 2016. The law created a Council of Older Persons to represent the interests of senior citizens and to promote, implement, monitor and evaluate the new policy. The law provides for the creation of a confidential (and voluntary) register of older persons. It also establishes in law rights related to anti-discrimination, personal liberty, the right to privacy, access to justice, the right to vote, to stand for public office and to participate in public life.

The Government of Antigua and Barbuda developed a National Policy and Plan of Action on Healthy Ageing, 2017–2027. The main themes of the policy and plan are to promote older persons participation in all aspects of cultural, economic and social life; to improve their physical and mental health and well-being; and to support them to live in their own homes and communities for as long as possible.

The Government of Barbados is working towards updating its ageing policy (from 2012) and recently published a new draft "National Policy on Ageing (2023–2028): Making Healthy and Active Ageing a Reality for All." Public consultations have been held to develop and review the new policy which contains policy objectives in eight key priority areas, including social security; health and health systems; physical and built environment; social environment; long-term care; and pandemics, disasters and emergency situations. The draft policy describes itself as "to date, the most progressive, multifaceted and targeted response to the aged and ageing situation in Barbados".

In Montserrat, a National Policy on the Care of Older Persons was developed together with an action plan for the period 2022-2026. Public consultations were held in 2021. The policies' priority areas include housing; assistive and alternative care; economic security; health care and promotion of healthy living; mental health services; emergency management and disaster situations; and recreation.

The Government of the Bahamas is preparing to introduce new legislation to protect the rights of older persons. In both Saint Kitts and Nevis and Saint Lucia, the respective governments are seeking

to update their national policies on ageing and have been conducting stakeholder consultations to that end, while Bermuda is developing a National Seniors' Strategy.

There have also been legislative and policy developments in the area of social protection, with important implications for older persons. The Government of Antigua and Barbuda passed the Social Protection Act 2020. The Act establishes governance arrangements, transparent eligibility criteria, and will create an appeals tribunal for social protection programmes. This includes programmes targeted at older persons, such as home care, day care, residential care and home improvement grants.

Anguilla launched a new Social Protection Policy in 2018 and a Plan of Action for its implementation, the main objective of which is to build an integrated system of social protection. As the action plan makes clear, improving the lives of older persons will depend on cooperation between the Department of Social Development and many other organisations, for example, the Attorney General's Chambers (in relation to proposed legislation and regulations for residential homes), the Water Authority (regarding the government assisted water supply), the Health Authority (in relation to home care for older persons and persons with disabilities), the Social Security Board (in relation to data sharing) and the Ministry of Finance (for fiscal space analysis).

All countries should have an up-to-date, multisectoral, policy or law for ageing or older persons. As table 1 shows, Caribbean countries are at different stages of the policy development cycle. The twenty-year anniversary of the MIPAA is an opportunity to reassess; to recommit to implementation of existing policies; or to strengthen and bring greater coherence to programmes and services for older persons through the development of new policies and laws.

B. Establishment of representative bodies and organizations for older persons

Older persons should be involved in the entire policymaking process, from development through to implementation, monitoring and evaluation. The MIPAA encouraged "the establishment of organizations of older persons at all levels to, inter alia, represent older persons in decision-making".

In some countries, national councils (or commissions) on ageing have been established: the National Council for Older Persons (of the Bahamas); the National Council on Aging (Belize); the Dominica Council on Ageing; the National Commission for the Elderly (Guyana); the National Council for Senior Citizens (Jamaica); the HelpAge Saint Lucia National Council of and for Older Persons; and, most recently (in 2017), the Council of Older Persons (of the Cayman Islands). These organisations represent the interests of older persons and facilitate their participation in decision-making. National Councils provide a referral service to connect older persons with government services for which they may be eligible. They also organise events for older persons (and carers) to promote, for example, health and well-being, digital literacy; or will preparation. National councils (or commissions) are constituted in different forms: as government-sponsored bodies, quasi-governmental organizations or NGOs. In all cases, their primary role is to work together with wider government and other organisations as advocates for the interests of older persons.

There are also civil society organisations which represent older persons in different ways. There are charitable organisations in some countries such as HelpAge Belize or Age Concern Bermuda. There are national and regional NGOs that work on behalf of those with specific health conditions and their families, for example, the Alzheimer's Association of Trinidad and Tobago, the Jamaica Cancer Society and the Caribbean Palliative Care Association which is a relatively new network for advocacy and education on palliative care. In numerous countries, there are associations of older persons (or associations of pensioners/retired persons), one of the most active of which is the Barbados Association of Retired Persons (BARP). These groups also seek to represent the interests of older

persons and provide some member benefits, particularly senior citizens discounts on selected good and services.

These organisations all have an important role to play in meeting the objectives of the MIPAA, both directly, through their work with older persons, and through their contribution to public policymaking. Following the disruption of the COVID-19 pandemic, the partnership between government and older persons' organizations needs to be renewed and reinforced. Governments have a particular responsibility in this regard and should facilitate the work of older persons' organizations and ensure that there are spaces in which civil society organizations can inform, challenge and help to shape public policies and programmes for older persons.

C. Public pension systems: adequacy and sustainability

The Madrid Plan of Action called for programmes to enable all workers to acquire basic social protection; and for minimum incomes and the eradication of poverty among older persons. This requires expansion of social protection and social security programmes; the establishment of non-contributory pensions; attention to the living standards of older persons; and the strengthening of intergenerational solidarity. ECLAC continues to highlight the importance of moving towards universal, comprehensive, sustainable and resilient social protection systems, to guarantee equality on the basis of rights, so that no one is left behind (ECLAC, 2022b).

Adequacy of public pensions

The national insurance schemes in Caribbean member States all provide contributory old age pensions. Most countries also have non-contributory old age pensions which generally provide a minimal income to older persons with no other source of income. Non-contributory pensions are often administered separately from the national insurance system although in some countries the national insurance agency also administers the non-contributory pension alongside its other contributory benefits. The coverage and levels of income provided by both contributory and non-contributory pensions differ widely from country to country, reflecting differences in their economies and in some aspects of the design of the schemes. The government pensions provided to civil servants and certain public sector workers are the other major category of public pensions. Some government pension schemes are contributory while others are non-contributory.

Figure 1 shows the coverage of contributory and non-contributory age pensions as a proportion of the population aged over the retirement age. The retirement age used to calculate these coverage rates is the age of eligibility for a full contributory pension (even if the age of eligibility for a non-contributory pension is higher than this). Government pensions are not included here due to the non-availability of data. Based on data from 11 countries, the proportion of older persons receiving a contributory old age pension increased over the period 2008 to 2018. The highest rates of coverage were in Antigua and Barbuda, Bahamas, Barbados and Saint Kitts and Nevis, at 80 per cent or higher. The coverage rate was much lower in Belize, Grenada, Guyana, Jamaica, Saint Lucia and Trinidad and Tobago, where around half or even as few as a quarter of older persons are eligible for a contributory age pension. A history of labour market informality and lower levels of female labour force participation (particularly among Indo-Caribbean women) are the main reasons for these lower levels of contributory pension coverage.

Among these 11 countries, Guyana and Trinidad and Tobago have, by far, the most significant non-contributory old age pension systems. The Guyanese old age pension is universal for persons aged 65 and over (subject to conditions relating to citizenship and residence) and all pensioners receive the same pension. Trinidad and Tobago's non-contributory pension is means-tested, with the value of the pension reduced for those with some income from other sources. Nevertheless, among those aged 65

and over in Trinidad and Tobago, nearly two-thirds qualify for a non-contributory pension. In Antigua and Barbuda, Bahamas, Barbados and Saint Kitts and Nevis, as coverage rates for contributory pension schemes have increased, the proportion of older persons dependent on non-contributory pensions has declined to less than 10 per cent. A few countries still lack a non-contributory old age pension.

2013 2018 2013 2018 2013 2018 2018 2012 2015 2013 2018 2013 2018 2013 2018 2013 2018 2013 2018 2013 2018 BRB BLZ

Figure 1

Coverage of contributory and non-contributory old age pensions

(Percentages)

Source: ECLAC on the basis of information published by national insurance agencies and ministries of finance.

Contributory

Note: This figure shows the percentage of persons over retirement age receiving contributory and non-contributory pensions. The retirement age referred to here is the age at which workers become eligible for a full contributory age pension in each country (assuming they have made sufficient contributions). The age of eligibility for a non-contributory pension is commonly higher than the age of eligibility for a contributory pension, but the percentage receiving a non-contributory pension is calculated using the same denominator (based on the age of eligibility for a full contributory pension). Dominica introduced a non-contributory pension in 2014 although no information about its coverage was available. Data are shown for the following 11 countries: Antigua and Barbuda (ATG); Bahamas (BHS); Barbados (BRB); Belize (BLZ); Dominica (DMA); Grenada (GRD); Guyana (GUY); Jamaica (JAM); Saint Kitts and Nevis (KNA); Saint Lucia (LCA); and Trinidad and Tobago (TTO).

■ Non-contributory

In summary, the combination of contributory and non-contributory age pensions ensures universal or at least close to universal coverage in Antigua and Barbuda, Bahamas, Barbados, Guyana, Saint Kitts and Nevis, and Trinidad and Tobago. In other countries, including Belize, Grenada and Saint Lucia, age pension provision falls short of universal coverage and, as a result, there are significant numbers of older persons with no pension income.

Public expenditure on pensions accounts for an increasing share of national income in all Caribbean countries and this trend will likely continue in the coming years. Figure 2 shows expenditure on contributory national insurance pensions, non-contributory pensions and also public sector pensions (for civil servants, police, teachers etc.). Based on data for 11 countries, public expenditure on pensions was highest in Barbados at over 8 per cent of GDP in 2018. This is partly because the ageing process is more advanced in Barbados than in most other Caribbean countries. The largest increases in spending were in Trinidad and Tobago (from 2.6 per cent of GDP in 2008 to 6.7 per cent in 2018) and Guyana (from 1.8 per cent of GDP in 2008 to 3.9 per cent in 2018), where there was significant expansion of the non-contributory pension schemes. With the exception of Barbados and Trinidad and Tobago, expenditure varies between 2.4 and 5.1 per cent of GDP and is lowest in Bahamas (at 2.4 per cent).

 2008 2013 2018

BHS

BRB

BLZ

■ Contributory

(Percentages of GDP)

Figure 2
Public expenditure on pensions: contributory old age, public sector and non-contributory pensions
(Percentages of GDP)

Source: ECLAC on the basis of information published by national insurance agencies and ministries of finance.

DMA

Note: The estimates of expenditure on public sector pensions are retirement benefits but, in some cases, also include a small proportion of survivor's benefits. Dominica introduced a non-contributory pension in 2014 although no information about its cost was available. Data are shown for the following 11 countries: Antigua and Barbuda (ATG); Bahamas (BHS); Barbados (BRB); Belize (BLZ); Dominica (DMA); Grenada (GRD); Guyana (GUY); Saint Kitts and Nevis (KNA); Saint Lucia (LCA); Saint Vincent and the Grenadines (VCT); and Trinidad and Tobago (TTO).

GRD

■ Public sector

GUY

■ Non-contributory

 LCA

 These increases in pension expenditure have been necessary to provide for the growing number of pensioners although there have also been real terms increases in the value of contributory national insurance pensions in most countries. Figure 3 compares the average level of contributory national insurance retirement pensions, in 11 countries, with national poverty and indigence lines. Among these countries, the average contributory pension provides an income greater than the value of the poverty line in all countries except Jamaica. The largest increases were in Guyana, where the average retirement pension more than doubled in real terms between 2005 and 2019, and in Saint Kitts and Nevis, where the pension increased by 59 per cent between 2008 and 2020.

It should be remembered that these are averages and just because the average contributory pension is above the poverty line does not mean that all beneficiaries are above that threshold. It should also be noted that increases in average pension payments over time do not necessarily reflect changes to the pension system, for example changes to the calculation used to determine the monetary value of pensions. More recently retired pensioners will often have had higher earnings and/or better contribution records compared with earlier cohorts of retirees and this will result in an increase to the average pension over time, without there necessarily being any change to the pension system. To ensure that these trends continue, Caribbean countries therefore need to continue to expand social security coverage, improving benefit levels where possible, so that future cohorts of retirees will enjoy further improvements in pension incomes and living standards.

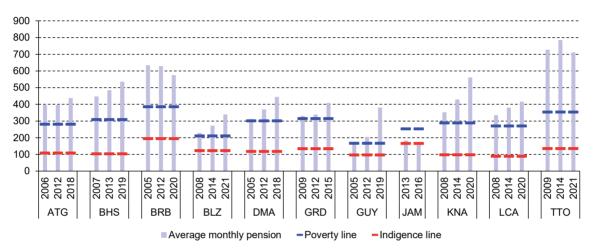
There are significant variations in the extent of redistribution built into different national insurance pension schemes. Studies by Altamirano and others (2018), Nassar and others (2016) and World Bank (2010) indicate that the national insurance pension schemes of Barbados, Belize, Guyana, Jamaica, Saint Vincent and the Grenadines and Trinidad and Tobago incorporated a significant degree of redistribution. The more progressive nature of these pension schemes can be due, for example, to a minimum pension value or a 'flat rate' element which plays an important role in the pension calculation. This boosts the pension income of those who were low-paid workers relative to those who were higher-paid workers, so there is less inequality among pension incomes. The pension schemes in

Antigua and Barbuda, Bahamas, Dominica, Grenada, Saint Kitts and Nevis and Saint Lucia, on the other hand, are less redistributive. In these countries, earnings-related pension contributions play a more important role in the pension calculation, and the inequalities in earnings-related contribution histories translate more directly into pension inequality.

Figure 3

Average national insurance (contributory) retirement pensions versus national poverty and indigence lines

(International dollars (PPP), 2021 prices, per month)



Source: ECLAC on the basis of information published by national insurance agencies.

Note: National poverty and indigence lines are the most recent available (for a single adult male) uprated to 2021 prices using consumer price indices (the lines shown for Guyana are the international poverty lines of US\$3.20 and US\$5.50 per day). Data are shown for the following 11 countries: Antigua and Barbuda (ATG); Bahamas (BHS); Barbados (BRB); Belize (BLZ); Dominica (DMA); Grenada (GRD); Guyana (GUY); Jamaica (JAM); Saint Kitts and Nevis (KNA); Saint Lucia (LCA); and Trinidad and Tobago (TTO).

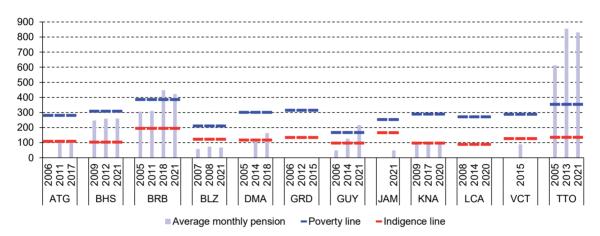
Non-contributory (or social) pensions mostly provide the same flat rate pension to all recipients and the value of the pension is generally much lower than a contributory pension. Among 12 Caribbean countries, only in Barbados and Trinidad and Tobago did the value of the non-contributory pension exceed the value of the poverty line (and only in Trinidad and Tobago did it exceed the line by a significant amount) (figure 4). It is also notable that while the real value of contributory pensions has generally been increasing over time, there were not such consistent increases in non-contributory pensions and, in some countries, there was no significant increase to the real value of the non-contributory pension over a decade or more.

Guyana's non-contributory old age pension is notable because it is received by all persons aged over 65 (those with long-term citizenship and residency). The Government of Guyana has been able to increase the value of the pension from 19,000 GYD per month (90 USD) in 2017 to 28,000 GYD (134 USD) in 2022, which is about three times the increase in the consumer price index over this period.

In Suriname, there is also a universal pension, the AOV paid to every citizen aged over 60. There is a contributory national insurance system covering formal sector workers and a contributory civil servants pension scheme, both of which also pay retirement pensions from the age of 60. Suriname has experienced several periods of high inflation, including over the last two years, and to provide some protection to the living standards of pensioners, the Government has recently implemented several increases to the AOV. The pension was valued at 525 SRD per month from 2012 until 2019. However, three increases were implemented between 2020 and 2022, taking its value to 1,250 (44 USD) per month in March 2022. Nevertheless, this is still a very low amount of money to live on and still not

sufficient to preserve the purchasing power that the pension had in 2012. In recognition of this fact, it was announced that those older persons who were primarily dependent on the AOV, and who had little or no income from other sources, would receive a top-up of up to 1,000 SRD per month over the coming year, ensuring that they had a minimum of at least 2,250 SRD per month (79 USD) to live on (De Boodschap, 2022).

Figure 4
Value of non-contributory pensions versus national poverty and indigence lines
(International dollars (PPP), 2021 prices, per month)



Source: ECLAC on the basis of information published by national insurance agencies and ministries of social development.

Note: National poverty and indigence lines are the most recent available (for a single adult male) uprated to 2021 prices using consumer price indices (the lines shown for Guyana are the international poverty lines of US\$3.20 and US\$5.50 per day). Data are shown for the following 12 countries: Antigua and Barbuda (ATG); Bahamas (BHS); Barbados (BRB); Belize (BLZ); Dominica (DMA); Grenada (GRD); Guyana (GUY); Jamaica (JAM); Saint Kitts and Nevis (KNA); Saint Lucia (LCA); Saint Vincent and the Grenadines (VCT); and Trinidad and Tobago (TTO).

A new social pension was introduced in Jamaica in 2021. Some older persons were previously beneficiaries of the PATH Programme (the Programme of Advancement Through Health and Education, a conditional cash transfer programme) but this programme was targeted primarily towards families with children, those with little or no assets and poor living conditions, meaning that many older persons who may be living alone or were 'asset rich' but 'income poor' were not eligible (MLSS, 2021). The value of the new social pension is 3,400 JMD per month (22.50 USD) and it is paid to persons aged 75 and over who are not in receipt of any other pension, benefit, grant, relief or income.

The adequacy of pension incomes is a problem in other Caribbean islands. In 2019, the Dutch National Ombudsman published a report on poverty among older persons in the Caribbean Netherlands (Bonaire, Sint Eustatius and Saba) (Nationale Ombudsman, 2019). The report describes extreme poverty and hardship among some older persons caused by the high cost of living relative to pension incomes. It highlighted particular problems caused by the reduction of pension incomes following the death of a spouse; gaps in contribution records linked to migration; and the fact that special benefits (for example to replace essentials items such as refrigerators) do not always reach those who need them.

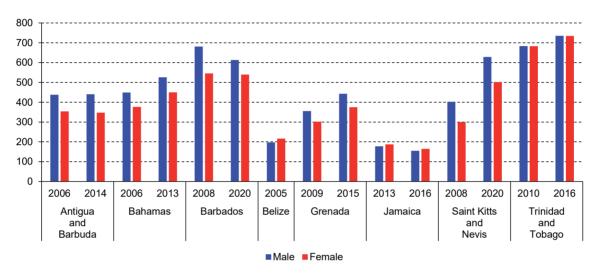
In some countries, there are sizeable differentials between the average pensions received by male and female pensioners. This is due to lower earnings by females during their working lives and the increased likelihood of interruptions to their record of pension contributions. Among five Eastern Caribbean countries, average female pensions were between 12 and 21 per cent lower than the corresponding pensions for males (figure 5). This was not the case in Belize, Jamaica and Trinidad and

Tobago where average pensions are similar for males and females. In Jamaica and Trinidad and Tobago this is because earnings play a less significant role in determining the value of the pension. Gender inequalities in pension entitlements need to be addressed through tackling the labour market inequalities which underlie them: lower levels of female employment, lower salaries for women, the unequal care burden, workplace inflexibility, and the impact of these factors on career development.

Figure 5

Average national insurance (contributory) retirement pensions by sex

(International dollars (PPP), 2021 prices, per month)



Source: ECLAC on the basis of information published by national insurance agencies.

A recently published analysis of pension systems in six Caribbean countries (Schwartz and Zegarra, 2021) provides a comparative analysis of public pensions in six countries (Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago). Schwartz and Zegarra emphasise the need for a multi-pillar approach tailored to national circumstances and discuss the characteristics of different national pension systems. They estimate replacement rates for contributory national insurance pensions. These measure how the average individual's pension income compares to their pre-retirement employment income. They can be calculated in various ways depending on the information available but express pension income as a percentage of pre-retirement income. Schwartz and Zegarra's estimated replacement rates indicate that Barbados had the highest replacement rate (77.9 percent) followed by Suriname (72.1 per cent), Trinidad and Tobago (53.8 per cent), Guyana (41.1 per cent), Jamaica (34.3 per cent), and the Bahamas (28.5 percent). Higher replacement rates indicate more generous pensions (and also imply higher contribution rates).

As mentioned above, the information presented in this chapter covers three distinct categories of pension: contributory national insurance pensions, non-contributory (social) pensions and government pensions. Some people may be eligible to receive more than one type of pension (or none) depending on their work history. Some people may also receive pensions from private sector companies or personal pensions. These are not considered in detail here, largely due to the absence of detailed and publicly available data, but the Caribbean-wide coverage rate for private sector pensions was estimated at 9.5 per cent for 2018 (Small-Ferguson, Johnson and Panday, 2018).

In some countries, including Barbados and Saint Vincent and the Grenadines, public sector workers can receive both government and national insurance retirement pensions. In some cases, this led to a situation where retirement pensions were greater than the salaries received by active workers, which is unsustainable in the long term. Once such anomalies are created, they can be difficult to resolve in a way which is seen to be fair and just to all the affected parties. In Barbados, government pensions are reduced by an amount equal to any national insurance pension entitlement, however in Saint Vincent and the Grenadines many former public service workers now receive a non-contributory government pension and a contributory national insurance pension.

A recent High Court ruling in Grenada (GIS, 2022) created a similar problem there. The Government had previously switched public sector workers recruited since 1985 from the government pension scheme to the national insurance scheme. The High Court ruling, however, reinstated the original government pension entitlement for those workers, which implies a significant pension liability for the Government. These examples illustrate how the coherence of a pension a system depends not only on the internal coherence of each pension scheme, but also on how they interact.

An additional financial benefit provided to older persons comes in the form of discounts or preferential rates designed to ease the financial burden of electricity and water bills. In Antigua and Barbuda, there is a Senior Citizen Utility Subsidy Programme and in Saint Kitts and Nevis, the Seniors' Subsidized Utilities Program. In Saint Vincent and the Grenadines and Trinidad and Tobago, there are schemes providing subsidized water and electricity to low income households, from which some older persons benefit. The Water and Sewerage Corporation of the Bahamas has a Senior Discount scheme while, in Guyana, the old age pensioners' water subsidy was recently reinstated and, in Sint Maarten, there is a Senior Citizens Utility Relief Program providing discounted electricity. These schemes are either means-tested or linked to pension entitlements.

2. Sustainability of pension systems

Public expenditure on pensions as a percentage of GDP has increased in recent years and demographic trends mean that expenditure will continue to trend upwards. This is due, above all, to the increasing numbers of older persons. The number of working age persons will also start to decline, and in some countries it is already falling. It is this relative increase in the number of older persons versus persons of working age which makes it increasingly difficult to fund growing pension entitlements.

In a study published in 2018, Nam and Jones estimated that across 9 Caribbean countries, public funding for pensions would need to increase from an average of 3.7 per cent of GDP in 2010 to an average of 9.8 per cent of GDP in 2050, to maintain the same level of benefit generosity. In their 2021 study of six Caribbean countries, Schwartz and Zegarra also made projections of future public sector spending on pensions. Their estimates indicate average expenditure increasing from 4.7 per cent of GDP in 2019 to 9.8 per cent of GDP in 2050.

The cost of providing pensions to an increasing number of older persons will require increased pension contributions and taxation. These costs can be mitigated to some extent by increasing retirement ages and/or making adjustments to the rate at which benefit entitlements are accrued, in order to make it more feasible to maintain and improve the levels of pension benefits.

While managing these future cost increases, governments also need to take steps to close the gaps which currently exist in pension coverage and to increase pension levels for those not currently receiving an adequate income. The first priority should be to mitigate the extreme hardship faced by older persons with no pension income by closing the coverage gap and guaranteeing a minimum level of pension income to all older persons. This has to be achieved through expanding the coverage of

⁵ Benefit generosity is expenditure per pensioner as a percentage of GDP per worker (see Nam and Jones, 2018).

non-contributory pensions. Once a pension floor is established, the level of this floor should be progressively increased. Meanwhile, there should be renewed efforts to expand national insurance coverage so that, in future, there will be fewer people entering old age with no contributory pension entitlement. This requires policies and sector-specific interventions to incentivise small enterprises and self-employed workers that are operating informally to register with national insurance agencies and formalize their operations. It will also require strengthened capacity in labour inspection and compliance.

Pensions also need to be uprated periodically to take account of changes in the cost of living. The Bahamas, Barbados and Dominica have introduced indexation based on the consumer price index (CPI) for contributory pensions to ensure that pensions maintain the same purchasing power. In other countries, the arrangements for uprating pensions are more ad hoc and, for individual pensioners, this has a tendency to result in pensions losing value in real terms. For example in Saint Lucia, the National Insurance Corporation recently announced that a CPI-linked pension increase, the first since 2015, that was initially scheduled for 2024, would be brought forward to 2022 due to recent cost of living increases. To avoid pensions eroding in value, they should be indexed to consumer prices in a regular and systematic way.

D. Work and the ageing labour force

Improved pension provision has meant that fewer Caribbean older persons are forced to continue working into old age. In 2020, an estimated 27 per cent of males aged over 65 were still in the labour market, compared to 30 per cent in 2000 and 37 per cent in 1990 (figure 6A). Over the same period female labour market participation (65 and over) declined from 14 per cent (1990) to 12 per cent (2000) and 11 per cent (2020). However, labour force participation among older persons remains much higher in countries with lower pension coverage rates and pension levels. For example, labour market participation among persons aged over 65 is relatively high in Belize and Jamaica compared with Guyana, Trinidad and Tobago and Suriname (figure 6B). This suggests that a significant number of older persons continue working because they have no pension income or inadequate pension income. Many of these older workers are own account workers engaged in informal activities of various kinds. While in some cases this may reflect a preference of older persons to work on a self-employed basis, it also reflects the fact that older persons find it much more difficult to obtain work as paid employees due either to compulsory retirement ages or age discrimination.

Older persons should not be forced to continue working into old age due to inadequate pensions. However, the MIPAA does call for elimination of age barriers in the formal labour market, assistance for older workers in the informal sector, and for all older persons to be enabled to continue with incomegenerating work "for as long as they want and for as long as they are able to do so productively." To facilitate this, the Plan includes actions for the promotion of occupational health and safety, life-long learning and vocational rehabilitation.

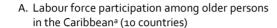
With increased longevity, the persistence of gaps and deficiencies in existing pension provision, and the increasing cost of funding pensions, governments will need more older people to continue working for longer. This process is already underway with many countries having implemented, or considering implementation, of increases to retirement ages. These reforms should be accompanied by policies to encourage a more flexible approach to work and retirement for older persons, helping them to remain economically active for longer in a way which is compatible with their life goals.

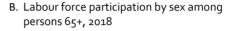
Among 13 Caribbean countries, four have completed the implementation of increases to the retirement age⁶ in the last two decades: Barbados (from 65 to 67), Dominica (from 60 to 65), Jamaica

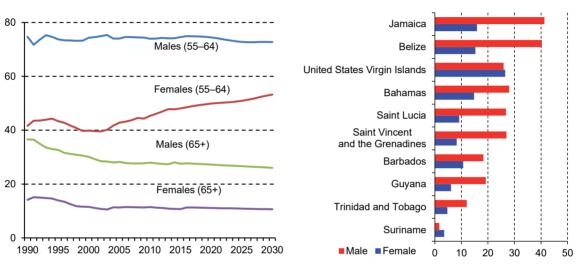
⁶ The age of eligibility for a full national insurance (contributory) retirement pension.

(from 60 to 65 for women) and Saint Lucia (from 60 to 65). A further two countries are currently implementing increases: Antigua and Barbuda (from 60 to 65, to be completed by 2025) and Saint Vincent and the Grenadines (from 60 to 65, to be completed by 2028). In other countries, actuarial reports have recommended increases, including Bahamas (from 65 to 67), Grenada (60 to 65), Saint Kitts and Nevis (62 to 65) and Trinidad and Tobago (60 to 65).

Figure 6
Labour market participation of older persons
(Percentages)







Source: ILOSTAT.

The Government of Jamaica's new National Policy for Senior Citizens emphasises active and productive ageing. This includes commitments to "equitable employment and labour policies and legislation to support the labour market engagement of senior citizens"; and to "encourage participation in economic livelihoods, even beyond normal retirement ages, in accordance with people's abilities and talents." To support older persons in the development of micro-enterprises, the National Council for Senior Citizens (NCSC) runs entrepreneurial/skills-training workshops, focusing on activities such as artisan soap making, black castor oil production, culinary arts, garment construction, marketing on social media and packaging (PIOJ, 2022).

To encourage older persons to remain in the workforce and to help them to combine work with changing priorities and personal circumstances, the MIPAA promotes the principle of flexible retirement. Instead of a common statutory retirement age, the intention is to give organizations and their staff more scope to be flexible about when staff retire, whether retirement is phased and whether responsibilities and/or work patterns change in the final months and years before retirement.

Some Caribbean national insurance schemes offer workers a degree of flexibility and the option to either retire early or to delay retirement. For example, the national insurance schemes of Belize and Trinidad and Tobago allow workers to continue working beyond the standard retirement age of 60. After the age of 65, the pension is paid irrespective of whether someone continues to work. This is

^a Bahamas, Barbados, Belize, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago and the United States Virgin Islands.

particularly useful for workers who have not paid sufficient contributions to entitle them to a full pension at age 60. Meanwhile, in the Bahamas (where the retirement age is currently 65) and Saint Vincent and the Grenadines (where the retirement age is currently 63 but increasing to 65), workers can retire early from the age of 60, albeit with a reduced pension. In Barbados, workers can retire either early or late with appropriate adjustments made to their pension entitlement.

In order to encourage more people to remain in the workplace, the Government of Bermuda recently increased the mandatory retirement age for many public sector workers from 65 to 68. The new legislation does not force people to work beyond the age of 65 but gives them the option to continue working if they wish to. For now, workers continue to become eligible for a social insurance pension at age 65 although the government is considering reforms which would delay this entitlement. In a similar vein, the British Virgin Islands Retirement Age Act (2016) prohibits employers from forcing any employee into retirement before the age of 65.

In addition to pension sustainability, there are wider economic, social and health benefits to retaining older persons in the labour force or facilitating their return, whether full or part time. Older persons have valuable skills and experience, and many employers can benefit from retaining or employing older workers. Work also keeps older persons socially, physically, and mentally active in a way which can be beneficial to their health and well-being.

Governments and employers should promote measures to ensure that workplaces provide age-friendly environments which encourage older persons to remain at, or return, to work. Employers can do this by supporting older workers in aligning their personal aspirations and their job descriptions with organizational goals. The work environment should be one where workers feel comfortable discussing their career aspirations, training needs, retirement planning, and any health-related issues while managers are able to discuss performance issues. Older workers who have accumulated knowledge and experience often value autonomy or working in roles which enable them to utilize the skills and experience that they have built up, perhaps passing it onto others.

Working age people should be encouraged and supported in preparing for their own retirement, and in making choices during their working lives which will better enable them to enjoy an active, healthy and financially secure retirement. For example, if people are able to save and invest in pensions and other assets during their working lives, they will be more financially secure in old age. If people pursue healthy lifestyles, they are more likely to enjoy good health in old age. If they know how to manage and protect their income and assets, they will be less vulnerable to unexpected events (Rouse and Inniss, 2015).

A number of Caribbean governments and national councils on ageing have organised seminars and workshops, over the last five years, to promote planning for retirement among the working age population. The National Council for Senior Citizens of Jamaica organized public seminars; the Division of Ageing of Trinidad and Tobago organised two-day seminars for public officers; while the National Council on Ageing of Belize devoted its 2018 conference to financial planning for retirement.

Retirement planning seminars or symposiums have also been run by the Department of Public Administration in Grenada, the National Insurance Services of Saint Vincent and the Grenadines, and as part of the Eastern Caribbean Currency Union's (ECCU) Financial Information Month in October 2017. In 2020, the Government of Barbados established a Financial Literacy Bureau within its Ministry of Energy and Business Development. It is intended to equip the Barbadian population with the ability to "make sound informed and effective financial decisions through life," and the Bureau recently ran a virtual clinic on retirement planning.

As people work for longer, employers need to maintain the health and well-being of their workforces through occupational health and well-being support including, for example, adjustments to

tasks or equipment. They should be aware of, and seek to mitigate, work-related health risks taking advice from occupational health experts, addressing issues related to workplace design and considering preventive redeployment.

When workers do become ill, it does not necessarily mean that their work will be affected. In some cases, adjustments to work can enable an employee with a health problem to continue effectively in their role. The biggest barrier to working with a health problem may be employers' attitudes, rather than the health condition itself (EU-OSHA 2016).

The age-friendly workplace should treat all employees fairly, irrespective of age, meaning that people should be judged based on their skills, competencies and experiences rather than their age. There should be legal protections against discrimination on the grounds of age in recruitment, training, and progression. Age limits should only be used where necessary. In recruitment, it may be desirable to explicitly target older applicants, for example, with age-specific advertisement campaigns. Where older workers choose to continue working, it should not adversely affect their pension entitlement. It is important to be objective about the performance of older workers and to counteract the stereotypical views of the abilities and attitudes of older workers that some employers may have (EU-OSHA 2016), and efforts should be made to change the public perception of older workers.

II. Ageing, health and care

Longer life expectancy is a major accomplishment, but older persons can only enjoy those years to the full if they maintain good health. This chapter examines the policies and programmes that Caribbean countries have implemented to promote healthy ageing in the following thematic areas: chronic noncommunicable diseases, health care access and coverage, long-term care services, and COVID-19. The sections for each focal area provide an overview of the existing state of research; an overview of the policies, programmes, or initiatives implemented in different Caribbean countries with a focus on best practices that can serve as models for other countries; and policy recommendations, within the context of MIPAA, to support healthy ageing and improved overall population health in the Caribbean.

The MIPAA establishes in its second priority direction that older persons are fully entitled to have access to preventive and curative health care while also emphasising the importance of health promotion and disease prevention throughout life. The conceptulization of health as a human right adopted by the United Nations Committee on Economic, Social and Cultural Rights makes clear that this entitlement contains the following elements: healthcare facilities, goods, services and information that are available in sufficient quantity without discrimination, and are physically accessibile, affordable, respectful of medical ethics, culturally appropriate and of good quality (United Nations, 2000).

A. The epidemic of non-communicable diseases

Notwithstanding cross-national variations in the pace of population ageing across the Latin American and Caribbean (LAC) region, many countries are undergoing rapid population ageing. Overall improvements in social conditions and public health during the 20th century have contributed to life expectancy gains across the region. The Caribbean is the LAC subregion with the largest share of older persons (aged 60 and older) and it has seen gains in both life expectancy and healthy life expectancy since the 1990s (Martinez and others, 2021). On average, adults at age 60 in the Caribbean subregion live an additional 21 years (PAHO, 2017). However, population ageing is a gendered process and, as observed globally, Caribbean women at age 60 can expect to live longer than their male counterparts. As shown in table 2, in most Caribbean countries women outlive men by approximately 3 years on average.

Table 2 Life expectancy and healthy life expectancy at age 60 by sex (Years)

	Life Expectar 2020-	, ,	Healthy Life Expe 20	ectancy at age 60 119	
	Women	Men	Women	Men	
The Caribbean	23.50	20.82			
Antigua and Barbuda	21.81	20.94	16.34	15.27	
Bahamas	21.07	18.57	17.27	14.92	
Barbados	25.11	23.88	16.92	15.68	
Belize	23.43	21.08	17.60	15.90	
Curaçao	25.03	21.98			
Grenada	20.34	16.92	15.56	13.14	
Guadeloupe	27.99	23.69	**	••	
Guyana	22.41	19.72	13.62	11.47	
Jamaica	20.99	20.17	17.33	15.50	
Martinique	28.13	23.75	**	••	
Puerto Rico	26.63	22.95			
Saint Lucia	22.40	22.73	17.13	14.65	
Saint Vincent and the Grenadines	20.91	18.36	16.44	15.42	
Suriname	20.70	17.12	15.42	12.61	
Trinidad and Tobago	22.05	19.27	18.88	15.57	
United States Virgin Islands	25.76	21.48			

Sources: United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects 2019 and World Health Organization, Global Health Observatory Indicators, Healthy Life Expectancy (HALE) at age 60.

Ageing societies also undergo an epidemiological transition whereby the primary cause of mortality shifts from infectious to non-communicable diseases (Santosa and others, 2014). Although infectious diseases continue to account for a significant proportion of deaths in some low and middleincome countries (LMICs), non-communicable chronic diseases (NCDs) are increasingly prevalent in these countries. Around 85 per cent of global premature deaths due to NCDs occur in LMICs (WHO, 2014). Globally, cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases account for over 80 per cent of all premature NCD deaths (WHO, 2022).

Specifically in the Caribbean subregion, cardiovascular diseases, cancer, and diabetes were the leading causes of mortality among the general population, over the period 2006 to 2016 (Razzaghi and others, 2019). Moreover, the disease burden attributable to each of these three categories of NCDs is increasing over time (Jones, 2021). Among Caribbean adults 60 years and older, ischaemic heart diseases, cerebrovascular diseases and diabetes are among the five leading causes of death (Quashie and others, 2018). This also means that longer lifespans are often accompanied by poor health due to disease and/or disability that undermines individuals' well-being (Al Snih and others, 2010). Healthy life expectancy of Caribbean men and women is, on average, more than 5 years lower than their total life expectancy.

Modifiable lifestyle behavioural risk factors including tobacco use, inadequate physical activity, unhealthy diets, and harmful alcohol use are associated with increased risk of non-communicable disease. The Americas, including the Caribbean subregion, is amongst the world regions with the highest prevalence of physical inactivity and harmful alcohol consumption (WHO, 2014). Additionally, high levels of salt consumption, an indicator of unhealthy diets, is a major contributing factor to hypertension (elevated blood pressure) that affects between 20 and 35 per cent of adults in the Americas. Hypertension, in turn, is associated with more than half the deaths from cardiovascular diseases in the region (PAHO, 2021a).

The NCD burden and associated risk factors are increasingly prevalent among younger adults, with implications for their future health and quality of life. Over the period 2006 to 2016, the World Health Organization (WHO) and the Caribbean Public Health Agency (CARPHA) collaborated to conduct NCD risk factor surveys among the population aged 15 to 69 based on the WHO Stepwise Approach to Surveillance (STEPS) methodology. A recent review of the health status of Caribbean countries, based on data from the STEPS surveys, shows high risks for NCDs in all countries. Specifically, all countries reported levels of fruit and vegetable consumption below global recommendations (with no significant gender differences) and a high prevalence of obesity and overweight (higher among women). There were wide cross-national variations in tobacco use (current and daily smokers) and the harmful use of alcohol, with these risk factors being more common among men than women. Regarding physical inactivity, there was also wide variation across countries, with men typically more physically active than women (see CARPHA 2019). Overall, the findings on individual-level risk factors from the STEPS surveys provide an indication of the likely health trajectories of Caribbean countries and the future levels of NCD incidence and related mortality. Additionally, within the population from adolescence through adulthood, the risk factors tend to be more prevalent among women thereby reinforcing the gendered health risks for chronic conditions in later life.

The extent of the NCD burden facing Caribbean countries can also be assessed by the risk of premature mortality. Premature mortality refers to the probability of dying between age 30 and exact age 70 from the leading NCDs. Table 3 shows that in 2019 the estimated risks of premature mortality were highest in Guyana (29 per cent), Grenada (23 per cent), and Suriname (23 per cent). Taken together, the increasing prevalence of NCDs among younger adults and the high risk of premature mortality due to NCDs indicate that Caribbean countries need substantial investments in health and care infrastructure as well as human resources to manage this ongoing epidemiological transition.

Table 3

Premature mortality from the four main non-communicable diseases in Caribbean countries

(Estimated probability (percentage) of dying between ages 30 and 70 due to 4 main NCDs)

		2000			2019	
-	Male	Female	Both sexes	Male	Female	Both sexes
Antigua and Barbuda	21.8	16.4	18.9	17.5	17.6	17.6
Bahamas	23.1	17.1	19.9	23.6	16.6	19.9
Barbados	19.4	14.9	17.0	17.5	14.6	16.0
Belize	26.1	20.8	23.4	18.5	14.3	16.5
Grenada	27.3	19.0	23.0	26.3	20.2	23.4
Guyana	38.8	32.7	35.7	32.1	26.4	29.2
Jamaica	18.4	18.1	18.2	16.3	17.4	16.9
Saint Lucia	23.4	17.4	20.3	20.8	14.6	17.7
Saint Vincent and the Grenadines	25.3	23.4	24.3	22.8	18.4	20.7
Suriname	27.1	21.1	24.0	27.8	17.9	22.7
Trinidad and Tobago	32.4	25.3	28.7	20.3	14.1	17.1
Caribbean (11 countries)	25.3	21.5	23.3	20.8	17.4	19.1

Source: World Health Organization, Global Health Observatory, Indicators for NCD mortality.

B. Promoting healthy ageing: national approaches to address NCDs

Rapid population ageing and the increasing health burden posed by NCDs underscores the need for Caribbean countries and territories to implement comprehensive and evidence-based policies to address NCD risk factors. The San José Charter, which serves as the regional framework for the implementation of the MIPAA, identified the need for countries to design and implement programmes to effectively address communicable and non-communicable diseases.

Governments in the Caribbean recognize that non-communicable diseases are a regional challenge (Eldemire-Shearer and others, 2011) and several countries have developed and implemented policies or national strategic plans to address NCD risk factors and reduce the prevalence of chronic diseases (Quashie and others, 2018). Based on a WHO survey of national capacity to address NCDs carried out in 2021, 6 of 13 Caribbean countries reported having an operational, multisectoral national NCD policy, strategy, or action plan that integrates several NCDs and their risk factors and extends beyond the health sector. ⁷ These countries were Barbados, Belize, Guyana, Saint Lucia, Saint Vincent and the Grenadines and Suriname (see table 4).

Table 4 Adoption of national NCD policies, strategies or strategic action plans, 2021

	ATG	BHS	BRB	BLZ	DMA	GRD	GUY	JAM	KNA	LCA	VCT	SUR	TTC
Multisectoral NCD policy	0	0	•	•	0	0	•	0	0	•	•	•	0
Physical Activity Awareness	0	0	0	0	0	0	0	•	•	0	•	0	•
Reduce Salt Consumption	0	0	0	0	0	0	0	•	0	0	•	0	0
Marketing Food to Children	0	0	0	0	0	0	0	0	0	0	0	0	0
Cardiovascular Diseases	0	•	•	•	0	0	0	0	0	•	•	•	•
Cancer	0	•	•	•	0	0	0	0	0	•	•	•	•
Diabetes	0	•	•	•	0	0	0	0	0	•	•	•	•
Chronic Respiratory Diseases	0	0	•	•	0	0	0	0	0	•	•	•	0
Reduce Harmful Use of Alcohol	0	•	•	•	0	0	0	0	0	•	•	•	•
Reduce Unhealthy Diet related to NCDs	0	•	•	•	0	•	0	0	0	•	•	•	•
Reduce Physical Inactivity	0	•	•	•	0	0	0	0	0	•	•	•	•
Reduce Tobacco Use	•	•	•	•	0	0	•	•	0	•	•	•	•
Plan for Oral Health	0	0	•	0	0	•	0	•	0	0	0	0	•
National Policy on Saturated Fatty Acids	0	0	0	0	0	DK	0	•	0	0	0	0	0
National Policy on Trans Fatty Acids Elimination	0	0	0	0	0	DK	0	0	0	0	0	0	0

[•] policy, strategy or plan adopted Opolicy, strategy or plan not adopted DK don't know

Source: World Health Organization, Global Health Observatory, Indicators for NCD National Capacity Policies, Strategies and Action Plans.

[&]quot;Multisectoral" refers to engagement with one or more government sectors outside of health. "Operational" refers to a policy, strategy or action plan which is being used and implemented in the country and has resources, and funding, available to implement it. Countries who have a "Yes" for this indicator have responded "Yes" to the questions "Does your country have a national NCD policy, strategy or action plan which integrates several NCDs and their risk factors?" and to the sub question "Is it multisectoral?". Additionally, countries had to respond "operational" for the sub question "Indicate its stage" and indicate that the policy/strategy/action plan addresses the 4 main risk factors for NCDs (harmful alcohol use, unhealthy diet, physical inactivity and tobacco) and the 4 main NCDs (cancer, cardiovascular diseases, chronic respiratory diseases and diabetes). An exception is made for alcohol according to national context. See the WHO Global Health Observatory's Indicator Metadata Registry List.

The Bahamas and Trinidad and Tobago reported a policy, strategy or action plan to address three of the four major NCDs and the behavioural risk factors. Only four countries had a national policy to increase awareness of the importance of physical activity. Physical activity programmes are among the low cost "best buys" for countries to reduce the incidence of, and mortality due to, non-communicable diseases. A meta-analysis of the global disease burden due to major chronic NCDs indicates that physical inactivity accounts for 6 to 10 per cent of the leading chronic non-communicable diseases and 9 per cent of premature mortality. Moreover, increasing physical activity may potentially add 0.82 years to the life expectancy of the Latin American and Caribbean population (Lee and others, 2012). A growing body of empirical studies has shown that physical activity can have beneficial long-term effects on managing weight gain, preventing obesity, and reducing the risk of developing chronic heart disease, type 2 diabetes, Alzheimer's and related dementias (Reiner and others, 2013).

National efforts to improve public health through increased physical activity would benefit from enhanced collaboration between researchers, physicians and other health care personnel and physical activity service providers (e.g. gyms, recreational centres) to improve health communication to the population about the long-term benefits of physical activity. Public health concerns should also be incorporated into urban and territorial planning to promote the development of safe public spaces for recreational and physical activities. Policies such as dedicated taxes on alcohol, tobacco and sugar-sweetened drinks and food labelling regulations should also be considered to reduce harmful consumption habits and promote healthy eating.

C. Health care provision: equitable access and financing

Within the context of population ageing and a high prevalence of chronic diseases, Caribbean countries and territories face increasing demands for primary, secondary, and tertiary health care. Therefore, governments need to increase their investment in healthcare infrastructure, services, and human capital (the health care workforce). Figure 7 shows that, on average, total current health expenditure for Caribbean countries was between 4 to 10 per cent of total gross domestic product (GDP) in 2019, averaging 5.8 per cent. Government expenditure on health averaged 3.3 per cent of GDP in 2019, up from 2.6 per cent in 2010, but still substantially below the 6 per cent target recommended by PAHO. Out-of-pocket expenditure was equivalent to 1.9 per cent of GDP, in 2019, and other health expenditure 0.5 per cent of GDP (most of which consists of other private expenditure such as that through private health insurance).

Caribbean health systems are characterised by a mixture of public and private provision. Across 13 countries, public spending accounts for an average of 56 per cent of current health expenditure (CHE) and private spending an average of 42 per cent. Although older persons can access many health care services free of charge within the public healthcare system, there are also many unmet demands for care, medication and other services. This results in high levels of out-of-pocket expenditure as individuals (particularly with multimorbidity) seek and purchase health care privately (Macinko and others, 2019). Of the 42 per cent of CHE which is private, the majority (34 per cent) is accounted for by out-of-pocket expenditure.

Figure 7
General government, out-of-pocket and other current health expenditure, 2019
(Percentages of GDP)

Source: World Health Organization, Global Health Expenditure Database, Indicators, Aggregates and Financing Sources.

Note: Data are shown for the following 13 countries: Antigua and Barbuda (ATG); Bahamas (BHS); Barbados (BRB); Belize (BLZ);

Dominica (DMA); Grenada (GRD); Guyana (GUY); Jamaica (JAM); Saint Kitts and Nevis (KNA); Saint Lucia (LCA); Saint Vincent and the Grenadines (VCT); Suriname (SUR) and Trinidad and Tobago (TTO). The estimates for the Caribbean (CAR) are simple averages.

Based on the most recent data, for 2019, private health expenditure was highest in Grenada at 59 per cent of CHE and lowest in Suriname and Belize at 27 per cent of CHE. With widespread dependence on private and out-of-pocket expenditure whenever care cannot be easily accessed through the public health system, medical costs commonly result in financial hardship or act as a barrier to health care.

High levels of out-of-pocket expenditure, therefore, indicate deficiencies in public or market-based health care services while also pointing to other social inequalities in access to quality health care. Generally, individuals with higher socioeconomic resources or health insurance coverage tend to access high-quality health care (Scott and Theodore, 2013). Other social and institutional barriers for older persons to access primary health care include insufficient or unreliable public transport, the long waiting period to meet doctors, an insufficient supply of medical/health care personnel, poor communication with medical staff, lack of age-friendly bathroom facilities and/or improper maintenance of these facilities (see CARPHA 2019 for a detailed review).

Over the past twenty years of implementing the MIPAA, most Caribbean countries and territories have made steady progress in reducing socioeconomic inequalities in health care access, especially within primary healthcare systems. One of the most common strategies has included the elimination of user fees for health care services at public health facilities and/or free medication for older persons, including medications for some chronic NCDs (Jones, 2016; PAHO, 2017). Yet challenges remain for older persons seeking to access care and medications, including the unavailability of medications in public facilities and the limited range of medications available. For example, Jamaica's Drug for the Elderly Programme (JADEP) provides free drugs for a list of NCDs to persons aged over 60 while Trinidad and Tobago's Chronic Disease Assistance Programme does the same for all citizens, but neither programme provides drugs for

Alzheimer's disease, the most common form of dementia. Older persons, therefore, often have to rely on the private sector and self-financing for medications⁸ (PAHO, 2017).

Within the subregion, there are a few countries where older persons' primary health care access depends on government-operated health insurance coverage. In Antigua and Barbuda, most citizens access free health care through the contributory National Medical Benefits Scheme (MBS). Non-contributors, of any age, can receive free medications for chronic conditions and adults 60 years and older are entitled to free medications through the MBS (PAHO, 2010; 2017). Similarly, in Aruba, Bahamas, British Virgin Islands, Cayman Islands, Sint Maarten, and Suriname, health care coverage operates through the respective national health insurance system.

Moreover, countries vary in the degree to which health care coverage is *universal* within their systems of national insurance. For instance, in Aruba health insurance covers all levels of care from primary to tertiary for all citizens whereas in Bahamas coverage is limited to primary care services (and some specialized services such as laboratory tests and medicines), and in the British Virgin Islands co-payments (though low) are required within the network of public hospitals and private health facilities. In Sint Maarten, the state subsidizes some medical expenses of the uninsured. In Suriname, the 2014 Basic Health Insurance Act provides a basic package for primary to tertiary care for all citizens and the state provides free health care to the population aged under 16 and those aged 60 and over. In the Cayman Islands, there are approved private providers and a government-owned health insurance company which currently provides coverage mainly to civil servants, pensioners, and those unable to obtain private insurance, but the system is beset by escalating costs (PAHO, 2017).

Finally, tertiary care is completely unavailable in some countries and is only accessed overseas in neighbouring Caribbean countries or internationally (the United States or the United Kingdom). Countries without tertiary care include the British Virgin Islands, Dominica, Montserrat, Saint Kitts and Nevis, Saint Vincent and the Grenadines, and Sint Maarten. In most of these countries, tertiary care that is sought overseas needs to be financed by individuals. In two countries, Montserrat and Sint Maarten, the government provides some coverage for tertiary care overseas. In Montserrat, economically insecure citizens including older persons, on and off the island, are eligible for medical assistance through a means-tested programme administered by the Social Services Unit of the Ministry of Health and Social Services. In Sint Maarten, tertiary care is available through an agreement between insurers (mainly the Social and Health Insurance, SZV) and health facilities in various countries: Aruba, Colombia, Cuba, Curaçao, the Dominican Republic, the United States, and Venezuela.

Recognizing the importance of investing in high-quality primary health care services as a preventive population-level health care strategy that supports healthy ageing, several countries have recently adopted policies or implemented measures to strengthen their primary healthcare systems, integrate NCD prevention, treatment and management, and target older persons.

In Jamaica, a Minimum Package of Care for persons aged 60 and over was introduced to help older persons maintain function, treat illness and access long-term care. The package includes primary as well as some secondary and tertiary services and was delivered as part of the Ministry of Health and Wellness' Ten Year Strategic Plan, a major focus of which is to strengthen primary health care. Critically, the Minimum Package of Care identifies the community health centres as a primary conduit of effective care for older persons, including health promotion and prevention programmes/services for older persons and their caregivers, and management of chronic NCDs. Additionally the home visiting programme includes a wide range of health and social services: vital checks, foot care, nutrition counselling, pharmacy pick up and drop off services, and caregiver education and support (CARPHA, 2019).

⁸ In Trinidad and Tobago, eligible beneficiaries of the Chronic Disease Assistance Programme can access medications at private health facilities at a lower (subsidized) cost when medications are unavailable in public health facilities.

In Montserrat, the Government developed and held public consultations on a new National Policy on the Care of Older Persons 2022–2026. The main health care priorities include improving the provision of primary and secondary health care services; promoting health care and healthy lifestyles to reduce the prevalence of NCDs; and developing guidelines and processes for monitoring the health status of older persons (Government of Montserrat, 2021).

The Government of Cayman Islands is planning to expand the availability of affordable health insurance through CINICO, a government-owned national insurance company. CINICO was formed to provide health insurance coverage to civil servants, but the intention is to develop affordable health plans for younger residents and retirees, so that "CINICO truly becomes a national insurance provider" (Cayman Islands Government, 2022).

The Government of Saint Kitts and Nevis has been working to strengthen health systems with the primary aims of developing a national health insurance scheme, strengthening universal health coverage and access to essential health services, and improving primary health care. However, the fiscal impacts of COVID-19 on the Government's budget have delayed the launch of the national health insurance scheme.

In Saint Lucia, the first phase of the national health insurance system is under development. In the proposed system, payment of health insurance premiums will provide access to packages of services, with providers being reimbursed directly by the insurers. The first phase of implementation will include essential services at the level of primary health care geared toward the treatment and management of non-communicable diseases.

In summary, Caribbean countries have mixed public/private health care systems with health coverage operated through a national health insurance scheme in some countries and territories. Caribbean countries have made progress towards reducing economic barriers to health care access, especially among older persons. Nevertheless, capacity constraints in the primary health care system incentivize the use of private health care services and can deter others from seeking health care entirely. Indeed, research has suggested that older persons in the region experience unmet health care needs within the primary health care sector. Even in countries such as Barbados, where primary health care services are well developed and accessible, older persons prefer private facilities where available and within their financial means because of the perceived higher quality service (Cloos and others, 2010). Furthermore, in countries where tertiary (specialized) care must be sought overseas and is not financially supported by the government, this can contribute to widening socioeconomic inequalities in later life health as the wealthiest individuals will be better positioned to seek health care abroad.

Notwithstanding the importance of eliminating economic barriers to health care, many, if not all, Caribbean countries also need to address critical social and institutional gaps in service delivery in primary health care settings: improving health advice/consultations; reducing waiting times; improving the availability of medication through the public healthcare system; ensuring dignified/respectful communication with medical staff; and redesigning health centres to accommodate older persons with and without mobility limitations (Macinko and others, 2016; CARPHA, 2019).

Additionally, countries need to better integrate the treatment and management of non/communicable diseases and their risk factors into the primary healthcare system. Reducing the deterrents to individuals' use of primary health care, combined with better integration of NCD prevention and management, can contribute to reducing the prevalence of NCDs and disabilities as societies age. Improvements to primary health care can also help relieve some of the current and future strains on formal and informal long-term care systems across the Caribbean.

As populations age and the demand for health services increases, strengthening public health systems and increasing their capacity will be critical to meeting the health needs of older persons and

reducing inequalities in access and health outcomes. The integration of NCD programmes within the primary care network has a particularly important role in the prevention and management of NCDs, which will help to reduce (or delay) the need for secondary and tertiary care and the onset of disabling conditions that require long-term care. As behavioural lifestyle risk factors for chronic conditions are increasingly prevalent at earlier stages of the life course, including adolescence and young adulthood, national health care policies and programmes should adopt a lifespan approach to NCD prevention and management.

D. Long-term care services: residential and home-based care

The Caribbean is expected to see an increased need for formal long-term care services as a growing number of older persons experience the onset and progression of health declines, and traditional familial resources for care/support may be unavailable due to a combination of demographic and social changes including declining fertility, increasing migration and women's labour force participation (Pelaez and Martinez, 2002; Quashie and Zimmer, 2013). Long-term care may be provided within a designated residential facility or within the individual's home. The MIPAA and subsequent regional agreements also emphasise that measures should be implemted to protect the human rights and fundamental freedoms of older persons residing in any shelter care or treatment facility.

Many Caribbean countries have a limited supply of public and private long-term care homes (CARPHA, 2019; Govia and others, 2021). Even where available, there are challenges and limitations to the quality of care provided including inadequately trained and insufficient staff, the possibility of abuse and unsafe building structures. Although many countries have regulations for residential long-term care facilities, there is inconsistency in the extent to which the minimum standards of care are enforced as countries often lack the institutional capacity for monitoring these residential facilities. There should be registration of all residential facilities and regular independent inspections.

Barbados, Bahamas, and Bermuda are among the forerunners in their provision of state-provided residential care to older persons. In Bahamas, there are several government-owned residential homes while the Sandilands Rehabilitation Centre provides care for older persons with medical, social, and psychiatric problems. The Government of Barbados operates the Alternative Care for the Elderly Programme (ACEP) which provides public funding for long-term care in privately owned nursing homes. Bermuda provides a leading example regarding the regulation of long-term care homes. The government provides a wide network of residential and home-based care for older persons that is coordinated and managed through the Department of Aging and Disability Services within the Ministry of Social Development and Seniors (Government of Bermuda, n/d). All residential care and nursing homes require registration with the Chief Medical Officer of Aging and Disability Services. Currently, there are 17 registered residential care homes for older persons. These facilities are monitored through the Residential Care Home and Nursing Home (RCH) regulations. In Guyana, the Government is at an earlier stage in the development of regulations, standards and inspection of residential care homes. Minimum standards for elderly residential care facilities were developed in 2016 and the Elderly Home Visiting Committee was created in 2017. The committee carries out visits with the emphasis being on supporting and working with the owner and staff of the homes to bring them up to standard.

Day care services for older persons, for example those living with family carers who go out to work during the day, are provided either by long-term care homes or non-residential day care centres. There is some limited public provision of day care services but not all older persons have access to the care that they need at a price they can afford. There are often waiting lists, particularly for more affordable care options.

Day care services, in particular, were affected by the pandemic with many centres closed, perhaps because day care services were not regarded as essential in the same way as residential care. However, many users of adult day care have similar needs to those in nursing homes, and require day care services to enable them to continue living in the community. These services, therefore, need to be regarded as essential and maintained, with appropriate COVID-19 protection measures.

Long-term care services may also be provided to older persons within their homes. Many Caribbean governments have invested in developing (or improving) home care programmes. These programmes are generally managed and administered through the government ministry responsible for policy for older persons. They typically provide nursing care and assistance to dependent older persons and those with activity limitations in areas including dressing, eating, bathing, and preparing meals. Caregivers are generally trained in nursing or geriatric care. Other services include Meals on Wheels programmes, which deliver prepared meals to older persons at their home. Another common feature across countries is that home-based care programmes typically target vulnerable older persons and those with limited financial and/or social support.

Nevertheless, government-operated home care programmes also suffer from limitations and deficiencies. In some countries (e.g., Guyana, Jamaica, Saint Lucia) the home care programmes are only available in set geographic locations or monthly. Thus, many older persons in the region rely on networks of community-based, faith-based, and non-governmental organizations.

The National Assistance Board of Barbados recently launched an Elder Care Companion Programme. This programme is intended to supplement the existing Home Help Programme, but whereas the focus of Home Help is to support older persons with activities like cooking, cleaning, washing, bathing etc., the new Elder Care Companion Programme is concerned more with emotional and psychosocial well-being. Companions are trained in communication, mental health and social work and the programme will tackle the widespread problems of loneliness and isolation among older persons.

The Government of Bermuda, in 2015, launched the Personal Home Care (PHC) Benefit to assist with the cost of home care services. Family and friends may register as a care provider if they meet the registration requirements which for family members includes providing unpaid voluntary care to their family member for up to 12 hours per day.

Caribbean countries need to make the development and improvement of long-term care systems a national priority. This includes the construction of facilities (applying principles of age-friendly design), legislation, registration and the enforced monitoring and evaluation of facilities to ensure that fundamental human rights to health, security and protection from abuse and neglect, among others, are protected.

As most older persons in the Caribbean subregion rely on informal care, typically by female family members, all countries need further government investments to alleviate the burden on family caregivers to protect their health and well-being which, in turn, protects those depending on their care. Governments need to invest in comprehensive caregiver support, including financial, social and health support. Some potential policy strategies include paid leave for family caregiving, flexible work arrangements, as well as developing and subsidizing respite care services, including investment in geriatric care.

E. Palliative care

With rapid population ageing and NCDs being the leading cause of mortality in the Caribbean subregion, an increasing number of older persons and their families are likely to experience years of distress due to longterm illness, incapacity and the associated strains on family caregivers. Indeed, the WHO has identified several diseases (including chronic non-communicable and communicable diseases)⁹ that can be used as a guide to determine the needs for palliative care within the adult population (WPCA and WHO, 2014).

The WHO define palliative and hospice care as specific types of care needed at the end of life (not limited to the terminal phase of life), that are provided by a network of specialized health care professionals (e.g. medical doctors, nurses, psychologists) and informal caregivers (family members and care volunteers). Palliative care includes medical, psychological, and spiritual support that is intended to improve the quality of life of patients in need of care as well as their carers (WHO, 2020). Palliative and hospice care may be provided at designated care facilities or within the community at a person's home.

Globally, there are vast unmet needs for palliative care. The WHO estimates that approximately 40 million people need palliative care yearly, however, only about 14 per cent receive the care that they need, most of whom reside in high income countries (WHO, 2020). In the Caribbean subregion, palliative care is often unavailable and several scholars and policy makers have stressed the urgent need for governments to develop frameworks, including skills training, for palliative care (Daubman and others, 2021; Maharaj and Harding, 2016). Based on the information provided to the WHO NCD national country capacity survey for 2021, four Caribbean countries indicated that palliative care is generally available within the public health system (Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines and Trinidad and Tobago) and seven countries indicated availability in public community or home-based care (Antigua and Barbuda, Bahamas, Dominica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Trinidad and Tobago). Overall, there is a major shortfall in the availability of palliative care systems within the subregion and an absence of planning to develop such systems.

Systematic literature reviews of the existing, albeit limited, empirical and non-empirical research on palliative care specifically within the Caribbean have identified the following key barriers to the availability of palliative care within the subregion (Jennings and others, 2018; Maharaj and Harding, 2016).

Cultural attitudes toward health care professionals, dying and end of life care

The main underlying barriers include mutual mistrust between health professionals and the public. The authors identify that many members of the public distrust health professionals who provide accurate, comprehensive information about diagnoses as well as the cost of treatment. Additionally, individuals who adhere to cultural and spiritual beliefs that illnesses are within the divine delay or forego seeking health care.

Limited availability of opioids for medical purposes within the public health system

The underlying barrier is that national policies do not include measures for effective pain relief. Furthermore, national governments may not officially recognize some conditions that require palliative care (e.g., Alzheimer's disease) as a chronic NCD for which medications can be subsidised by the government. Thus, many older persons and their families incur significant costs for medication to relieve distress.

Limited development of palliative care services

Caribbean nations are ageing at comparatively lower levels of economic development than more developed nations, with major economic constraints to investing in the healthcare infrastructure needed for such specialized tertiary level care.

These include Alzheimer's and other dementias, cancer, cardiovascular diseases, cirrhosis of the liver, chronic obstructive pulmonary diseases, diabetes, HIV/AIDS, kidney failure, multiple sclerosis, Parkinson's disease, rheumatoid arthritis and drugresistant tuberculosis.

Unmet palliative care needs 4.

The region lacks health care personnel (medical doctors and nursing staff) specifically trained to provide palliative care. For instance, one study collected primary data from chief medical officers and presidents of medical associations to examine the availability of public or private palliative or hospice facilities, or specialists among 13 CARICOM member States. Based on responses from 10 nations, there were 6 hospice or palliative specialists employed across 4 nations (Macpherson, Chiochankitmun and Akpinar-Elci, 2014). There is also a critical shortage of trained support services outside of hospital systems for ongoing palliative care (e.g., community volunteers, social workers and counsellors). The limited availability of specialists to meet the growing demand for services puts excessive pressure on health care personnel, reduces the quality of care and leads to unmet care needs. Sometimes those in need of care and their caregivers are simply unaware of how to access palliative care services within their communities. These concerns and experiences have been reiterated by non-governmental organizations including the Alzheimer's Association of Trinidad and Tobago, which is unable to recommend specialized care facilities that provide palliative care for their growing list of members who are ageing with Alzheimer's disease and other dementias, or respite services for their informal caregivers.

Limited investment in palliative care research 5.

Palliative care is not sufficiently recognized as a health priority in many countries resulting in insufficient investment in research. Jennings and colleagues (2018) suggest that health research capacities can be expanded through continuing education programmes that are tailored to the epidemiological contexts of individual countries.

The limited research on palliative care has further implications for informal caregivers who provide home-based care to relatives with a wide range of care needs. Informal caregivers may be unaware or unable to recognize all health care needs. In some countries, such as Trinidad and Tobago, informal caregivers for persons with Alzheimer's rely on education programmes provided by NGOs but there is a lack of basic geriatric care training for home-based care.

In summary, the limited availability of palliative care, and long-term care more generally, both within the public health and community-based care systems, leaves vast unmet care needs for many older persons with long-term illnesses. Furthermore, the lack of specialized palliative care facilities, alongside limited caregiving training programmes leads to greater reliance on informal support primarily provided by family members, especially women. The burden on family caregivers can become excessive (Baboolal and others, 2018), which may impair their health (short and long-term) and potentially the health of the care-dependent older person. Both palliative and long-term care systems, therefore, need to be developed with the aim of integrating the care and support needs of both care recipients and their formal and informal care providers. Furthermore, sustainable health and care systems for ageing populations require investments in the healthcare workforce that encompasses continuous education and training of health professionals and para-professionals in the fields of gerontology and geriatrics. Regional training opportunities are currently available at the University of the West Indies, Mona Campus lead by the Mona Ageing and Wellness Centre (MAWC). The MAWC offers a wide range of training opportunities that are open to the public including short courses on caregiving, gerontology and geriatric certification programmes for government health and social care employees, and post-graduate degree programmes in gerontology.

Protecting older persons during the COVID-19 pandemic F.

The COVID-19 pandemic, which has been ongoing since the beginning of 2020, has focused the attention of leaders and policymakers, worldwide, upon the ability of public health systems to protect and maintain the health of citizens. Public health systems in the LAC region have been challenged with simultaneously managing the rapid spread of COVID-19, together with emerging and re-emerging communicable diseases (including dengue, chikungunya and Zika), as well as the increasing prevalence of NCDs such as cardiovascular and respiratory diseases, diabetes, and hypertension (PAHO, 2017).

Furthermore, older persons and persons with underlying chronic conditions are among the sub-populations that are more likely to experience severe illness, hospitalization or die from COVID-19. In the first year of the pandemic, case counts and COVID-19 mortality were relatively low in the Caribbean. However, they increased during 2021 and from August 2021 until February 2022, both case counts and mortality in the Caribbean were significantly higher than in Latin America or compared to the global averages (ECLAC, 2022a). In part, this was because of low rates of vaccination in the Caribbean. Vaccination rates vary widely from country to country, from 92 per cent in the Cayman Islands to 25 per cent in Jamaica (table 5). As of September 2022, there were still 12 Caribbean countries where less than half of the population had been vaccinated against COVID-19, compared to a global average vaccination rate of 63 per cent. This was primarily due to the unwillingness of persons to present themselves for vaccination. Caribbean health systems, generally, were ill-equipped to deal with the crisis. Although capacity was expanded in response to the crisis, there were still shortages of health workers, ICU beds and oxygen supplies (PAHO, 2021b).

Table 5
Cumulative total COVID-19 cases, deaths and vaccination rates for Caribbean countries (as of 25 September 2022)

	Total COVID-19 cases	Cases per 100 000 population	Total COVID-19 deaths	Deaths per 100,000 population	Persons fully vaccinated (Percentage)	Persons boosted (Percentage)
Anguilla	3 858	25 717	12	80	69	20
Antigua and Barbuda	9 008	9 199	145	148	64	10
Aruba	42 970	40 247	228	214	78	
Bahamas	37 193	9 458	833	212	42	8
Barbados	102 366	35 621	559	195	54	20
Belize	68 743	17 288	683	172	55	13
Bermuda	18 122	29 101	148	238	77	51
British Virgin Islands	7 305	24 159	64	212	60	12
Cayman Islands	30 545	46 477	31	47	92	36
Curaçao	45 357	27 641	287	175	61	29
Dominica	14 852	20 630	68	94	42	6
French Guiana	93 925	31 446	410	137	30	15
Grenada	19 516	17 344	236	210	35	6
Guadeloupe	191 997	47 984	986	246	36	22
Guyana	71 287	9 063	1 281	163	48	9
Jamaica	151 405	5 113	3 299	111	25	2
Martinique	219 529	58 500	1 036	276	39	24
Montserrat	1 381	27 626	8	160	39	10
Puerto Rico	948 052	33 139	5 095	178	95	58
Saint Kitts and Nevis	6 543	12 301	46	86	51	7
Saint Lucia	28 959	15 771	393	214	30	4
Saint Vincent and the Grenadines	9 448	8 516	116	105	28	4
Sint Maarten	10 855	25 314	87	203	61	21
Suriname	81 099	13 825	1 385	236	41	8
Trinidad and Tobago	182 597	13 047	4 195	300	51	12
Turks and Caicos Islands	6 380	16 478	36	93	78	19
United States Virgin Islands	23 083	22 105	123	118		
Caribbean	2 426 375	20 199	21 790	181	53	21
Global	611 421 786	7 844	6 512 438	84	63	28

Source: WHO Coronavirus (COVID-19) Dashboard.

In most countries worldwide, mitigation measures to reduce the spread of the virus largely focused on limiting social contacts, especially with non-household members. These included national "lockdowns", limiting contact with family members and other social gatherings, and reduced visitation to older persons in residential care facilities, among other measures (Andrus and others, 2020). As older persons are among the most vulnerable "high risk" groups for hospitalization, severe illness and mortality, many of these measures were designed to protect older persons' health.

The mitigation measures, however, had consequences for older persons' psychosocial and mental health. Even prior to the pandemic older persons, globally and within the Latin America and Caribbean region, were recognized as highly vulnerable to loneliness and depression (Brailean and others, 2015; Guerra and others, 2016; Newmyer and others, 2021; Rawlins and others, 2008). Forced reduction of social interaction and disrupted daily routines for prolonged periods increase the risks of loneliness. Some emerging empirical evidence among older persons in more developed countries suggests increased risks of loneliness during the pandemic (van Tilburg and others, 2021). Some studies, however, have found that the overall prevalence of loneliness among older persons was quite stable during the pandemic (Luchetti and others, 2020). Within the LAC region, research among Brazilian older persons has shown that the prevalence of pandemic loneliness was even lower than the pre-pandemic level (Torres and others, 2022).

Nevertheless, across a wide range of country contexts, there have been common risk factors for loneliness and depression among older persons during the pandemic. These include gender (women at higher risk than men); living alone; economic insecurity; high concerns or anxiety about the pandemic; being a caregiver and/or recipient; limited social interaction outside the household; and lack of digital connections (Arpino and others, 2021; Savage and others, 2021; Torres and others, 2022). For older persons in the Caribbean, there is no empirical evidence on whether loneliness and depression increased during the pandemic, but lack of material resources (economic, technological), social resources (few family ties) and heath resources (being in poor health) are likely to exert a similarly negative influence on their mental health.

The pandemic also disrupted the care and treatment of patients with other health conditions, and access to health and social care services, which results in conditions going untreated and perhaps worsening over time. Health systems in many countries have been forced to organize their services to address the health demands associated with rising cases of COVID-19 infections and hospitalizations. Early studies in more developed countries document the experience of older persons' with other health conditions who saw their treatment affected by cancellations or postponements of surgeries. Other individuals may have chosen to forego seeking health care for fear of contracting the virus. One study among older Europeans also found that economically vulnerable older persons were more likely to forgo health care for fear of COVID-19 and had a higher probability of being unable to schedule health care appointments during the early stages of the pandemic (Arnault, Jusot and Renaud, 2021). Thus, disruptions in health care services during the pandemic may disproportionately present health risks for socioeconomically disadvantaged adults who are also likely to have the greatest health needs.

The sudden disruptions in the provision of formal health and social care services imply intensified reliance on informal care providers for those with health needs. While older persons do receive care from family members, many older persons often provide care, especially to their partners (Pinquart and Sorensen, 2011). In the context of the COVID-19 pandemic, early studies show that older persons have experienced more caregiving strain and poor mental health overall (Park, 2021), especially among those with lower socioeconomic status (Beach and others, 2021). Moreover, informal caregivers face increased care responsibilities during the COVID-19 pandemic while also losing (or having limited) access to their own support services including respite care or the support of other unpaid caregivers.

In the context of a pandemic, older persons with chronic NCDs and terminal illnesses as well as their caregivers need particular attention as the pandemic may have negative impacts on the progression of chronic conditions that demand intensive personal care, such as dementia. Given the limited availability of palliative care services in the Caribbean, the reduced availability of support services for informal caregivers presents unique challenges and pressures on informal caregivers of persons with dementia. One study based on interviews conducted with caregivers of persons with dementia in Jamaica during the pandemic (between April 2020 and May 2021), indicated that caregivers faced increased financial and social constraints (Stubbs and others, 2021). Financial challenges included incurring costs for medical bills and hiring additional paid care workers for support as dementia symptoms progressed. Restricted social engagement also negatively affected caregivers and persons with dementia. Although some participants were able to mitigate the reduced in-person social interaction with the use of virtual platforms, technological resources were more readily available for persons from higher socioeconomic backgrounds, highlighting the need for more targeted and equitable support services (Stubbs and others, 2021). Thus, policymakers, medical professionals, and social care providers also need to be attentive to the health needs of informal caregivers, in the context of COVID-19.

The pandemic highlighted and exacerbated existing shortfalls in health and long-term care systems in the Caribbean subregion. It has also emphasised the importance of unpaid carers and the limited support structures available to them. Nevertheless, there are some examples of good practice adopted by Caribbean governments and NGOs to protect the health of older persons and support informal caregivers.

Government measures typically include guidelines for hygiene, physical distancing, and self-quarantine provided by ministries of health and reinforced by the respective ministries that are responsible for the affairs of older persons. Guidelines were also developed for the care of older persons, and employees, within long-term care homes, including restrictions on visits from the public. Government ministries have also tried to address the social aspects of the pandemic. In Barbados, the Ministry of People Empowerment and Elder Affairs developed an Emergency Operating Centre to manage the funding and distribution of care packages to over 2,000 vulnerable older persons and implemented a 24-hour hotline to ensure older persons can continue to voice their needs and concerns. The Ministry of Social Development and Family Services in Trinidad and Tobago also implemented a 24-hour hotline for older persons.

NGOs have been instrumental in protecting older persons' health and well-being during the pandemic. This has been most evident through efforts to inform and educate older persons about the importance of COVID-19 vaccinations to protect their health and those of their loved ones (especially those they care for within the home), and to counter misinformation campaigns about COVID-19 vaccines and reduce vaccine hesitancy. The NGOs have also maintained contact with their members through digital meetings in an effort to counteract social isolation and loneliness.

Vaccine hesitancy seriously undermined the Caribbean's response to COVID-19 and caused unnecessary deaths. Older adults were prioritized for vaccination and were more likely to get the vaccination than younger persons (CADRES/USAID/UNICEF, 2022) but, nevertheless, some older persons were influenced by family members, or even instructed by family members not to get the vaccination. Public information campaigns sought to address vaccine hesitancy. In Jamaica, to try and encourage senior citizens to come forward to be vaccinated against COVID-19, the Government created a vaccine incentive programme which offered a one-time grant of 10,000 JMD (66 USD) to all Jamaican Citizens aged 60 years and older who were fully vaccinated.

The Ministry of Elder Affairs in Barbados continued to deliver the Home Care Programme through the National Assistance Board. They implemented or enhanced protective measures including

providing caregivers with extensive training, personal protective equipment, and counselling to cope with the increased care demands.

State support for unpaid carers during the COVID-19 pandemic has been limited. As such, NGOs have been more active in providing support services for informal caregivers primarily through virtual support interventions to maintain social engagement. For example, in Jamaica, the Caribbean Community of Retired Persons and the Mona Ageing and Wellness Centre provided education programmes, as well as consultations via telephone or video, to family caregivers of persons with dementia. NGOs have also lobbied for caregivers to be able to travel during curfews if necessary to access health supplies or support and to be provided with paperwork granting them the necessary exemptions (Lorenz-Dant, 2020). The Alzheimer's Association of Trinidad and Tobago has been active in the provision of virtual education and organization of support groups for carers.

The high prevalence of chronic NCDs increases the vulnerability of Caribbean populations to COVID-19. The global public health crisis has therefore reinforced the urgent need for Caribbean countries to address structural weaknesses in public health systems, develop national capacities to effectively address and manage NCDs, and invest in the care infrastructure for older persons and their caregivers.

III. Enabling and supportive environments

With a growing number of older persons, there is increasing focus in research and policymaking on the need to create more age-friendly, socially inclusive communities. Safe and supportive environments encourage older persons to participate in social and recreational activities, which are critical aspects of later life health and overall well-being. This chapter examines the social policies and programmes that Caribbean countries have implemented to provide supportive environments for older persons and consists of four sections addressing housing, social participation, disaster preparation and response, and elder abuse. Each section starts with an overview of the existing state of research and with attention to the implications for later life health and well-being. This is followed by an overview of the policies, programmes, or initiatives implemented in different Caribbean countries with a focus on best practices that can serve as models for other Caribbean countries. Each section closes with recommendations for social policy that align with the objectives of the MIPAA, and associated regional agreements, to support healthy and productive ageing of older persons in the Caribbean.

A. Living arrangements and housing to support health and well-being

In countries with weak public welfare systems and care infrastructure for ageing populations, older persons typically rely on family-based support and coresidence with children (or other family members) which is, arguably, the most advantageous living arrangement to access various forms of social support including financial, instrumental, emotional, and personal care (United Nations, 2005). Although coresidence with children is the predominant living arrangement among older persons in Latin America and the Caribbean, an increasing percentage live independently, either alone or with their spouse/partner only (United Nations, 2017). As shown in table 6, estimates from national population surveys for six countries and territories (circa 2010) indicated that between 30 and 60 per cent of older persons lived alone or with their partner only.

Table 6					
Living arrangements of older persons					

		Household living arrangements of persons aged 60 and over (percentages)				Number of	Percentage of regional
	Data source	Alone	With spouse only	Independent (alone or with spouse only)	With children	- persons aged 60 or over in 2010 (thousands)	population aged 60 or over
Bahamas	2010 DYB	13.9				37.9	0.1
Guyana	2009 DHS	16.3	17.4	33.8	48.1	53.9	0.1
Jamaica	2011 DYB	21.4	14.5	35.9		327.1	0.6
Puerto Rico	2010 IPUMS	21.2	33.9	55.0	31.3	674.0	1.2
Saint Lucia	1991 IPUMS	16.9	14.2	31.1	45.3	20.8	0.0
Trinidad and Tobago	2011 IPUMS	15.2	15.0	30.2	52.9	165.1	0.3
Bermuda	2010 DYB	22.6	37.5	60.2		13.8	0.0

Source: Adapted from United Nations (2017), "Living Arrangements of Older Persons: A Report on an Expanded International Dataset", Population Division of the Department of Economic and Social Affairs, New York.

Note: DYB (Demographic Yearbook of the United Nations); DHS (Demographic and Health Surveys); IPUMS (Integrated Public Use Microdata Series International): Version 6.

Independent living arrangements in later life do not necessarily signal vulnerability for all older persons. Living arrangements reflect a combination of individuals' sociodemographic characteristics (e.g. age, gender), socioeconomic resources (e.g. education, income), and health status. For instance, older women are more likely to live alone relative to men, particularly within the age group 75 to 79, which is due in part to women's longer life expectancy and higher rates of widowhood. This gender gap tends to be higher in Europe and North America, while in the Caribbean there is a slightly higher prevalence of solo living among older men relative to women (Esteve and others, 2020). The higher prevalence of solo living among men in the Caribbean may reflect sociocultural matrifocal norms of Caribbean societies that favour familial support for older women that may also involve coresidence (De Vos, 1990).

Living arrangements and household composition are also linked to individual's health status and the relationship is bidirectional. On one hand, health status can determine one's living arrangement. Being in good health is associated with independent living arrangements but the onset of disability and health declines increase the likelihood of living with family, typically adult children (when they are available) or in residential facilities (Korinek, Zimmer and Gu, 2011; Peng and Wu, 2015). On the other hand, living arrangements are also an important predictor of older persons' health. Living alone is associated with a higher risk of social isolation and loneliness (Klinenberg, 2016) and mortality among older persons (Abell and Steptoe, 2021), due to multiple underlying mechanisms. However, living with others does not always promote good health. Studies across diverse social contexts (e.g., in the United States of America, England, Latin America and the Caribbean, and China) suggest that living without a partner but with other family or non-family members is associated with poorer mental health and wellbeing, including higher risks of loneliness (Greenfield and Russell, 2011) and depression (Hu and others, 2020; Quashie and Andrade, 2020), compared to living with a partner.

The importance of living arrangements to older persons' health also varies by their socioeconomic status. Prior research has shown that wealthier older persons who live alone have a lower risk of experiencing disabilities in instrumental activities of daily living (IADL) whereas less wealthy older persons living alone have higher risks of onset for disabilities with activities of daily living (ADL) and instrumental activities of daily living ¹⁰ (Henning-Smith, Shippee and Capistrant, 2018). Additionally,

Activities of Daily Living (ADLs) are basic self-care tasks like walking, dressing, toileting and bathing. Instrumental Activities of Daily Living (IADLs) are more complex tasks such as going out, shopping, cooking, cleaning, managing finances and medications.

socioeconomically advantaged older persons are more likely to have home modifications that accommodate functional limitations, reduce the risk of falls, and provide overall better opportunity to age successfully in their own homes (Meucci and others, 2016).

While empirical research on the salience of living arrangements and housing quality for older persons' health in the Caribbean is limited, the available evidence suggests that living alone or living with others and being unpartnered can present health risks in later life, which may be exacerbated among socioeconomically disadvantaged and physically impaired older persons. Although intergenerational coresidence remains normative in the LAC region, reductions in the supply (or availability) of family members with whom to coreside, especially adult children, imply an increasing urgency for advanced planning by Caribbean governments to meet the potential support and care needs of older persons who will increasingly live independently in their own homes. Policies to support independent living should facilitate the development of high quality housing which is designed to support physical and social independence even among older persons who experience functional limitations.

Whereas many Caribbean governments have implemented programmes to support older persons' care needs within their homes (e.g., home help, nursing care and meal deliveries), few countries have addressed older persons' needs related to housing infrastructure to maintain safe, accessible, age-friendly homes that can support the rising prevalence of independent living. According to the MIPAA and regional agreements such as the San José Charter, older persons should have access to adequate housing, especially as a form of social protection in periods of crisis (e.g., natural disasters and emergency displacement). Some countries (Barbados, Bahamas, Cayman Islands, Trinidad and Tobago, and Saint Kitts and Nevis) offer means-tested social assistance (in-cash) for older persons or their families to repair their homes, or may provide short term rental assistance to older persons.

Regarding efforts to improve housing quality, Bermuda and the United States Virgin Islands offer leading examples of public-private sector collaborations to implement programmes to offer affordable and improved quality of housing for older persons. In 2020, the Bermuda Housing Trust, in collaboration with the NGO Age Concern, introduced a programme for families to apply for interest-free loans at a maximum of BMD\$15,000 (Bermudan dollars) to support home modifications (e.g., install ramps or railings, bathroom fixtures). Additionally, materials purchased for home modification purposes are duty-free (Government of Bermuda, 2021), which helps minimize the financial burden of home repairs.

In 2016, the Government and private sector in the United States Virgin Islands collaborated to construct an 80-unit housing community, targeted at middle- to low-income older persons, and with infrastructure to accommodate persons with mobility limitations (Serlin, 2016). The housing community also provides additional social services to address older persons' health (e.g., preventive medical screenings and nutrition advice) and well-being (social activities to encourage peer engagement). These housing initiatives in Bermuda and the United States Virgin Islands, and the long-term care services which are provided, enable older persons, and their families, to age within their own homes *and* to engage with their communities.

Rebuilding and making Dominica's housing stock hurricane proof has been a Government priority over the last five years. Older persons in Dominica were amongst those hardest hit by Hurricane Maria which struck the island in September 2017. Those whose homes were damaged or destroyed often had insufficient resources to rebuild or repair their homes. The Housing Recovery Project, which provides financial, technical and administrative assistance for reconstruction, gives special consideration to the needs of older persons.

Given the increasing prevalence of independent living arrangements among older persons, many Caribbean countries need to expand the scope of their existing programmes for older persons and their families to repair and/or remodel their homes to better accommodate mobility declines as they age. Moreover, policies to provide housing support should target older persons with lower socioeconomic

resources given their higher risks for poor health and disability. There is also a need to develop housing communities which are designed to facilitate the provision of long-term care and promote social interaction: assisted living facilities or continuous care retirement communities that can accommodate older persons at varying levels of independence to "age in place".

Promoting social participation in later life В.

Increasing life expectancy and the growing proportion of older persons, worldwide, has encouraged many countries to adopt a public policy agenda based on the framework of active ageing. Active ageing refers to older persons "continuing participation in social, economic, cultural, spiritual, and civic affairs, not just the ability to be physically active or to participate in the labour force" (WHO, 2002). The active ageing framework advances a positive view of ageing i.e. seeing older persons as actively contributing to society rather than as a burden. Moreover, this framework recognizes the heterogeneity in older persons' abilities and preferences regarding their time use and advocates for countries to provide optimal opportunities for health (physical and mental) and social participation that enhance quality of life for older persons. Social participation can include both informal activities (e.g., meetings with friends and family members) and formal activities (e.g., educational, volunteering, political/civic) (Levasseur and others, 2010).

In practice, older persons' continued social participation is contingent on their opportunity structures for participation based on an interplay of individual factors (e.g., sociodemographic, health), institutional factors (e.g., public policies, built environment, level of economic development) and cultural (e.g., social norms and expectations of ageing). Research across European, North American, and Caribbean contexts, suggests that socioeconomic resources (e.g., higher educational attainment, household incomes), health status (e.g., self-perceived good health, fewer functional limitations and chronic conditions) and social resources (e.g., being married, larger social networks) generally facilitate older persons' social participation (Choi and others, 2007; Hank and Erlinghagen, 2010; Willie-Tyndale and others, 2016).

Infrastructural conditions are also critical for older persons' social participation with the safety and accessibility of the built physical environment as key factors. Safety especially regarding perceived and objectively high levels of crime and violence are important contextual factors that impair individuals' mental health and overall well-being (Baranyi and others, 2021). Neighbourhood safety (or lack thereof) is critical for older persons' well-being given much of older persons' daily lives revolve within their immediate communities, and even more so for older persons with mobility limitations. Some research has shown that high levels of crime are a risk factor for depression among older persons because of the impact that crime has on social participation (Baranyi and others, 2022).

Accessibility of the physical environment encompasses transportation, including public transit and private cars, as well as having ramps and railings in public spaces to support older persons with mobility limitations. Accessible transportation may promote or maintain older persons' sense of independence and willingness to maintain social connections that can promote their health and wellbeing (Dahan-Oliel, Gelinas and Mazer, 2008). Yet, older persons sometimes also hold negative perceptions about public transit and may maintain resistance to using public transit even when they cease driving independently (Dickerson and others, 2007; Brown and others, 2020). Additionally, when older persons can no longer drive independently their social networks are reduced and this is evident even among older persons who are competent to use public transportation (Mezuk and Rebok, 2008).

Furthermore, societies worldwide are experiencing rapid advances in information and communication technologies (ICT) including digital media (e.g., internet use, smartphones and social media for networking), and increasing ICT usage amongst the older adult population (Hunsaker and Hargittai, 2018). Older persons' access to and use of ICT increasingly shapes their informal and formal social participation through social connections with family and friends as well as community organizations, which can facilitate healthy ageing and individuals' preferences to age in place (Barbosa Neves and others, 2019; Satariano, Scharlach and Lindeman, 2014). Some empirical studies suggest that ICT usage may alleviate perceived social isolation, loneliness, and reduce the risks of depression among older persons (Forsman and Nordmyr, 2017). Importantly, ICT usage can be especially critical for social participation and well-being of older persons with mobility limitations who may be confined to their homes or immediate communities (Pinto-Bruno and others, 2017).

Despite the rapid development of ICT and increasing interest in usage among older persons, digital inequalities in access to and use of technologies persist both between and within countries worldwide (Poushter, Bishop, and Chwe, 2018). Among individual factors, sociodemographic characteristics including age (cohort), education and income level are key predictors of technology use. Specifically, internet use, including social media use, tends to be higher among younger compared to older persons, those with higher versus lower personal resources (e.g., education, income) and in better health (Poushter, Bishop, and Chwe, 2018; König, Siefert and Doh, 2018). The social environment also influences older persons' internet use as partners or other family members (e.g., adult children) and friends can encourage older persons' adoption and use of digital media. Thus, older persons with wider social networks of digital media users are also more likely to use digital technologies (König, Siefert and Doh, 2018).

The San José Charter provides recommendations for governments to implement measures to facilitate older persons' active participation in institutions and in society more generally. There is also a growing body of empirical evidence on the factors that support or inhibit older persons' social participation and the implications for health and well-being. Caribbean countries and territories have sought to enable diverse forms of formal social participation in numerous different spheres.

Public transit

Regarding institutional barriers to social participation, the lack of accessible public transit is a critical barrier for older persons in many Caribbean countries. There are economic and infrastructural factors such as transportation costs and limited vehicular accommodations for persons with mobility limitations (e.g. wheelchair accessible buses). Reduced public bus fares for older persons is the most common strategy adopted by Caribbean countries to address the public transportation barrier (Jones, 2016). Yet, additional practical challenges remain, including the reliability and efficiency of public bus services, to build older persons' trust and continued use of public transit. If public services are not reliable, this encourages the use of privatized public transit, which generally requires regular rather than reduced fares.

Privatized public transit is characteristic of the Eastern Caribbean where private owners operate public buses. Although the government may regulate bus fares, older persons are not necessarily entitled to a discount. Privatized public transit presents additional challenges such as unreliable transportation schedules as entrepreneurs have the freedom and flexibility to determine their periods of service operation. In Saint Lucia, a few communities have collaborated with the mini-bus association (organization of private entrepreneur bus owners) to provide a monthly transportation service to assist older persons with transportation for errands (e.g., grocery shopping). While beneficial, this service is not widely available and requires mobilization among independent communities thereby introducing or reinforcing geographic inequalities in access to public transit services for older persons.

The lack of safety, reliability and accessibility of public transit are common concerns among older persons and major deterrents to the use of public transit. Governments need to continue their efforts to expand public transit services for older persons including providing buses (or other transit) that can accommodate older persons with mobility limitations and assistive devices such as walkers. The implementation or expansion of public transit partnerships between government and/or non-

governmental organizations for older persons and public transit companies could be a fruitful and sustainable initiative. Such partnerships can be transformative for older persons in marginalized and rural communities, enhancing their social participation and well-being. Examples of such partnerships are evident in select communities within Saint Lucia and may provide a model for other Caribbean countries.

Community engagement

Programmes to promote social participation for older persons are underdeveloped in Caribbean countries. Based on interviews conducted with NGOs for older persons in Barbados, Trinidad and Tobago, Saint Lucia, and Montserrat, there is a lack of infrastructure to support and encourage older persons' social engagement in their communities. Community centres currently available in most countries tend to favour younger adults, for example, with limited or no infrastructural support for older persons with impaired mobility. Additionally, older persons require a wider range of health enhancing leisure and physical activities combined with education and training programmes to expand their human capital, potentially helping them to supplement their pension incomes.

In an attempt to respond to these needs, the Department of Community Development and Social Services in Saint Kitts and Nevis launched the Seniors Enrichment Programme which organises activities for older persons with an emphasis on physical health and well-being, lifelong learning, skills development and social interaction. In Saint Lucia, the HelpAge Saint Lucia National Council of and for Older Persons coordinated and organized talent shows and sporting events for older adults, while the Ministry of Equity, Social Justice and Empowerment is developing an intergenerational programme "Adopt an Older Person," involving conversation, consultation and experience sharing. Trinidad and Tobago has a national network of Senior Activity Centres which are multi-service facilities where older persons can come together for services, and educational and recreational activities although the pandemic substantially impacted the operation of the centres.

As many older persons prefer to live in their own homes as they age, public community services need continued improvement so older persons are able to access services within their communities, and to expand opportunities for active ageing including physical, social, and economic activities. Promoting seniors sporting events and expanding and adapting community facilities to better reflect and accommodate older persons' needs can further encourage social participation. Moreover, government and/or non-government organizations that serve older persons should provide tailored community programmes to meet older persons' preferences and the capacities of different communities.

Lifelong learning and digital inclusion 3.

Several countries provide opportunities for lifelong learning and enhancing technological literacy. The Belize National Council on Ageing have organized free training sessions and workshops for older persons and/or caregivers on topics including online digital skills training; sexual health and ageing; avoiding financial abuse; and training for caregivers on how to protect older persons from COVID-19. In Barbados, the Unique Helping Hands Senior School provides lifelong learning opportunities for older persons including computer literacy training and other programmes to enhance technology skills (e.g., Zoom workshops). The Barbados Association for Retired Persons (BARP) also offers digital skills workshops. Some activities have included partnerships with telecommunications organizations to provide individualized support to introduce and train members with digital technologies such as smartphones. Scotiabank Bahamas ran a "Digital Seniors" initiative to encourage more seniors to use digital banking services.

In Saint Kitts and Nevis, the United States Virgin Islands and the Cayman Islands, governments have implemented educational programmes for older persons whereby they can enrol and participate in courses offered at higher education institutions (e.g., Clarence Fitzroy Bryant College (SKNIS, 2020), the University of the Virgin Islands, the University College of the Cayman Islands, and the International

College of the Cayman Islands). As education is one of the key individual resources that influence older persons' social participation and health (physical and mental), Caribbean governments need to make investments in developing opportunities for lifelong learning and prioritizing technological literacy.

Governments also need to expand programmes offering opportunities for social participation. Particular attention needs to be given to improving older persons' access to education as well as expanding their access to technology, computer literacy, and diversity of internet use (e.g., socializing, information seeking and communicating with health professionals). The services need to be attentive to, and should seek to overcome, socioeconomic, geographic, health, and other social inequalities which can impede access to lifelong learning and digital technology. Relatedly, governments need to expand efforts for older persons to develop their human capital for income-generating activities, which may be particularly important to lower-income older persons (with or without a pension), or those without opportunities to participate in the formal labour market.

C. Older persons in disaster risk management

The Caribbean subregion is vulnerable to several different types of natural disasters including hurricanes, flooding and landslides, volcanic eruptions, and earthquakes. Socioeconomically disadvantaged individuals and communities disproportionately experience the harmful consequences of natural disasters (Aldrich and Benson, 2008; Hutton, 2008). Prior studies also indicate that older persons are at higher risk of mortality from the secondary effects of disasters (Adams and others, 2011; Ichiseki, 2013; Jonkman and others, 2009; Santos-Burgoa and others, 2018).

Given changes in weather patterns associated with climate change, the frequency and severity of natural disasters require individuals, community organizations, and national governments to adopt more proactive and socially inclusive planning and preparation for disaster mitigation and response. The San José Charter recognizes older persons as a vulnerable sub-population and recommends that Caribbean member States include the contributions of older persons in all areas of disaster and emergency mitigation, preparedness, and post-disaster recovery.

Some Caribbean countries have made significant strides in including older persons in their national disaster preparedness and response systems. For instance, Anguilla and Barbados, as part of their national disaster preparedness plans, have established registers of at-risk older persons (e.g., those living alone or in poor health) who will likely face heightened risks during a disaster. Barbados recently developed the "Barbados Comprehensive Disaster Management (CDM) Country Work Programme (CWP) 2019-2023" (Government of Barbados, 2019). This inter-ministerial and multisectoral strategic national action plan for national disaster management aims to better integrate disaster management into key sectors (e.g., finance, renewable energy, the blue economy, and private sector) and strengthen community resilience to disasters. The four-year country work programme will benefit older persons through activities including the development of designs for resilient low-income public housing, reviewing social protection programmes to integrate disaster risk management, and implementing psychosocial support training.

Likewise, the Government of Bermuda has also created an inter-ministerial Emergency Measures Organization that coordinates disaster preparedness, response, and recovery, with priority to older persons' needs, especially those with health vulnerabilities. Additionally, NGOs such as the Bermuda Red Cross have been involved in training older persons with disaster management skills to help themselves and their peers or family members in times of disaster (Royal Gazette, 2017). The Cayman Islands National Hurricane Plan also prioritizes shelter and alternative accommodation for older persons as part of the disaster preparedness and response (Cayman Islands Government, 2019).

Seven Caribbean countries participated in the second phase of PAHO's Smart Health Care Facilities in the Caribbean Project. The project has been making health facilities both safer and greener through adoption of standards for disaster resiliency and energy efficiency. As of 2021, the programme had undertaken comprehensive assessments of disaster safety and environmental management at 415 health facilities and upgraded 31 health facilities in Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia and Saint Vincent and the Grenadines.

Empirical studies following Hurricane Maria, which struck Puerto Rico in 2017, illustrated the importance of prioritizing older persons in disaster management (a point reinforced by Hurricane Fiona which caused similar damage in September 2022, just five years on from Maria). The studies showed how Maria disproportionately affected older persons, among whom there was evidence of excess mortality in the aftermath of the disaster (Santos-Burgoa and others, 2018). While several community-level preparedness measures were activated, including identifying persons with health and social vulnerabilities and relocation to safer, better-equipped housing and accommodation, several communities were underprepared and under-resourced to meet the needs of older persons during the prolonged post-disaster period (Andrade and others, 2021). This included a lack of medical supplies for older persons in several communities (including chronic disease management), persistent electrical outages, prolonged periods with unsafe drinking water, unsafe housing and a lack of financial and psychosocial support. Additionally, the breakdown in public services including health care, water, electricity, and telecommunication disproportionately affected remote areas of Puerto Rico (Andrade and others, 2021; Kishore and others, 2018). Overall, the lack of clear guidelines and protocols to meet the needs of older persons in natural disasters alongside advanced planning for prolonged recovery periods, and the limited implementation of previous disaster recommendations contributed to these deficiencies in the response, with adverse consequences for older persons.

The experiences of older persons in Puerto Rico offer insight to the expected challenges related to the more recent 2021 La Soufrière volcanic eruption in Saint Vincent and the Grenadines. Although empirical studies are not available, to date, reports from humanitarian relief organizations indicate that several international NGOs have collaborated to assist in relief efforts, especially regarding health care delivery, maintaining and promoting public hygiene and sanitation awareness, psychosocial support programmes, and financial support through cash transfers or food vouchers for vulnerable persons (IFRC, 2022; United Nations, 2021). This natural disaster also took place amidst the COVID-19 pandemic and outbreaks of dengue. For older persons and other vulnerable groups affected, recovery will likely be a prolonged process.

Another urgent area of improvement is the inclusion of older persons and their needs in national disaster management plans. Climate change presents Caribbean countries with the threat of an increasing frequency and intensity of natural disasters (especially hurricanes and floods). Many countries need to expand their efforts to include older persons in the design and implementation of disaster management policies at all stages (mitigation, recovery, risk assessments, reconstruction), especially among older persons who live in high-risk areas (e.g., coastal communities) or marginalized communities with limited public social service infrastructure, for example in rural areas. National disaster management plans also need to include efforts to raise public awareness of older persons' vulnerability to abuse in post-disaster situations and include psychosocial support services and the prevention of elder abuse. The Government of Barbados' recently proposed 2023-2028 National Policy on Ageing provides a good example of developing a multi-sectoral and multi-level (national and community) approach to the integration older adults in all levels of disaster preparedness and response.

D. Protection from abuse and neglect

The World Health Organization defines elder abuse as single or repeated actions (or neglect), which can take various forms including physical, verbal, sexual, emotional, financial, psychological harm or distress. It is a violation of an individual's human rights (WHO and University of Geneva, 2008). Abuse can occur in the community (e.g., in one's own or family home) and institutional settings (long-term care facilities) but there are few systematic studies on the scale of elder abuse within institutions for older persons' care (Yon and others, 2019). Financial abuse occurs when family members, caregivers or others seek to manipulate and exploit older persons to gain access to their pension income or an asset such as a property.

The global prevalence of elder abuse is difficult to estimate due to the wide variation in methods and definitions adopted by different studies. Nevertheless, based on a systematic review of empirical studies, approximately one in six community-dwelling adults aged 60 years and older worldwide experience at least one form of abuse annually (Yon and others, 2017). Rigorous prevalence studies are limited in low and middle-income countries. Available studies in Asia indicate that the prevalence of elder abuse ranges from 14 to 36 per cent and in Africa between 30 and 44 per cent (see Dong 2015 for a detailed overview of studies). Formal documentation and empirical evidence on elder abuse within the Caribbean subregion is limited but anecdotal evidence, case studies, increasing news media coverage and even viral videos of abuse on social media suggest that it is commonplace (Eldemire-Shearer and others, 2020). One study of older persons in Sint Maarten estimated that 4.1 per cent and 3.6 per cent of older persons perceived emotional and financial abuse, respectively. Moreover, approximately 2 per cent of older persons identified fear of being abused in their own homes, 3 per cent identified fear of abuse within their neighbourhood and 7 per cent perceived an overall lack of safety within their neighbourhoods as a major problem (Government of Sint Maarten, 2013).

Although the precise scope of the problem is unknown globally, existing empirical research identifies some of the common individual risk factors including gender (women are more likely than men to be victims), cognitive impairment (e.g. Alzheimer's disease) or physical impairment, poor physical health (e.g. chronic conditions), lower socioeconomic status (e.g., low education or income), and psychosocial distress including depression, poor quality family relations and social isolation (Dong, 2015). Broader societal factors also play a role in creating the conditions in which elder abuse takes place. Ageism and related sociocultural norms and negative expectations and attitudes toward older persons including views of older persons as frail and dependent or being unable to maintain control over their lives, alongside social tolerance of violence, potentially encourage elder abuse. The presence of ageism within society may also hinder victims from reporting experiences of abuse and seeking formal help or other forms of protection (WHO, 2011). Natural disasters, and their aftermath, are an increasingly important contextual factor that presents a heightened vulnerability to experiencing abuse and neglect as well as barriers to reporting abuse (Gutman and Yon, 2014). Elder abuse can have severe health consequences including increased risks for poor health (including morbidity and higher health service use) and premature mortality (Dong, 2015), which are also exacerbated among older persons with smaller social networks and lower levels of social engagement (Dong and others, 2011).

Within the Caribbean subregion, the San José Charter on the Rights of Older Persons commits Caribbean countries to implement policies to eradicate or minimize the potential for elder abuse. This includes implementing policies and procedures to prevent, punish and eradicate any type of abuse or ill-treatment of older persons, including penalizing those responsible. Governments should also establish mechanisms for prevention and supervision, and strengthen legal mechanisms to prevent any type of violence against older persons.

Caribbean countries have been attentive to the need to increase public awareness of elder abuse. Many countries conduct public awareness campaigns, typically organized in conjunction with World Elder Abuse Awareness Day (June 15), and there has been growing media coverage of elder abuse. In addition to reducing or preventing the incidence of elder abuse, public awareness campaigns also help older persons to better identify potential risks to their safety and the resources within their respective communities and countries to report incidents of abuse.

Institutionalized services for reporting elder abuse (e.g., self-reports by older persons or other persons who are aware of abuse cases) include designated "hotlines" that are typically associated with specific divisions within government ministries. For instance, the Division of Ageing in Trinidad and Tobago has increasingly received reports of elder abuse. Similarly in Jamaica, the National Council for Senior Citizens has established a dedicated hotline for reports of elder abuse and the Council collaborates with the police service to investigate reports of abuse.

Many countries address elder abuse cases within the context of existing legislation on violence (including domestic violence), assault, theft/robberies, and fraud (Gény, 2018; Eldemire-Shearer and others, 2020). Few Caribbean countries have legislation that specifically addresses violence against older persons and the punishment of the perpetrators of elder abuse. Bermuda has the Senior Abuse Register Act 2008 and Anguilla, the Dependent Adults Act 2005 which provide good examples of legislation to protect older persons from abuse and exploitation. Notably, Bermuda has established formal mechanisms for reporting, monitoring, and investigating cases of elder abuse. The manager of Ageing and Disability Services holds the position of the Senior Abuse Registrar with responsibility for investigating reports of elder abuse. Moreover, perpetrators face direct consequences once they are included on the register including denial of employment as a care provider, and prohibition from management or maintenance of a financial interest in a senior care home.

Similarly in Trinidad and Tobago, the Government is planning to introduce legislation to protect residents of older persons from abuse. An earlier Homes for Older Persons Act 2007 was assented to but not brought into force because the administrative structures required to enforce the law were not in place. This law will now be updated and appropriate structures, including an inspectorate of older persons' homes, will be created. The legislation will enable prosecutions to be brought in cases of wilful assault, ill-treatment or neglect.

As countries are rapidly ageing, the number of persons at risk of elder abuse is increasing. Governments need to design specific legislation for addressing elder abuse and with keen attention to protecting sub-groups of older persons with heightened risks of vulnerability including, but not limited to, women, persons with disabilities, older persons living alone, the socioeconomically disadvantaged, and those living in remote areas. Laws and procedures relating to guardianship of vulnerable older persons, for example those who are cognitively impaired, also need to protect the rights to autonomy, indepndence, dignity, respect and freedom from abuse of any kind.

Tackling elder abuse requires cooperation between social services, health professionals, the police and criminal justice system, among others, and there need to be protocols setting out roles and responsibilities for reporting, investigation, case management, intervention and prosecution of offenders. There should also be guidelines for individuals working in public and private entities that serve older persons and they should be trained to prevent, recognize and report abuse. This would include health care professionals, formal and informal caregivers, and public service organizations (e.g., social services officers and others such as the police). Banks also need to take steps to prevent financial exploitation of older persons, for example training staff to recognise the warning signs.

IV. Conclusions and key recommendations

Over the twenty years since the adoption of the MIPAA, Caribbean countries and territories have made significant progress towards the plan's objectives. Older persons are a key focus of attention for social policy and social protection, and many countries have adopted national policies on ageing and/or established national councils. Contributory pensions are providing higher real incomes and cover an increasing proportion of older persons although significant gaps remain, including in respect of coverage rates which vary significantly across countries. Non-contributory pensions generally only provide a minimal level of income to older persons, below the national poverty line in most cases, and in some countries there are significant numbers of older persons with no pension income. In this context it is necessary to:

- Ensure that policies and laws for ageing and older persons are fit for purpose and consider the need for new, updated or supplementary policies;
- Renew links between governments and organizations of older persons and expand opportunities for older persons to participate in decision-making;
- Ensure that non-contributory age pensions complement other pillars of the pension system and guarantee a minimum pension income to all older persons;
- Expand the coverage and then progressively increase the level of non-contributory age pensions to provide an adequate standard of living;
- Promote formalization of the informal economy through sector-specific interventions to bring more workers under the umbrella of social insurance, so that when these workers reach retirement age, they will be entitled to a contributory pension;
- Pay greater attention to the need to increase pensions in response to increases in the cost of living and implement regular and systematic cost-of-living adjustments to pensions;

- Monitor the sustainability of national insurance schemes and consider the need for parametric reforms such as increases to pension contribution rates, the rate at which entitlements are accrued, and retirement ages;
- Promote flexible retirement for formal sector workers and support for older persons working in the informal sector, so that they can continue to be economically active, without negatively affecting pension entitlements, for as long as they want to work and are able to do so.

There has also been progress in addressing commitments to advance the health and well-being of older persons. In primary health care especially, older persons have free access to health care services and home care programmes have been developed in many countries. However, many, if not all, Caribbean countries still need to address critical gaps in health service delivery. The devastating impact of the pandemic on those with certain chronic health conditions reinforces the need for renewed attention to lifestyle-related NCDs while vaccine hesitancy emerged as a major problem which undermined the Caribbean's response to COVID-19. In the area of long-term care, most Caribbean countries do not currently have sufficient national capacity to meet the rising need for high-quality, long-term care as societies age. There remains a critical shortage of specially trained health and care personnel to meet the needs of older persons. To address these issues, it is necessary to:

- Promote universalization of the right to health for older persons through measures to strengthen public health care or national health insurance schemes and reduce reliance on out-of-pocket expenditure;
- Integrate the treatment and management of non/communicable diseases and their risk factors into the primary health care system and ensure that medication for a wide range of NCDs is available through public health systems;
- Adopt policies, strategies and programmes to address NCD risk factors such as obesity, tobacco and alcohol consumption, and physical inactivity through policies to promote physical activity in schools, workplaces and communities; dedicated taxes on alcohol, tobacco and sugar-sweetened drinks; food labelling regulations to promote healthy eating; and health information campaigns;
- Promote the development of palliative care services to ensure that older persons with terminal illnesses die with dignity and free of pain;
- Expand training of health care personnel specifically in the areas of geriatrics and gerontology, palliative care and care of older persons with cognitive impairments including Alzheimer's disease and related dementias;
- Adopt legislative measures to regulate, monitor and enforce best practice standards among long-term residential care and day care providers.

Since the adoption of the MIPAA, Caribbean member and associate member States have developed and expanded their social welfare policies and programmes for older persons. This has included reducing financial barriers to active ageing by introducing reduced (or even free) public transport for older persons, creating activity centres and organizing social and community events for older persons. Elder abuse is one of the most pressing areas of concern. There is emerging empirical evidence of an increase in abuse during the COVID-19 pandemic (Chang and Levy, 2021) and reports of a growing problem in the Caribbean (Newsday, 2021). Governments have responded by seeking to increase public awareness of ageism and all forms of abuse against older persons. The pandemic also highlighted how many older persons experience a daily double jeopardy of physical and digital social exclusion (Seifert, Cotton, and Xie, 2021). The increased frequency and severity of natural disasters and their impact on older persons is also an urgent concern. With these things in mind, to promote the active social participation of older persons in the context of an enabling and supporting environment, it is necessary to:

- Strengthen housing support programmes for older persons, particularly those offering grants for home maintenance and adaptation;
- Promote the development of affordable housing options for older persons that facilitate the provision of different forms of care, such as assisted living facilities or continuing care retirement communities;
- Expand the provision of concessionary public transport and develop affordable personal transport options tailored to older persons;
- Develop programmes to facilitate older persons' engagement in social, educational, recreational, sporting, cultural and civic engagement in their communities, with particular attention to those belonging to the most marginalized groups;
- Engage with stakeholders such as the telecommunications industry, financial and educational institutions, NGOs, and community organizations to provide ICT training for older persons to enhance digital and social inclusion;
- Make special provisions for older persons in disaster risk management plans, including priority, preferential assistance for older persons in disaster response, and recognising the contribution that older persons can make to disaster preparation;
- Develop and maintain voluntary registers of vulnerable persons, including vulnerable older adults, to facilitate the provision of support and protection, in the event of a disaster;
- Implement legislation to address elder abuse, including the creation of formal mechanisms for reporting and investigation, for the protection of victims and the punishment of abusers;
- Provide training and guidelines for health care workers, social workers, care workers and caregivers to help them prevent, recognise, and report abuse.

Bibliography

- Abell, J. G., and Steptoe, A. (2021), "Why is living alone in older age related to increased mortality risk? A longitudinal cohort study", *Age and ageing*, vol. 50, issue 6, November.
- Adams, V. and others (2011), "Aging disaster: mortality, vulnerability, and long-term recovery among Katrina survivors", *Medical anthropology*, vol. 30, No. 3, May.
- Aldrich, N. and Benson, W. F. (2008), "Disaster preparedness and the chronic disease needs of vulnerable older adults", *Preventing Chronic Disease*, vol. 5, No. 1, January.
- Al Snih, S. and others (2010), "Obesity and disability: relation among older adults living in Latin America and the Caribbean", *American Journal of epidemiology*, vol. 171, No. 12, June.
- Altamirano, A. and others (2018), "Presente y futuro de las pensiones en América Latina y el Caribe", Monograph of the Inter-American Development Bank, November.
- Andrade, E. L. and others (2021), "The impact of natural hazards on older adult health: lessons learned from Hurricane Maria in Puerto Rico", *Disaster medicine and public health preparedness*, November.
- Andrus, J. K. and others (2020), "Perspectives on battling COVID-19 in countries of Latin America and the Caribbean", *The American journal of tropical medicine and hygiene*, vol. 103, No. 2, August.
- Arnault, L., Jusot, F., and Renaud, T. (2021), "Economic vulnerability and unmet healthcare needs among the population aged 50+ years during the COVID-19 pandemic in Europe", *European journal of ageing*.
- Arpino, B. and others (2021), "Older people's nonphysical contacts and depression during the COVID-19 lockdown", *The Gerontologist*, vol. 61, issue 2, September.
- Baboolal, N. and others (2018), "Comparisons between different elements of reported burden and common mental disorder in caregivers of ethnically diverse people with dementia in Trinidad", *Plos one*, 13(7), e0201165, July.
- Baranyi, G. and others (2022), "Lower social participation partly explains the association between perceived neighbourhood crime and depressive symptoms in European adults aged 50 years or older: A longitudinal mediation analysis", *Preventive Medicine*, vol. 155, February.
- _____(2021), "The impact of neighbourhood crime on mental health: a systematic review and meta-analysis", Social Science and Medicine, vol. 282, August.
- Barbosa Neves, B. and others (2019), "Can digital technology enhance social connectedness among older adults? A feasibility study" *Journal of Applied Gerontology*, 38(1), January.

- Beach, S. R. and others (2021), "Family Caregiving During the COVID-19 Pandemic" The Gerontologist, vol. 61, issue 5, August.
- Brailean, A. and others (2015), "A multiple indicators multiple causes model of late-life depression in Latin American countries", Journal of affective disorders, vol. 184, September.
- Brown, C. R. and others (2020), "Driving cessation among older adults in a Caribbean small island developing state", Journal of Transport and Health, vol. 18, September.
- CADRES/USAID/UNICEF (Caribbean Development Research Services/United States Agency for International Development/United Nations Children's Fund) (2022), "COVID-19 Vaccine Hesitancy Survey Report 2021", Bridgetown, Barbados, January.
- CARPHA (Caribbean Public Health Agency) (2019), "Healthy Ageing in the Caribbean", State of Public Health Report, 2019, Port of Spain, Trinidad, and Tobago, February.
- Cavangero, E. and others (2015), "Setting the Context for Universal Health Coverage Reforms in Latin America and the Caribbean", Toward Universal Health Coverage and Equity in Latin America and the Caribbean: Evidence from Selected Countries, Dmytraczenko, T. and G. Almeida (eds.), Washington, D.C., The World Bank.
- Cayman Islands Government (2022), "CINICO to Expand Coverage, Add Services" [online], Grand Cayman expand-health-insurance-coverage,-add-property-and-casualty-insurance>.
- (2019), "The Cayman Islands National Hurricane Plan" [online], Grand Cayman [date of reference: 01 June 2022] https://www.gov.ky/publication-detail/the-cayman-islands-national-hurricane-plan>.
- Chang, E.S. and Levy, B.R. (2021), "High Prevalence of Elder Abuse During the COVID-19 Pandemic: Risk and Resilience Factors", The American Journal of Geriatric Psychiatry, vol. 29, issue 11, November.
- Choi, N. G. and others (2007), "Formal and informal volunteer activity and spousal caregiving among older adults", Research on aging, vol. 29, issue 2, March.
- Cloos, P. and others (2010), "Active ageing': a qualitative study in six Caribbean countries" Ageing and Society, vol. 30, issue 1, January.
- Dahan-Oliel, N., Gelinas, I., and Mazer, B. (2008), "Social participation in the elderly: What does the literature tell us?", Critical Reviews™ in Physical and Rehabilitation Medicine, vol. 20, issue 2.
- Daubman, B. R. and others (2021), "Implementing Palliative Care Training in the Caribbean: Development and Assessment of a Basic Palliative Care Training Course in Jamaica", Journal of Pain and Symptom *Management*, vol. 62, issue 6, December.
- De Boodschap (Suriname) (2022), "Regering roept assistentie BBGO in om ouderen in nood te bereiken", Paramaribo, Suriname, January.
- De Vos, S. (1990), "Extended family living among older people in six Latin American countries", Journal of Gerontology, vol. 45, issue 3, May.
- Dickerson, A. E. and others (2007), "Transportation and aging: A research agenda for advancing safe mobility" The Gerontologist, vol. 47, issue 5, October.
- Dong, X. Q. (2015), "Elder abuse: Systematic review and implications for practice", Journal of the American Geriatrics Society, vol. 63, issue 6, June.
- Dong, X. Q. and others (2011), "Elder abuse and mortality: The role of psychological and social wellbeing", *Gerontology*, vol. 57, issue 6, October.
- ECLAC (Economic Commission for Latin America and the Caribbean) (2022a), "The sociodemographic impacts of the COVID-19 pandemic in Latin America and the Caribbean" (LC/CRPD.4/3), Santiago, 2022.
- (2022b), Social Panorama of Latin America, 2021 (LC/PUB.2021/17-P), Santiago, January.
- (2003), "Regional Strategy for the Implementation in Latin America and the Caribbean of the Madrid International Plan of Action on Ageing", Santiago, Chile, November.
- Eldemire-Shearer, D. and others (2020), "Elder Abuse—An Examination of the Situation in Jamaica", International Handbook of Elder Abuse and Mistreatment, Shankardass, M. (ed.), Singapore, Springer.
- (2011), "Chronic disease and ageing in the Caribbean: opportunities knock at the door", West Indian *Medical Journal*, vol. 60, issue 4, July.
- Esteve, A. and others (2020), "Living alone over the life course: Cross-national variations on an emerging issue" Population and Development Review, vol. 46, issue 1, March.

- EU-OSHA (European Agency for Safety and Health at Work) (2016), "The ageing workforce: Implications for occupational safety and health: a research review", European Union, Bilbao, Spain.
- Forsman, A. K., and Nordmyr, J. (2017), "Psychosocial links between Internet use and mental health in later life: a systematic review of quantitative and qualitative evidence", Journal of Applied Gerontology, 36(12), December.
- Gény, L. R. (2018), "Caribbean synthesis report on the Madrid International Plan of Action on Ageing and the San José Charter on the Rights of Older Persons in Latin America and the Caribbean", LC/TS.2017/143, LC/CAR/TS.2017/10, Santiago, Chile, ECLAC, January.
- GIS (Government Information Service) of Grenada (2022), "National Address By Prime Minister, Dr. the Rt. Hon. Keith Mitchell, April 26 2022".
- Government of Antigua and Barbuda (2017), "Antiqua and Barbuda National Policy and Plan of Action on Healthy Ageing 2017-2027".
- Government of Barbados (2019), "The Barbados Comprehensive Disaster Management (CDM) Country Work Programme (CWP) 2019-2023", The Department of Emergency Management, Bridgetown.
- Government of Bermuda (n/d), "General Information Services" [online], Hamilton, Bermuda [date of reference: 03 June 2022] < https://www.gov.bm/seniors-services-and-resources>.
- (2021), "Interest Free Loan Initiative for Seniors (Aged 50+) and Disabled Persons. Available" [online], Hamilton, Bermuda [date of reference: o6 June 2022] https://www.gov.bm/articles/ interest-freeloan-initiative-seniors-aged-50-and-disabled-persons%C2%Ao>.
- (2018), "Bermuda's Population Projections, 2016–2026", Department of Statistics, Hamilton, Bermuda, September.
- Government of Montserrat (2021), "Public consultation on the new National Policy on the Care of Older Persons 2022-2026" [online], Brades, Montserrat, [date of reference: 03 December 2021] .
- Government of Sint Maarten (2013), "Results Elderly Research Sint Maarten: Version November 4, 2013", Van Sittert, R. (ed.), Department of Social Development, Philipsburg, Sint Maarten.
- Govia, I. and others (2021), "Mapping long-term care in Jamaica: Addressing an ageing population", Sustainability, vol. 13, issue 14, July.
- Greenfield, E. A., and Russell, D. (2011), "Identifying living arrangements that heighten risk for loneliness in later life: Evidence from the US National Social Life, Health, and Aging Project", Journal of Applied Gerontology, 30(4), August.
- Guerra, M. and others (2016), "A comparative cross-cultural study of the prevalence of late life depression in low and middle income countries", Journal of affective disorders, vol. 190, January.
- Gutman, G. M., and Yon, Y. (2014), "Elder abuse and neglect in disasters: Types, prevalence and research gaps", International journal of disaster risk reduction, vol. 10 part A, December.
- Hank, K., and Erlinghagen, M. (2010), "Dynamics of volunteering in older Europeans", The Gerontologist, vol. 50, issue 2, April.
- Henning-Smith, C., Shippee, T., and Capistrant, B. (2018), "Later-life disability in environmental context: Why living arrangements matter", *The Gerontologist*, vol. 58, issue 5, October.
- Hu, Y. and others (2020), "Do multigenerational living arrangements influence depressive symptoms in mid-late life? Cross-national findings from China and England", Journal of Affective Disorders, vol. 277, December.
- Hunsaker, A., and Hargittai, E. (2018), "A review of Internet use among older adults", New Media and Society, vol. 20, issue 10, October.
- Hutton, D. (2008), "Older people in emergencies: considerations for action and policy development", World Health Organization, Geneva, Switzerland.
- Ichiseki, H. (2013), "Features of disaster-related deaths after the Great East Japan Earthquake", The Lancet, vol. 381, issue 9862, January.

- IFRC (International Federation of the Red Cross) (2022), "St. Vincent and the Grenadines: Recovery efforts continue to be crucial one year after the La Soufrière eruption" [online], Geneva, Switzerland [date of reference: 02 June 2022] reference: 02 June 2022] https://www.ifrc.org/press-release/st-vincent-and-grenadines-recovery-">https://www.ifrc.org/press-release/st-vincent-and-grenadines-recovery- efforts-continue-be-crucial-one-year-after-la>.
- JIS (Jamaica Information Service) (2022), "Revised National Policy for Senior Citizens to be Presented Sept. 21", Kingston, Jamaica, 19 September.
- Jennings, N. and others (2018), "Main themes, barriers, and solutions to palliative and end-of-life care in the English-speaking Caribbean: a scoping review", Pan American Journal of Public Health, vol. 42, January.
- Jones, F. (2021), "The situation of non-communicable diseases in the Caribbean", Focus, issue 1, January March, Port of Spain, Trinidad and Tobago, ECLAC.
- (2016), "Ageing in the Caribbean and the human rights of older persons: Twin imperatives for action", Santiago, Chile, ECLAC.
- Jonkman, S. N. and others (2009), "Loss of life caused by the flooding of New Orleans after Hurricane Katrina: analysis of the relationship between flood characteristics and mortality", Risk Analysis: An International Journal, vol. 29, issue 5, May.
- Kishore, N. and others (2018), "Mortality in Puerto Rico after hurricane Maria", New England Journal of Medicine, 379(2), July.
- Klinenberg, E. (2016), "Social isolation, loneliness, and living alone: identifying the risks for public health", American journal of public health, vol. 106, issue 5, May.
- König, R., Seifert, A., and Doh, M. (2018), "Internet use among older Europeans: an analysis based on SHARE data", Universal Access in the Information Society, vol. 17, issue 3, August.
- Korinek, K., Zimmer, Z. and Gu, D. (2011), "Transitions in marital status and functional health and patterns of intergenerational coresidence among China's elderly population", The Journals of Gerontology: Series B, vol. 66, issue 2, March.
- Lee, I. M. and others (2012), "Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy", The Lancet, vol. 380, issue 9838, July.
- Levasseur, M. and others (2010), "Inventory and analysis of definitions of social participation found in the aging literature: Proposed taxonomy of social activities" Social science and medicine, vol. 71, issue 12, December.
- Lorenz-Dant, K. (2020), "International examples of measures to support unpaid carers during the COVID-19 pandemic", International Long-Term Care Policy Network, CPEC-LSE, May.
- Luchetti, M. and others (2020), "The Trajectory of Loneliness in Response to COVID-19", American Psychologist, vol. 75, issue 7, October.
- Macinko, J. and others (2019), "Primary care and multimorbidity in six Latin American and Caribbean countries", Pan American Journal of Public Health, vol. 43, January.
- (2016), "Gaps in primary care and health system performance in six Latin American and Caribbean countries", Health Affairs, vol. 35, No. 8, August.
- Macpherson, C. C., Chiochankitmun, N., and Akpinar-Elci, M. (2014), "Hospice and palliation in the Englishspeaking Caribbean", Cambridge Quarterly of Healthcare Ethics, vol. 23, issue 3, July.
- Maharaj, S., and Harding, R. (2016), "The needs, models of care, interventions and outcomes of palliative care in the Caribbean: a systematic review of the evidence", BMC palliative care, vol. 15, issue 1, January.
- Martinez, R. and others (2021), "Life expectancy, healthy life expectancy, and burden of disease in older people in the Americas, 1990–2019: a population-based study", Pan American Journal of Public Health, vol. 45, September.
- Meucci, M. R. and others (2016), "Variation in the presence of simple home modifications of older Americans: findings from the National Health and Aging Trends Study", Journal of the American Geriatrics Society, vol. 64, issue 10, October.
- Mezuk, B., and Rebok, G. W. (2008), "Social integration and social support among older adults following driving cessation", The Journals of Gerontology: Series B, vol. 63, issue 5, September.
- MLSS (Ministry of Labour and Social Security) (2021), "Social Pension Programme", Ministry Paper No. 27/2021, Kingston, Jamaica, April.

- Nam, V., and Jones, F. (2018), "Inclusive Social Protection and Demographic Change: The Implications of Population Ageing for Social Expenditure in the Caribbean", Studies and Perspectives Series – The Caribbean, No.66, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), January.
- Nassar, K. and others (2016), "National Insurance Scheme Reforms in the Caribbean", IMF Working Paper, WP/16/206, International Monetary Fund, November.
- Nationale Ombudsman (2019), "Focus on the elderly in the Caribbean Netherlands", Report number 2019/045, September.
- Newmyer, L. and others (2021), "Measuring Older Adult Loneliness Across Countries", The Journals of Gerontology: Series B, vol. 76. Issue 7, September.
- Newsday (2021), "Ministry: Elder abuse reports in 2021 overtake 2020 statistics", Port of Spain, Trinidad and Tobago, 15 July 2021.
- PAHO (Pan American Health Organization) (2021a), "Updated PAHO Regional Sodium Reduction Targets: A Tool to Tackle the Burden of Diet-related Noncommunicable Diseases", Washington D.C., October.
- (2021b), "Hospitals and isolation facilities in the Eastern Caribbean Countries are overwhelmed with the increase of COVID-19 cases combined by shortage of health workforce and clinical supplies", Washington D.C., September.
- (2017), "Health in the Americas+ 2017 Edition: Summary Regional Outlook and Country Profiles", Washington D.C., December.
- (2010), "Health Systems Profile, Antiqua and Barbuda 2008", Washington D.C., December.
- Park, S. S. (2021), "Caregivers' mental health and somatic symptoms during COVID-19", The Journals of *Gerontology: Series B*, vol. 76, issue 4, April.
- Pelaez, M., and Martinez, I. (2002), "Equity and systems of intergenerational transfers in Latin America and the Caribbean", Pan American Journal of Public Health, vol. 11, May/June.
- Peng, R., and Wu, B. (2015), "Changes of health status and institutionalization among older adults in China", Journal of aging and health, vol. 27, issue 7, October.
- Pinquart, M, and Sörensen, S. (2011), "Spouses, adult children, and children-in-law as caregivers of older adults: a meta-analytic comparison", Psychol Aging, Vol. 26, No. 1, March.
- Pinto-Bruno, Á. C. and others (2017), "ICT-based applications to improve social health and social participation in older adults with dementia", *Aging and Mental Health*, vol. 21, No. 1, January.
- PIOJ (Planning Institute of Jamaica) (2022), "Economic and Social Survey of Jamaica, 2021", Kingston, Jamaica, June.
- Poushter, J., Bishop, C., and Chwe, H. (2018), "Social media use continues to rise in developing countries but plateaus across developed ones", Washington D.C., Pew Research Center, June.
- Quashie, N. T., and Andrade, F. C. (2020), "Family status and later-life depression among older adults in urban Latin America and the Caribbean", Ageing and Society, vol. 40, issue 2, February.
- Quashie, N. T. and others (2018), "Population ageing and sustainable development in the Caribbean: where are we 15 years post MIPAA", International Journal of Ageing in Developing Countries, vol. 2, issue 2, Malta, International Institute on Ageing.
- Quashie, N., and Zimmer, Z. (2013), "Residential proximity of nearest child and older adults' receipts of informal support transfers in Barbados", Ageing and Society, vol. 33, issue 2, February.
- Rawlins, J. M. and others (2008), "The elderly in Trinidad: Health, social and economic status and issues of loneliness", West Indian Medical Journal, vol. 57, issue 6, December.
- Razzaghi, H. and others (2019), "10-year trends in noncommunicable disease mortality in the Caribbean region", Pan American Journal of Public Health, vol. 43, April.
- Reiner, M. and others (2013), "Long-term health benefits of physical activity-a systematic review of longitudinal studies" BMC public health, vol. 13(1), September.
- Rouse, J. and Inniss, K. (2015), "Planning for Retirement Years The Trinidad and Tobago Experience", Ageing in the Caribbean – ECLAC Focus, Issue 2, April- June.
- Royal Gazette (2019), "Sigh of relief, but what about the long term?", Hamilton, Bermuda, 12 March 2019. _____(2017), "Seniors train to tackle emergencies", Hamilton, Bermuda, 8 February 2017.

- Santosa, A. and others (2014), "The development and experience of epidemiological transition theory over four decades: a systematic review", Global Health Action, vol. 7, May.
- Santos-Burgoa, C. and others (2018), "Differential and persistent risk of excess mortality from Hurricane Maria in Puerto Rico: a time-series analysis", The Lancet Planetary Health, vol. 2, issue 11, November.
- Satariano, W. A., Scharlach, A. E., and Lindeman, D. (2014), "Aging, place, and technology: Toward improving access and wellness in older populations", Journal of Aging and Health, vol. 26, issue8, December.
- Savage, R. D. and others (2021), "Loneliness among older adults in the community during COVID-19: a crosssectional survey in Canada", BMJ open, 11(4).
- Schwartz, M. J. and M. A. Zegarra (2021), "Pension Systems in the Caribbean: The Challenges Ahead", Economic institutions for a resilient Caribbean, Moisés J. Schwartz and Diether W. Beuermann (eds.), Washington, D.C., Inter-American Development Bank, February.
- Scott, E., & Theodore, K. (2013), "Measuring and explaining health and health care inequalities in Jamaica, 2004 and 2007", Pan American Journal of Public Health, vol. 33, February, 116-121.
- Seifert, A., Cotten, S. R., and Xie, B. (2021), "A double burden of exclusion? Digital and social exclusion of older adults in times of COVID-19", The Journals of Gerontology: Series B, vol. 76, issue 3, March.
- Serlin, C. (2016), "Affordable Seniors Housing Opens in the U.S. Virgin Islands" [online] [date of reference: 06 https://www.housingfinance.com/developments/affordable-seniors-housing- 2022] opens-in-u-s-virgin-islands_o>.
- SKNIS (Saint Kitts and Nevis Information Service) (2020), "Seniors encouraged to enroll in short courses at CFBC" [online], Basseterre, St. Kitts and Nevis, [date of reference: o6 September 2022] https://www.sknis.gov.kn/2020/03/11/seniors-encouraged-to-enroll-in-short-courses-at-cfbc/>.
- Small-Ferguson, R., Johnson, S. and Panday, V. (2018), "Pensions Industry Trends and Caribbean Experience", presentation at the Caribbean Actuarial Association Conference, Kingston, Jamaica, November.
- Stubbs, M. and others (2021), "The experiences of caregivers of persons living with dementia in Jamaica during COVID-19", Gerontology and Geriatric Medicine, vol. 7.
- Torres, J. L. and others (2022), "Loneliness and social disconnectedness in the time of pandemic period among Brazilians: evidence from the ELSI COVID-19 initiative", Aging and Mental Health, vol. 26, No. 5, May.
- United Nations (2021), "St. Vincent and the Grenadines: La Soufrière Volcano, Report No. 3" [online], Christ Church, Barbados [date of reference: 02 June 2022] https://reliefweb.int/report/saint-vincent-and- grenadines/st-vincent-grenadines-la-soufri-re-volcano-report-no-o3-17>.
- (2017), "Living Arrangements of Older Persons: A Report on an Expanded International Dataset", Population Division of the Department of Economic and Social Affairs, ST/ESA/SER.A/407, New York.
- (2005), "Living Arrangements of Older Persons Around the World", Population Division of the Department of Economic and Social Affairs, New York.
- (2000), "The right to enjoy the highest possible level of health (article 12 of the International Covenant on Economic, Social, and Cultural Rights)", General Comment, No. 14 (E/C.12/2000/4), Committee on Economic, Social and Cultural Rights, Geneva.
- Van Tilburg, T.G. and others (2021), "Loneliness and Mental Health During the COVID-19 Pandemic: A Study Among Dutch Older Adults", Journal of Gerontology: Series B, vol. 76, issue 7, September.
- WHO (World Health Organization) (2022), "Noncommunicable diseases: Key Facts" [online], Geneva, Switzerland [date of reference: 24 September 2022] https://www.who.int/news-room/fact-100 sheets/detail/noncommunicable-diseases>.
- (2020), "Palliative Care: Key Facts" [online], Geneva, Switzerland [date of reference: 04 September 2022] https://www.who.int/news-room/fact-sheets/detail/palliative-care.
- <u>(2014)</u>, "Global Status Report on Noncommunicable Diseases 2014", Geneva, Switzerland.
- (2011), "European report on preventing elder maltreatment", Copenhagen, Denmark, World Health Organization Regional Office for Europe.
 - (2002), "Active ageing: A policy framework", No. WHO/NMH/NPH/02.8, Geneva, Switzerland.
- WHO (World Health Organization) and University of Geneva (2008), "A global response to elder abuse and neglect: building primary health care capacity to deal with the problem worldwide" (ISBN 978 92 4 156358 1), Geneva, Switzerland.

- WPCA and WHO (Worldwide Palliative Care Alliance and World Health Organization) (2014), "Global Atlas of Palliative Care at the End of Life", London, United Kingdom, January.
- Willie-Tyndale, D. and others (2016), "Participation in social activities and the association with sociodemographic and health-related factors among community-dwelling older adults in Jamaica", Journal of cross-cultural gerontology, vol. 31, issue 4, December.
- World Bank (2010), "Strengthening Caribbean Pensions: Improving Equity and Sustainability", World Bank Publications - Reports 2847, The World Bank Group.
- Yon, Y. and others (2019), "The prevalence of elder abuse in institutional settings: a systematic review and meta-analysis", European Journal of Public Health, vol. 29, issue 1, February.
- (2017), "Elder abuse prevalence in community settings: a systematic review and meta-analysis", The Lancet Global Health, vol. 5, issue 2, February.



Series

ECLAC

Studies and Perspectives-The Caribbean

Issues published

A complete list as well as pdf files are available at www.eclac.org/publicaciones

- 111. The ageing Caribbean: 20 years of the Madrid Plan of Action, Nekehia Quashie and Francis Jones, (LC/TS.2022/225; LC/CAR/TS.2022/5), 2023.
- 110. Science, technology and innovation for sustainable development: lessons from the Caribbean's energy transition, Laverne Walker and Jônatas de Paula (LC/TS.2022/217; LC/CAR/TS.2022/4), 2022.
- 109. Addressing gender disparities in education and employment: a necessary step for achieving sustainable development in the Caribbean, Abdullahi Abdulkadri, Samantha John-Aloye, Iskuhi Mkrtchyan, Candice Gonzales, Shari Johnson and Shirelle Floyd (LC/TS.2022/114; LC/CAR/TS.2022/3), 2022.
- 108. Preliminary overview of the economies of the Caribbean 2020–2021, Dillon Alleyne, Michael Hendrickson, Sheldon McLean, Machel Pantin, Nyasha Skerrette and Keron Victor (LC/TS.2022/49; LC/CAR/TS.2022/2), 2022.
- 107. A review of the status of institutional mechanisms for sustainable development planning in the Caribbean, Catarina Camarinhas and Ivica Trumbic (LC/TS.2022/16; LC/CAR/TS.2022/1), 2022.
- 106. Economic Survey of the Caribbean 2021, Dillon Alleyne, Michael Hendrickson, Sheldon McLean, Machel Pantin and Nyasha Skerrette (LC/TS.2021/222; LC/CAR/TS.2021/8), 2022.
- 105. Selected online learning experiences in the Caribbean during COVID-19, Amelia Bleeker and Ryan Crowder (LC/TS.2021/212; LC/CAR/TS.2021/7), 2022.
- 104. Education during the COVID-19 pandemic: access, inclusion and psychosocial support, Malaka Parker and Pablo Alfaro (LC/TS.2021/211; LC/CAR/TS.2021/6), 2022.
- 103. Proposal to establish a Caribbean Resilience Fund: a segregated portfolio trust fund, Sheldon McLean and Justin Ram (LC/TS.2021/210; LC/CAR/TS.2021/5), 2022.
- Synthesis of policy interventions responding to integrated water resources management challenges in the Caribbean SIDS, Artie Dubrie, Marilyn Crichlow, Elon Cadogon, Priscilla Miranda, Stacey Moultrie, Kemraj Parsram, Herbert Thomas and Rudolph Williams (LC/TS.2021/209; LC/CAR/TS.2021/4), 2022.

STUDIES AND PERSPECTIVES

Issues published:

- 111 The ageing Caribbean
 20 years of the Madrid Plan of Action
 Nekehia Quashie and Francis Jones
- 110 Science, technology and innovation for sustainable development
 Lessons from the Caribbean's energy transition
 Layerne Walker and Jônatas de Paula
- 109 Addressing gender disparities in education and employment A necessary step for achieving sustainable development in the Caribbean Abdullahi Abdulkadri, Samantha John-Aloye, Iskuhi Mkrtchyan, Candice Gonzales, Shari Johnson and Shirelle Floyd



