Chapter 2
Improving Health in the Caribbean Region: Challenges and Opportunities

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The Caribbean region encompasses more than 700 islands, islets, reefs, and cays, which are grouped into 13 sovereign states and 12 dependent territories under the governance of larger developed nations. It is a region inhabited by 44 million people representing diverse races and ethnicities, including African, Indian, and Indigenous populations. Despite their historically distinct lifestyles and practices, collectively there is a high prevalence of non-communicable diseases and unhealthy behaviors that contribute to persistently high mortality rates in the region.

Before the onset of the COVID-19 pandemic, the Caribbean region already faced challenges such as elevated infant mortality rates, a life expectancy slightly below that of developed nations, and a significant prevalence of issues like obesity and substance abuse (Healthy Caribbean Coalition, 2017; Pan-American Health Organization [PAHO], 2012). When COVID-19 emerged alongside these preexisting health concerns, it had a detrimental impact on the population. With a mortality toll of over 50,000 people across the Caribbean, it served as a stark reminder that if these underlying health issues are not addressed, the region remains vulnerable to increased mortality rates and ill-preparedness for future pandemics or disasters.

This chapter offers a comprehensive assessment of the health landscape in the Caribbean region before the onset of the pandemic. It will spotlight critical health markers, including infant mortality, life expectancy, and mortality rates attributed to non-communicable diseases such as diabetes and heart disease. Additionally, it will delve into the various risk factors associated with these diseases, with a particular emphasis on obesity, alcohol consumption, and the prevalence of suicide. The examination of suicide rates highlights the importance of mental and emotional well-being. The inclusion of suicide as a topic of discussion underscores the significance of addressing the mental and emotional well-being of both adults and

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children throughout the region. The chapter concludes by exploring recommendations aimed at enhancing the overall health and well-being of the Caribbean population.

Patterns of Overall Health in the Region

Infant mortality is a crucial health indicator because it serves as a sensitive barometer of a nation's overall health and well-being. Infant mortality is a widely used measure of health in international comparisons. It captures the rate at which babies die before their first birthday. A high infant mortality rate indicates serious issues within the healthcare system, the socioeconomic conditions, and the general environment. It not only highlights challenges in maternal and child healthcare but also signifies inadequate access to prenatal care, immunizations, and nutrition. Monitoring and reducing infant mortality are essential goals for any nation.

Patterns of overall health within the Caribbean region are illustrated in Table 2.1, which reveals data on infant mortality, under-five mortality, and life expectancy. The infant mortality data reveal dramatic variation across countries within the region (World Health Organization [WHO], 2022a). Notably, countries such as Cuba and Antigua have achieved infant mortality rates lower than those of the United States, showcasing remarkable health successes. At the same time, Haiti, Dominica, the Dominican Republic, Guyana, and St. Lucia have remarkably elevated rates that are five to nine times higher than the rate in Cuba. A similar pattern is evident for the under-five mortality. The overall rate in the region of the Americas including the Caribbean is 13 deaths before the age of 5 for every 1000 live births. Cuba, along with Antigua and Barbuda, like the United States, has a child mortality rate that is less than half the rate for the region. Other countries such as the Bahamas, Barbados, and Jamaica have rates that are equal to or slightly lower than the average rate for the region. At the same time, Haiti, Dominica, the Dominican Republic, Guyana, and St. Lucia have rates that are about two to four times higher than the region (WHO, 2022b).

Life expectancy at birth is another widely used measure of overall health. Table 2.1 shows that in 2021, life expectancy was 76 for the United States and 72 for Latin America and the Caribbean. Antigua and Barbuda along with Barbados leads the region with a life expectancy of 78. Barbados boasts a remarkable statistic, with 71 centenarians per 100,000 individuals (Fitzgerald, 2022). Similarly, Martinique follows closely behind with 63 centenarians, while Guadeloupe stands out with 75 centenarians per 100,000 people (Fitzgerald, 2022). Grenada boasts a commendable life expectancy of 75, while Cuba follows closely with 74, and Dominica, the Dominican Republic, and Trinidad and Tobago each maintain a respectable life expectancy of 73. These figures compare favorably with the regional average. However, several other countries in the region lag behind, with Haiti and Guyana reporting the lowest life expectancies at just 63 and 66, respectively. These

Table 2.1 Patterns of overall health in the Caribbean region

Country	Infant mortality[a] per 1000 births 2021	Under-five mortality[b] per 1000 births 2021	Life expectancy[c] 2021
Antigua and Barbuda	5	6	78
Bahamas	11	13	72
Barbados	11	12	78
Cuba	4	5	74
Dominica	32	36	73
Dominican Republic	27	33	73
Grenada	14	16	75
Guyana	23	28	66
Haiti	45	59	63
Jamaica	11	12	71
Saint Kitts and Nevis	12	15	72
Saint Lucia	22	25	71
Saint Vincent and the Grenadines	13	14	70
Suriname	15	17	70
Trinidad and Tobago	15	16	73
United States	5	6	76
Region of Americas	11	13	
Caribbean small states			71
Latin America + Caribbean			72
Global		38	71

[a]WHO Global Health Observatory Indicators https://www.who.int/data/gho/data/indicators/indicator-details/GHO/infant-mortality-rate-(probability-of-dying-between-birth-and-age-1-per-1000-live-births)

[b]WHO Global Health Observatory Indicators https://www.who.int/data/gho/data/indicators/indicator-details/GHO/under-five-mortality-rate-(probability-of-dying-by-age-5-per-1000-live-births) (SDG 3.2.1) (who.int)

[c]The World Bank Data https://data.worldbank.org/indicator/SP.DYN.LE00.IN

point to significant disparities in health indicators across the Caribbean region with poorer health outcomes compared to the broader Americas region (World Bank, 2022).

Mortality Rate for Selected Diseases

Non-communicable diseases (NCDs), also known as chronic diseases, are a group of medical conditions that develop over the life span and are often influenced by a combination of genetic, behavioral, environmental, and lifestyle factors.

Non-communicable diseases are a major global health concern because they are often associated with a significant disease burden, long-term disability, and high healthcare costs. Many of these diseases can be prevented or managed through healthy lifestyle choices, early detection, and effective medical care. Non-communicable diseases encompass a wide range of health conditions, including but not limited to cardiovascular diseases (CVDs), both type 1 and type 2 diabetes, chronic obstructive pulmonary disease (COPD), asthma, and chronic bronchitis, all of which impact the respiratory system. It also includes obesity, chronic kidney disease, musculoskeletal disorders, and mental health disorders, including depression and anxiety.

Table 2.2 presents the prevalence rates per 100,000 individuals for non-communicable diseases, specifically diabetes and ischemic heart disease, across various countries in the Caribbean region. For the Americas region as a whole, the mortality rate for non-communicable disease is 411 (per 100,000 population). The US rate is comparable at 408 per 100,000, while the rate in low- and middle-income countries is 589 globally (WHO, 2021a). Cuba's rate is closest to the United States

Table 2.2 Mortality rate per 100,000 for non-communicable diseases, diabetes and ischemic heart disease in the Caribbean region

	Non-communicable		Ischemic heart
	Diseases[a] per 100,000	Diabetes[b] per 100,000	Disease[c] per 100,000
Country	2019	2019	2019
Antigua and Barbuda	501	62	78
Bahamas	532	51	89
Barbados	476	46	56
Cuba	431	12	98
Dominican Rep.	507	34	144
Grenada	618	81	114
Guyana	801	97	193
Haiti	837	80	185
Jamaica	454	70	50
Saint Lucia	516	71	60
Saint Vincent and the Grenadines	537	53	94
Suriname	665	72	123
Trinidad and Tobago	439	78	82
United States	408	15	74
Region of Americas	411	56	76
Low-middle income	589		

[a]WHO Global Health Observatory Indicators https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-ghe-ncd-mortality-rate (accessed 3/15/2022)
[b]Pan American Health Organization/WHO Core Indicators Dashboard: Country Profiles https://opendata.paho.org/en/core-indicators/core-indicators-dashboard (accessed 3/15/2022)
[c]Pan American Health Organization/WHO Core Indicators Dashboard: Country Profiles https://opendata.paho.org/en/core-indicators/core-indicators-dashboard (accessed 3/16/2022)

with 431 per 100,000. Several countries in the region have a markedly higher rate than that for low- and middle-income countries, with rates being 837 for Haiti, 801 for Guyana, 665 for Suriname, and 618 for Grenada. However, all countries in the Caribbean region have a rate that is higher than that of the Americas region.

Table 2.2 also displays the mortality rates for diabetes. Poorly controlled diabetes affects not only diabetes mortality, but it also increases the risk of cardiovascular diseases, nephropathy, neuropathy, amputation, and blindness. Most countries in the Caribbean region have mortality rates for diabetes that are higher than the rate of the Americas region. Guyana has the highest rate, but it is closely followed by Haiti, Trinidad and Tobago, and Grenada. Cuba has the lowest prevalence of diabetes in the Caribbean, with a rate that is slightly lower than that of the United States (PAHO, 2023). The high global incidence of diabetes represents a significant public health challenge. A projection by Wild et al. (2004) estimated that by the year 2030, the Americas region would be home to approximately 66.8 million individuals living with diabetes. In 2004, it was projected that by 2030, the Americas region would have 66.8 million persons with diabetes (Wild et al., 2004).

Ischemic heart disease is another major killer within the region, and again, considerable variation is evident. Guyana (i.e., 193 per 100,000) has the highest rate, but it is closely followed by Haiti (i.e., 185 per 100,000), the Dominican Republic (i.e., 144 per 100,000), Suriname (i.e., 123), Grenada (i.e., 114), Cuba (i.e., 98), St. Vincent and the Grenadines (i.e., 94), and the Bahamas (i.e., 89). Most Caribbean countries have rates higher than the United States and the Americas region. However, there are some countries like Jamaica, Barbados, and St. Lucia that have rates lower than the Americas region (PAHO, 2023).

An earlier report from the Pan American Health Organization (2012) drew on data from 2007 and highlighted the challenge of so many dying too soon from ischemic heart disease within the region. For example, it compared Canada where there were 32 deaths per 100,000 for males and 9 per 100,000 for females with Trinidad and Tobago, where the rates were 78 per 100,000 for males and 33 per 100,000 for females. That is, the rates of death from ischemic heart disease were more than two or three times higher in Trinidad and Tobago than in Canada, illustrating the heavy burden of this disease within the region. Relatedly, high blood pressure is also a huge problem within the Caribbean region and around the world. Globally, it is the leading cause of death and the second leading cause of disability (PAHO, 2012). In 2000, there were one billion people with hypertension in the world, and the number is expected to increase over time. The prevalence of hypertension is high throughout the PAHO region, among both males and females. In all countries of the region, PAHO estimates more than 30% of adults have hypertension, and in some countries, it's as high as 48% (PAHO, 2012).

This comprehensive overview of the prevalence of non-communicable diseases, with a particular focus on diabetes, hypertension, and ischemic heart disease, describes the multifaceted health challenges within the Caribbean region. The data reveals substantial variations in mortality rates, shedding light on the health challenges faced by each country. Several Caribbean nations exhibit markedly higher

mortality rates, with Haiti, Guyana, Suriname, and Grenada experiencing rates well above that of low- and middle-income countries. Contributing factors that impact the higher mortality rate are due to the prevalence of diabetes. Guyana emerges with the highest rate, closely followed by Haiti, Trinidad and Tobago, and Grenada. In contrast, Cuba stands out with the lowest prevalence of diabetes in the Caribbean, slightly below that of the United States (PAHO, 2023). This underscores the global concern surrounding the escalating rates of diabetes, with projections indicating a substantial rise in affected individuals by 2030.

A PAHO report (2012) drew attention to the critical issue of premature deaths resulting from ischemic heart disease within the region. Ischemic heart disease represents another significant health challenge within the region, characterized by notable variations among countries. Most Caribbean nations (e.g., Guyana, Haiti, Dominican Republic) report rates higher than those in the United States and the broader Americas region. It emphasized the stark contrast between Canada and Trinidad and Tobago, where death rates from the disease were more than two to three times higher in Trinidad and Tobago.

Hypertension emerged as another pressing concern, both in the Caribbean and globally. It is the leading cause of death worldwide and the second leading cause of disability (PAHO, 2012). The prevalence of hypertension is notably high in the Caribbean, affecting both males and females, with estimates indicating that over 30–48% of adults in all countries in the region have hypertension.

Caribbean countries with markedly higher mortality rates for non-communicable diseases, including diabetes, ischemic heart disease, and hypertension, were particularly vulnerable to the impact of COVID-19. Contracting COVID-19 has shown to be more severe in individuals with preexisting non-communicable diseases even resulting in death. The pandemic with the related lockdowns, restrictions, and the lack of access to medical care hindered regular checkups and treatments that caused widespread stress and anxiety, which can exacerbate these diseases. This emphasizes continued efforts to address non-communicable diseases to improve public health outcomes and reduce health disparities.

Risk Factors: Obesity, Alcohol, and Suicide

Obesity, excessive alcohol consumption, and suicide are significant risk factors that can have detrimental effects on both individual health and public well-being. Obesity is a complex health issue characterized by an excessive accumulation of body fat. It is a contributing factor for heart disease, diabetes, certain types of cancer, and musculoskeletal disorders. Excessive alcohol consumption has been linked to a range of health problems, including liver disease, cardiovascular issues, mental health disorders, and an increased risk of accidents and injuries (WHO, 2022c). Last, suicide is a tragic outcome of mental health disorders and emotional distress (Modeste-James et al., 2023).

Obesity

Table 2.3 provides a glimpse of some of the risk factors for chronic disease. The first two columns show the prevalence of obesity for men and women in the Caribbean region (WHO, 2022c). According to the WHO, obesity has emerged as a major health challenge of global concern, yet it is preventable (WHO, 2021b). Specifically, the prevalence of obesity worldwide has nearly tripled since 1975, and in 2016, more than 1.9 billion adults, 18 years and older, were overweight, and over 650 million were obese. Not surprisingly then, some 39% of adults were overweight in 2016, and 13% were obese. WHO (2021b) data also reveal that overweight and obesity is a growing problem among children and youth. Over 340 million 5–19-year-olds were overweight or obese in 2016, and in 2020, 39 million children under the age of 5 were overweight or obese.

Table 2.3 shows that men in the Caribbean region have lower rates of obesity (e.g., Dominican Republic, 21; Suriname 19 per 100,000) than their peers in the United States (i.e., 36 per 100,000). However, compared to men in lower- and middle-income countries globally, Caribbean men have markedly higher rates. For

Table 2.3 Prevalence of obesity and suicide mortality in the Caribbean region

Country	Obesity Male adults[a] (%) 2016	Obesity Female adults[a] (%) 2016	Suicide Mortality[b] per 100,000 2019
Antigua and Barbuda	12	26	0
Bahamas	24	38	4
Barbados	15	31	1
Cuba	19	30	15
Dominica	20	36	
Dominican Rep.	21	34	5
Grenada	13	29	1
Guyana	13	27	40
Haiti	18	27	10
Jamaica	15	33	2
Saint Kitts and Nevis	15	30	
Saint Lucia	12	27	8
Saint Vincent and the Grenadines	17	31	1
Suriname	19	34	25
Trinidad and Tobago	11	26	9
United States	36	37	16
Region of Americas	26	31	10
Low-middle income	5	10	

[a]WHO Global Health Observatory Indicators https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-=-30-(age-standardized-estimate)-(-) (accessed 3/15/2022)
[b]World Health Organization (2021c)

females within the region, there is some variation, but, in general, the levels are relatively high, with the prevalence of obesity for women (e.g., Dominica, 37, Dominican Republic 34 per 100,000) in most countries of the region being only slightly lower than that of the United States (i.e., 36 per 100,000). The Bahamas (i.e., 38 per 100,000) is slightly higher than the United States (WHO, 2022b).

Health leaders in the Caribbean need to take the challenge of obesity seriously. Obesity has serious implications, one of which is its effect on healthcare expenditures. In 2011, it was estimated that the cost in healthcare spending, attributable just to obesity, was $270 billion in the United States and $30 billion in Canada (Withrow & Alter, 2011). However, the report also indicated that obesity has multiple other costs, some of which people do not even think about. For example, in addition to the medical costs, the United States spends, annually, an additional 9 billion dollars for the extra jet fuel needed to fly heavier Americans and an additional 4 billion dollars annually for the extra gasoline for cars that are carrying heavier passengers (Withrow & Alter, 2011). And then, there is the impact beyond the financial of the costs linked to the increased risk of a broad range of chronic diseases (including osteoarthritis, cardiovascular disease, cancer, and diabetes) due to obesity.

An ominous storm cloud readily evident in the United States today is childhood obesity. A study using national data for the United States projected obesity rates in the future based on the current trends (Ward et al., 2017). The study found that 57% of all American children and youth currently aged 2–19 years will be obese by the age of 35. In the United States, Black and Hispanic children, at age 2, are more likely to be obese than their White counterparts. This study also projected that almost 70% of all Black and Latinx children, aged 2–19 years today, will be obese by age 35.

This research is a striking reminder that childhood obesity is an important predictor of adult obesity and that some countries are currently on a trajectory that could overwhelm healthcare systems, just by the negative consequences linked to obesity. We currently lack data on child obesity levels in the Caribbean region, but there is reason to be concerned because the obesity patterns in the Caribbean while lower are generally similar to those in the United States.

Alcohol as an Under-Appreciated Threat Contributing to Poor Health

Another unappreciated risk factor within the Caribbean region, and globally, is alcohol use and abuse. A 2010 ranking of drugs by the United Kingdom's Independent Scientific Committee named alcohol as the world's most dangerous drug based on nine criteria of harm to self and others (Nutt et al., 2010). This analysis showed that alcohol was having a bigger negative impact than heroin, crack cocaine, methamphetamine, cocaine, tobacco, amphetamine, and cannabis. A 2011 report from the WHO indicated that, globally, alcohol was responsible for 2.5 million deaths

annually (WHO, 2012). That is, more people were dying from alcohol-related causes than from AIDS, tuberculosis, or violence.

The report highlights that alcohol consumption is associated with the risk of developing 60 different diseases and injuries, imposing a significant societal burden. This includes the consequences of alcohol-related road accidents, violence, various diseases, child neglect, and job absenteeism. Disturbingly, alcohol ranks as the third major global risk factor for disease and disability and stands as the leading cause of death among men aged 15–59 years worldwide. Additionally, the report underscores the established causal link between alcohol consumption and breast cancer in women. Alarming trends also indicate an increase in harmful alcohol use among youth. For instance, according to the 2017 Global School-Based Student Health Survey conducted in Trinidad and Tobago (WHO, 2020), involving interviews with 3000 students aged 13–17 years, a concerning 25% (comprising 28% males and 22% females) reported drinking excessively with the intent to become intoxicated.

Research also indicates that alcohol is a carcinogen, just like tobacco (Bagnardi et al., 2013). A review of the scientific evidence reveals that there is a strong causal association between the consumption of alcohol and seven types of cancer: cancers of the oropharynx, larynx, esophagus, liver, colon, rectum, and female breast (Connor, 2017). For all of these cancers, there was a dose-response association, wherein increasing alcohol consumption was linked to higher cancer risk with no evidence of a threshold effect. This review also indicated that the association was held across various types of alcoholic beverages.

According to Connor (2017), alcohol was responsible for half a million deaths from cancer in 2012 (5.8% of cancer deaths worldwide). While higher doses of alcohol result in higher risk, low to moderate consumption also carries a significant burden on the population. Connor (2017) also indicated that reducing alcohol consumption within the population as a whole would likely be more effective in reducing the incidence of alcohol-related conditions than would focusing only on the reduction of alcohol consumption among heavy drinkers.

Suicide and Mental Health in the Caribbean Area

Suicide in the Caribbean is a pressing issue that has received limited research attention despite its significant and far-reaching consequences. Table 2.3 details the suicide mortality rates across the Caribbean, highlighting Guyana and Suriname as having the highest incidences, with rates of 40 and 25 per 100,000 respectively. This positions Guyana's suicide prevalence as quadruple and Suriname's as triple the average for the Americas region. Cuba ranks third in the Caribbean for suicide rates at 15 per 100,000, closely approaching the United States' rate of 16 per 100,000. Haiti (i.e., 10), Trinidad and Tobago (i.e., 9), and St. Lucia (i.e., 8) also have rates of suicide that are much higher than those of Jamaica (i.e., 2), the Dominican Republic (i.e., 5), the Bahamas (i.e., 4), and other Eastern Caribbean countries. An issue that

is not a part of Table 2.3 is adolescent suicide ages 15–19 years old. According to the 2017 Global School-Based Student Health Survey conducted in Trinidad and Tobago (WHO, 2020), involving interviews with 3000 students aged 13–17 years, 24% (i.e., 17% males, 30% females) have seriously considered suicide, and 14% (i.e., 11% males, 17% females) have attempted suicide one or more times.

These elevated suicide rates highlight the importance of paying greater attention to the mental health of the entire population within the Caribbean region (WHO, 2021c). Research in the United States has revealed that the COVID-19 pandemic added a burden of stressful life experiences that are linked to worsening mental health (Sneed et al., 2020). COVID-19 increased the general population's vulnerability to mental health because it led to increased experiences of the death of loved ones and related grief and loss. It has also led to witnessing the suffering of loved ones; anxiety and fear of getting infected by the disease; decreased levels of social support from co-workers, family, and friends; and fear of the virus.

In addition, the uncertainty regarding how best to navigate issues of testing, vaccines, and treatment has also been stressful for many. All of these stressors have contributed to worsening the emotional well-being of the population, and these challenges were not evenly distributed. Socially and economically vulnerable populations are more likely to experience stressors and trauma leading to more symptoms such as anxiety, helplessness, nausea, and headaches and causing them to seek relief from stress (Sneed et al., 2020).

Strategies to Improve Mental Health

The task of addressing mental health challenges in the Caribbean region is a complex endeavor marked by several obstacles, including limited access to professional assistance and the influence of cultural factors on help-seeking behavior (Sharpe & Shafe, 2016). Mental health problems lack a straightforward solution, making effective interventions a challenging endeavor. Research has shown that over 60% of individuals with diagnosable mental illnesses in the Caribbean receive no treatment (Robinson et al., 2021). A study conducted in the United States, with a focus on the mental health of Black Caribbean immigrants, revealed a striking disparity. Among individuals meeting the criteria for major depression in the past year, the study found that 57% of all Americans had received some form of therapy, and 45% of Black Americans had received mental health treatment. In stark contrast, only 24% of clinically depressed Caribbean Blacks in the United States had accessed treatment (Williams et al., 2007).

Mental health concerns in the Caribbean are often disguised as physical health problems, with individuals attributing somatic symptoms to emotional distress (Hinkson et al., 2020). It is essential to recognize that mental disorders can increase the risk of both communicable and non-communicable diseases, as well as

accidental and non-accidental injuries. Similarly, physical illnesses can elevate the risk of mental disorders (Sharpe & Shafe, 2016). This is also the comorbidity between physical health problems and mental health symptoms and that these illnesses affect each other in complex ways. There is the co-occurrence of depression with chronic diseases like heart disease, diabetes, and hypertension, and research indicates that depression is more disabling than angina, arthritis, asthma, and diabetes (Moussavi et al., 2007). Research also reveals that depressed diabetes patients have lower levels of glycemic control (Papelbaum et al., 2011). Importantly, addressing depressive symptoms in patients with chronic disease can enhance adherence and reduce the severity and course of illness. Importantly, there are effective strategies to identify people at high risk of depression and prevent new cases among them (Muñoz et al., 2010). Thus, the sites where individuals receive care for their physical problems should prioritize assessing and addressing mental health problems.

While various factors, such as stigma, contribute to this alarming statistic, the accessibility of mental health providers and culturally relevant psychometric tools is crucial in alleviating the burden on the limited number of clinicians practicing in the region (Sharpe & Shafe, 2016). However, a significant challenge lies in the scarcity of indigenous assessment tools tailored to the Caribbean context. Currently, tools created for middle-class individuals in Euro-American countries are often employed, raising validity concerns (Sharpe & Shafe, 2016). Therefore, addressing the issue of access to mental health services and culturally relevant assessment tools is of paramount importance.

Caribbean nations must prioritize mental health. Providing mental health services and care not only alleviates the burden of disease but also contributes to enhancing the overall gross domestic product. Innovative and culturally sensitive approaches to service delivery and treatment are paramount. These approaches should aim to combat stigma and discrimination while fostering a shift toward community-based, client-centered, integrated physical and mental healthcare across the life span.

A practical screening and approach to assess mental illness is the WHO psychological first aid strategies that laypersons can be trained to use within their communities to provide supportive and practical help to fellow human beings dealing with emotional crises (WHO, 2011). It is important for health professionals, policymakers, and community leaders to actively promote awareness of mental health challenges. Moreover, they should prioritize the recruitment and training of individuals to expand the availability of community-based training programs. These initiatives aim to empower a broader spectrum of laypeople to offer support to those facing distressing circumstances. Such support should always be provided with respect for individuals' dignity and should harness their personal and community strengths as valuable resources in the process.

Enhancing Resilience Resources to Improve Adult Mental Health

Research has also identified a number of psychosocial factors that can improve health and buffer the negative effects of stress and health. Religious involvement is one of these. A national study of Black Americans in the United States found that each of the three aspects of religious engagement – frequency of religious attendance, receiving social support from other persons at one's place of worship, and seeking religious guidance in one's everyday life – reduced the negative effects of exposure to the stress of racial discrimination on mental health (Ellison et al., 2008).

Learning to forgive oneself and others is another resource that can promote better physical and mental health. Research finds that unforgiveness toward others is associated with physiological indicators of stress, while forgiving an offender for an offense and a general disposition to forgive is associated with higher levels of well-being and lower levels of anger and stress, as well as depression, anxiety, and PTSD (Griffin et al., 2015). Research also finds that listening to relaxing music can not only reduce vital signs of anxiety but can also lead to improvements in immune functioning and reductions in the biomarkers of stress (Finn & Fancourt, 2018).

A wide range of strategies can also be useful in managing stress and enhancing emotional well-being. Getting regular exercise can reduce stress and the risk of emotional exhaustion, and taking breaks, using health services, getting adequate sleep, and living with a sense of purpose are all useful stress-reducing strategies. These include establishing a routine, taking breaks from the news if the news is stressful for an individual, and having a trusted adult to share one's thoughts. Recent research has also documented striking mental health benefits of cultivating an attitude of gratitude in improving mental and physical health (Diniz et al., 2023).

Suicide and the Mental Health of Children and Youth

A new challenge that the current generation of children and youth face is managing social media. There is overwhelming scientific evidence that the heavy use of smartphones and social media can have negative effects on the mental health of young people (Abi-Jaoude et al., 2020). However, a total ban on children's use of smartphones is probably not a good idea. Today's youth have not known a world without them, but parents and other adults need to work with children and teens to monitor and limit their use of social media and set boundaries. Adults also need to set boundaries and be good examples of smartphone use for children and youth. Importantly, children and youth need adults in their life that they can talk to and who they trust.

One of the strongest, consistent, global predictors of resilience is the presence in a young person's life of an adult who she/he can trust and share their innermost thoughts and feelings with. For those who live and work with youth, a priority is to create safe places, where adults can hear from young people and validate their

experiences. Adults need to help younger ones feel that they are not alone and be active in pointing them to resources to cope and finding ways to get them to become and stay engaged in service to others and in social justice initiatives. Research finds that getting youth involved in advocacy and empowerment activities, nonviolent political protest, and learning to appreciate their history and culture provides powerful protection from youth suicide (Chandler & Lalonde, 1998). Thus, getting Caribbean youth involved in service to others, in volunteering, and in working to make a difference in their communities and their societies is likely to be a health-enhancing mental health strategy.

Other Steps to a Healthier Caribbean

The United States (slightly less than 5% of the world's population) spends more money on medical care than any other country in the world. According to the World Bank, half of the money spent on medical care worldwide is spent in the United States annually. In 1970, famed Caribbean economist, Sir Arthur Lewis, using the United States as the poster child, clearly indicated that a high level of healthcare spending does not guarantee a high level of population health. He said "If we take the ten leading countries, the United States is at or near the bottom in the indices of social health. It has the highest rate of maternal mortality in childbirth, the highest rate of infant mortality, the highest rate of illiteracy, the highest crime rate..." (Lewis, 1994).

There are opportunities for innovations in the ways in which healthcare is delivered. A recent study from Michigan in the United States, called Strong Beginnings, sent both nurses and community health workers to more than 1000 homes every year with the goal of improving access to prenatal and postpartum care and promoting breastfeeding, reducing preterm birth, and improving child outcomes (Meghea et al., 2023). The study found that bringing maternal healthcare into people's homes made a difference, especially for Black parents and infants. The use of trained community health workers who worked alongside nurses to help pregnant women and new mothers navigate hurdles like health insurance, finances, transportation, child care, and parental leave was critical to the success of the program. The researchers found that home visits by health workers were linked with reduced preterm birth and improved access to maternal care, especially after the birth of the child.

Ensuring that everyone has access to high-quality prevention-oriented primary medical care is a cornerstone of building a solid foundation for health, but healthcare alone will not solve our problems. This recognition can also be addressed by using the healthcare system to address broader challenges that the local community faces in their lives. Healthcare providers are being challenged to go beyond only treating illness and sending people back to the same conditions that made them sick in the first place (Marmot, 2017). There is a growing recognition of the centrality of the social environment as a determinant of health. That is, an individual's chances of getting sick are linked to their larger social context, and we need to understand

and address their health challenges within the context of their lives – their social and economic opportunities and resources and their living and working conditions. This means that Caribbean societies need to move upstream and focus on changing the social, physical, and economic environments that determine health and risk factors for health. It is a complementary approach to individual- and group-level interventions. They can be implemented at low economic costs (e.g., removing vending machines or tobacco bans), but it requires vision and political will (Bloom & Cohen, 2007; Katz, 2009). And if we can develop that kind of comprehensive approach, it would have a huge impact on improving health within the region.

Conclusion

The evidence is clear that in order to enjoy good health, healthier lifestyles are needed. There also is a need to improve nutrition and reduce obesity, increase exercise, manage stress and enhance mental health, and reduce smoking and alcohol. However, there is also a need for broader recognition that where individuals live, learn, work, play, and worship can be powerful determinants of their opportunities and chances for being healthy. Importantly, social policies can make it easier or harder to make healthy choices. We need to better incorporate health into our homes, schools, neighborhoods, and workplaces. Safety and wellness needs to be integrated into every aspect of community life, and enhancing health should be factored into all policymaking. This is a call for us to work across traditional policy silos and to engage in cross-sector partnerships and solutions. It is also a call for enlightened political, business, and community leadership and advocacy organizations to work together to make new commitments, combining public and private resources, to ensure that everyone has access to make the healthy choices that would enable them to be maximally productive and personally fulfilled members of society.

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