# Bermuda Adolescent Mental Health and Wellness

Report prepared for the Adolescent Mental Health Fund









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## Contents

1.	EXECUTIVE SUMMARY	1
2.	BACKGROUND	3
2.1.	What the Report is About	4
2.2.	What is in the Report	4
2.3.	How Information was Collected	4
2.4.	Report Limitations	4
3.	PROJECT DEFINITION AND CONTEXT	5
3.1.	The Adolescent Profile	5
3.2.	Understanding Mental Health	7
3.3.	The Status of Adolescent Mental Health	8
3.3.1.	Key facts, , ,	9
3.3.2.	Impact of Covid-19 pandemic	9
3.3.3.	The more common mental health issues and concerns	11
3.3.4.	Signs and Warnings,	12
4.	THE BERMUDA ENVIRONMENT	13
4.1.	Economy	13
4.2.	Culture and Social Environment	14
4.2.1.	Drugs and alcohol	14
4.2.2.	Gangs	15
4.2.3.	Stigma	16
4.2.4.	Family and parenting	17
4.2.5.	Incarceration and institutionalization	18
4.3.	Social Media	18
4.4.	Diversity	19
4.4.1.	Race	20
4.4.2.	Sexual Orientation	20
4.4.3.	Other Diversity	21

5.	OTHER BERMUDA CONSIDERATIONS	22
5.1.	Adverse Childhood Experiences (ACEs)	22
5.1.1.	Child sexual abuse	23
5.2.	Bermuda Suicides	24
5.3.	Access and Barriers to Support Services	25
5.4.	Bermuda Risk and Protective Factors	26
5.4.1.	Risk Factors	26
5.4.2.	Protective Factors	27
6.	BERMUDA STAKEHOLDERS	28
6.1.	Adolescents	29
6.1.1.	How they perceive their own mental health and what may affect it	30
6.1.2.	Awareness, usage and perceived effectiveness of existing services, programmes, and resource	s. 32
6.1.3.	What adolescents can do for themselves.	32
6.2.	Primary Caregivers	33
6.2.1.	What primary caregivers can do to support AMH	35
6.3.	School Stakeholders	35
6.3.1.	Perception of adolescent mental health in schools	36
6.3.2.	Awareness, usage and perceived effectiveness of existing services, programmes, and resource	s. 37
6.3.1.	What schools can do to support AMH.	39
6.4.	Youth Groups and Clubs	39
6.4.1.	What youth groups and clubs can do to support AMH	40
6.5.	Community	41
6.5.1.	Bermuda residents' suggestions for sustaining positive mental health	42
6.6.	Legal Framework – Advocacy Policy & Legislation	43
6.6.1.	Why focused legislation is important	43
6.6.2.	Global approaches to adolescent mental health legislation:	43
6.6.3.	Covid has increased the urgency for AMH related legislation	43
7.	REPORT SUMMARY & RECOMMENDATIONS	44
7.1.	Report Summary	44
7.2.	Recommendations	45
7.2.1.	Information and Education	45
7.2.2.	Standards of Practice	45
7.2.3.	Governance	46
7.2.4.	Support/incubate bright spots	46
7.2.4.	Support/incubate bright spots	46
725	Factnetics and Works Cited	17

## **Executive Summary**

This report has been developed to understand how the concept of adolescent mental health (AMH) and wellbeing presents itself in Bermuda and where opportunities exist for improving positive mental health and wellness. The need to focus on the mental health of adolescents has gained increasing recognition in the global community and Bermuda is no exception. In particular, the COVID-19 pandemic has resulted in alarming increases in rates of anxiety, depression, loneliness, stress, and tension in young people. To reverse the upward trajectory of mental illness in the community, attention to building and sustaining the mental wellbeing of 10- to 21-year-olds in our community is of critical importance.

Mental wellbeing, also often referred to as positive mental health, is not simply about the absence of mental health issues. It is more about the presence of positive characteristics and ongoing resilience needed to participate in life to the fullest.

The AMH field in Bermuda reflects a wide range of Government, Private and Third Sector programmes and services. Optimum delivery is strained by stretched services, dated infrastructures, inadequate resources, fragmented approaches, economic challenges, and troubling social issues that include drugs, gangs, and persistent effects of adverse childhood experiences. The potential impact of some programmes and services is further constrained by lack of the evidence base to assure effectiveness.

Other factors that impact the wellbeing of adolescents in Bermuda include a general lack of awareness and education about AMH, coupled with a culture that stigmatizes mental illness. Meanwhile, in and out of school, adolescents are faced with navigating a variety of stressful triggers exacerbated by social media, academic performance, and family dynamics. Overall, they face persistent stresses that can be directly linked to anxiety, depression, and other concerns. Five stakeholder groups were identified for this report based on their potential to broaden, promote, and strengthen positive adolescent mental health.

#### Health professionals and social sector services

Include psychologists, psychiatrists, GPs, social services, teen services, child and adolescent services.

#### Youth groups and clubs

Include recreational & sporting groups (e.g., out of school and afterschool programmes, youth mentoring, faith-based groups, public & private)

#### School stakeholders

Include admin. staff, teachers, psychologists, school counsellors

#### Primary caregivers

Including parents, guardians, family members

#### Adolescents and young adults 10 to 21 years old

Figure 1: Adolescent Mental Health Stakeholder Groups.

Individuals representing different layers within each of the stakeholder groups echoed concerns corroborated by analysis of the landscape, and other secondary research including:

- General lack of understanding of AMH in the community
- Siloed and disjointed programmes and services
- Lack of adequate qualified professionals
- Services not readily accessible to all
- Conflicting professional priorities / lack of time
- Compelling and overwhelming social issue constraints
- Sparse and unreliable local data collection

Despite these and other challenges in the field, some bright spots exist – there are programmes that stand out and hold themselves to higher than required standards; that implement evidence-based approaches; and integrate evaluation systemically.

The report concludes with suggestions for practical action around FOUR Strategic Priorities for philanthropic funding:

1	<ul> <li>Information and Education</li> <li>a. Build knowledge and awareness about adolescent mental in the community – targeted at adolescents themselves, parents, and all workplaces.</li> <li>b. Publicly distribute information and means to access all available resources</li> </ul>
2	<b>Support/incubate Bright Spots</b> focus targeted funding to reinforce and enhance new and existing exemplary programmes and services.
3	<ul> <li>Standards of Practice</li> <li>a. Support establishment of national standards for classification and delivery of youth serving programmes.</li> <li>b. Reinforce integration of evidence-informed practices that support adolescent mental wellness.</li> </ul>
4	<b>Coordinated Approach</b> Support the design and development of a national adolescent wellness approach that includes all stakeholders, programme assessments; data collection; and policy and regulation advancements.

These strategies will improve the scope, capacity, access and impact of providers, programmes, and services; bolster resources; and strengthen community awareness and engagement aimed at improving and sustaining adolescent mental health and wellness. Investments in research, funding and supports for building and sustaining positive mental health of adolescents across the AMH landscape can stem the tide of mental illness.

### 2.

## Background

#### 2.1. What the Report is About and its Origins

This report has been developed to understand how the concept of AMH and wellbeing presents itself in Bermuda and where opportunities exist for improving positive mental health and wellness.

The report was made possible by grant funding from Meritus Trust and the Hemera Foundation and other private donors and commissioned by the Bermuda Foundation. Michelle Wolfe, Managing Director and Founding Partner of Meritus, served as lead donor advisor on the project with support from her team of advisors.

The sponsors thank Dr. Edmina Bradshaw for collaborating with them on this initiative, taking the lead on the research and drafting the report. They also thank Dr. Myra Virgil for developing the proposal and study design and facilitating the research process. This production of this report would not have been possible without the benefit of these insights and experiences.

Our collective aim is to better understand this complex landscape and to explore the potential for appropriate and focused philanthropic investments. These outcomes are in the interest of building and sustaining positive adolescent mental health, knowing that government resources may focus more on treating mental illness and generally less on prevention.

#### 2.2. What is in the Report

This report outlines the concepts of 'adolescence' and 'mental health' followed by an overview of the global status of AMH. This is then placed it in a Bermudian context for understanding local AMH including the current economic and social landscape, family and parenting, drugs and gangs and other elements germane to mental health and wellness.

Next is a review of stakeholder groups identified for Bermuda, with adolescents at the core. A sampling of relevant programmes and services are examined, including themes that emerged from interviews and surveys.

Established global approaches including evidence-based practices for protection and prevention of adolescent mental health are then addressed, followed by areas of opportunity for Bermuda and report recommendations.

#### 2.3. How Information was Collected

A consultative approach was followed that included:

- In person and remote interviews with a broad spectrum of stakeholders representing the public, private and nonprofit sectors in Bermuda, and overseas
- Review of scholarly research, publications, and reports
- International evidence-based practice reviews
- Bermuda Omnibus phone survey findings<sup>1</sup>
- Narrative research survey on "Maintenance of Positive Mental Health in Adolescents"<sup>2</sup>

#### 2.4. Report Limitations

Limitations include lack of available or reliable data, access to potentially significant stakeholders and selfreporting from service providers. Information collected may also be influenced from factors such as current topical economic and political issues.

The Narrative survey responses cannot be generalized without caution because the number of respondents is short of being statistically significant and survey participants may have self-selected based on their interest in the topic.

Some of the information found in this report is limited to the accuracy, veracity, and willingness of stakeholders who agreed to provide input.

Claims have only been cross-referenced and are otherwise not assessed for validity in practice.

Some potentially significant stakeholders were unavailable for interviews.

## **Project Definition And Context**

#### 3.1. The Adolescent Profile

3.

According to the World Health Organization (WHO), "Adolescence is the transitional phase of growth and development between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health"<sup>3</sup>.

This period of life has a biological start beginning at the onset of puberty. The end of adolescence is more sociological, ending with the adoption of the roles and responsibilities of adulthood, such as committed relationships, career, and financial independence – that is, when an adult identity and behaviour are acknowledged and accepted<sup>4</sup>, <sup>5</sup>. Consequently, late adolescence can reasonably extend beyond the WHO definition of 19 years.

Within the Bermuda context and for the purpose of this report, the adolescent age range is taken to be 10 to 21 years. Anecdotally, Bermudian families are less inclined than in other countries to have a hard and fast rule that children leave the household at age 18. Young adults tend to continue living at home until they "find their feet".

The years from adolescence to adulthood, may be roughly divided into three stages<sup>6</sup>:

<b>10–13 yrs</b> Early Adolescence	<ul> <li>Puberty &amp; body changes begin</li> <li>Self consciousness</li> <li>Increased need for privacy</li> <li>Intellectual interests expand</li> <li>Curiosity and anxiety</li> </ul>
<b>14–17 yrs</b> Middle Adolescence	<ul> <li>Growth spurts, menstrual cycles (females), Voice cracking (males)</li> <li>Interest in romance and sexual relationships</li> <li>Question 'authority figures'</li> <li>More self involved</li> <li>Interest in personal appearance</li> <li>Peer pressure</li> </ul>
18-21 yrs	<ul> <li>Less physical and more cognitive development</li> <li>Have more impulse control and can delay gratification</li> <li>Stronger sense of identity and individuality</li> <li>Increased Independence</li> </ul>

These three stages represent periods of profound cognitive as well as physical, biological, social, and emotional transformation. In short, Early Adolescence involves changes in physical development and onset of puberty; Middle Adolescence is recognized for periods of irritability, severe mood swings, and rapidly changing emotions. Peer standards and loyalty can take precedence over parental orders; and Late Adolescence is when individuals consolidate their identity and form their own views of the world around them. While each period has its own characteristics, the brain continues to develop, adapt, and respond to adolescent experiences through all stages.

Neuroscientific studies<sup>7</sup> affirm that changes in the brain's structure and organization are greater than in adulthood, and second only to brain development during infancy and childhood. Significantly, development and maturation of the prefrontal cortex which is responsible for controlling and coordinating executive functions occurs primarily during adolescence and up to the age of 25 years.

The adolescent brain is particularly susceptible to the multitude of changes caused by stresses of daily life<sup>8</sup>. Some of the adolescent stresses that traverse all stages are noted in Table 1. While reactions may differ, a notable theme is an attraction to experiences that can be characterized as 'risk-taking'. Hormonal changes increase the appeal of these experiences, particularly those that promise to increase social status. Additionally, factors such as sex, gender, race, socio-economic exacerbate risk taking and sensitivity to social evaluation.

#### Common stresses experienced by adolescents include:

- Self-esteem and body image
- Academic pressures
- Bullying
- Depression
- Cyber addiction and media influence
- Drinking and smoking
- Substance abuse
- Food and/or housing insecurity
- Family trauma

- Gender identity
- Harsh parenting or lax parenting
- Underage sex
- Peer pressure, competition & conformity
- Fatigue and exhaustion
- Poor habits of diet, sleep, exercise
- Risk taking
- Adverse Childhood Experiences (ACEs)

Not everything new in the lives of adolescents increases their risks, and some of what might be considered challenging may turn out to promote positive development. However, with so much occurring so rapidly and in so many ways, adolescents face a myriad of complex interactions and changes that can inevitably influence their overall health and mental wellbeing<sup>9</sup>. Noteworthy bodies of science<sup>10</sup> continue to focus on strengthening the understanding of how this important developmental period can be better understood and taken into consideration by all stakeholders.

#### 3.2. Understanding Mental Health

WHO (The World Health Organization)<sup>11</sup> defines mental health as: "A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."

"Mental wellness", "mental wellbeing", "positive mental health", "good mental health" and other terms relating to the WHO mental health definition tend to be used interchangeably. The WHO definition reinforces that mental health is more than not having any symptoms of mental illness; it is being able to: **effectively navigate life's challenges PLUS being able to take pleasure and satisfaction from life.** 

Mental health conditions can be shaped by biological factors, including genetics and brain chemistry, and environmental factors including life experiences. Environmental factors range from pre-natal exposure to substances (alcohol, drugs, etc.), birth complications, adverse childhood experiences (abuse, neglect), and exposure to community violence<sup>12,13</sup>. Whether an individual develops symptoms can be further modified by their experiences and surrounding environment<sup>14</sup>.

lı	<b>EXCELLING:</b> Cheerful, Joyful, High Performance, Solution-focused, Energetic, Fully realising potential
I	<b>THRIVING:</b> Potential, Calm, Performing, Sleeping well, Eating normally, Normal social activity
н.	<b>SURVIVING:</b> Worried, Nervous, Irritable, Sad, Trouble sleeping, Distracted, Withdrawn, Self doubting
	<b>STRUGGLING:</b> Anviois, Depressed, Tired, Poor performance, Poor sleep, Poor appetite
•	<b>IN CRISIS:</b> Very anxious, Very low mood, Exhausted, Absenteeism, Very poor sleep, Isolation, Weight loss

Figure 3: Illustration of the mental health continuum.

The concept of mental health is frequently addressed by scholars and practitioners as existing on a continuum<sup>15</sup>. The illustration in **Figure 3**<sup>16</sup> provides five indicators on the mental health continuum ranging from Excelling (where one is flourishing), to severe 'In Crisis' symptoms that can become chronic, progressive, and disabling.

This "Excelling" zone is the highest level of mental wellbeing, followed by "Thriving" which is a healthy and normal state of mental health. Adolescents existing in these stages reflect positive mental health and wellbeing. This suggests they have levels of resilience to successfully adapt through mental, emotional, and behavioural flexibility. Research and evidence-informed practices affirm that such resilience can be learned and cultivated.

The "Surviving" zone suggests a more unsettled state of mind, although the cause may be difficult to pinpoint. In the "Struggling" zone, life may feel miserable accompanied by feelings of worthlessness and being in the "In Crisis" zone, suggests great suffering and a need for urgent professional help.

The rate at which one transitions from one zone to another along the continuum can be relatively sudden or imperceptibly gradual. For adolescents, the stresses that may precipitate deterioration (**Figure 2**), are further compounded by the ongoing physical, emotional, and biological changes also being experienced.

Individuals can have good mental health while living with a diagnosed mental illness that is being treated successfully. One can also have poor mental health but not have a mental illness. Regardless, if an issue like stress is intense or allowed to continue unrestrained, it can lead to, or worsen a mental illness.

The challenge for AMH is how to keep this population within the healthy and coping zones and stop the needle moving towards the 'Struggling' and 'In-Crisis'.

Mental health is not an either/or phenomenon where one is either mentally well or not. At any one time, a 'normal' person can lie at one point of the continuum and improve or deteriorate depending on how they respond to different stresses.

#### 3.3. The Status of Adolescent Mental Health

"Sometimes I have panic attacks in school when I feel stressed, and it feels like someone is strangling your chest and shortness of breath – this is the scariest part. Another symptom is tingling in the face. I can feel it coming, but I do not tell anyone about it. They should teach about it in school so students can help each other. They should have stress toys in every class – I take my own to school so I can feel better." 14-year-old Bermuda private school student. In December 2021, in an unprecedented public advisory<sup>17</sup>, the U.S. surgeon general warned of a "devastating" mental health crisis among adolescents. Across the world<sup>18</sup>, researchers, hospitals and doctor groups have echoed this status, citing rising levels of mental illness, a severe shortage of therapists and treatment options, and insufficient research to fully explain the trend<sup>19</sup>. Although there is a risk of generalising research findings, published data suggests declining and alarming facts about the status of AMH across the globe. Bermuda echoed this concern with a first ever Children's Mental Health Awareness month in May 2022. There, the Minister of Health reiterated growing concerns about the mental health of Bermuda's own adolescents<sup>20</sup>.

#### 3.3.1. Key facts<sup>21, 22, 23, 24</sup>

- Globally, one in six 10-19-year-olds experiences a mental disorder, accounting for approximately 15% of the global burden of disease in this age group.
- The lifetime prevalence of any mental disorder among adolescents is 49.5%, and 22.2% of adolescents will suffer from a severe mental impairment in their lifetimes.
- Young adults (age 18 to 25) have the highest reported incidence of mental illness of ANY adult age group.
- In 2020, 12% of U.S. children ages 3 to 17 were reported as having ever experienced anxiety or depression, up from 9% in 2016.
- ADHD, anxiety problems, behaviour problems, and depression are the most diagnosed mental disorders in children.
- Most adolescents with depression are underdiagnosed and do not receive treatment.
- Depression, anxiety, and behavioural disorders are among the leading causes of illness and disability among adolescents, and they have increased over time.
- Adverse childhood events (ACEs) are associated with children's physical and mental health.
- Half of all mental health conditions start by 14 years of age, and over half are undetected and untreated.

#### 3.3.2. Impact of Covid-19 pandemic

Several reviews<sup>25</sup> including country-specific studies suggest a heavy psychosocial impact of the COVID-19 pandemic resulting in a range of new or worsened mental health problems. These include anxiety, depression, post-traumatic stress disorders (PTSD), sleep disorders, suicidal behaviour and addiction disorders. Some researchers26 have anticipated that many of these and other related psychosocial problems may persist and develop further mental health crises that would become even more evident in the future.

"It will be years before we understand the full impact of Covid on the long-term mental health of Bermuda's children. Even now, we can see that children born in the past 2 years are not meeting developmental milestones." "Longtail effects of the pandemic makes it even more critical to possibly undo some of the issues and set adolescents up for health mental wellness." "They have experienced trauma with missing social supports - we are learning that we should anticipate early onset of dementia of the cohort of young adolescents"

Figure 4: Comments about the impact of Covid-19 from Bermuda health service professionals.

Figure 5 provides a 2022 illustration<sup>26</sup> of how the pandemic has affected the mental health of U.S. adolescents.

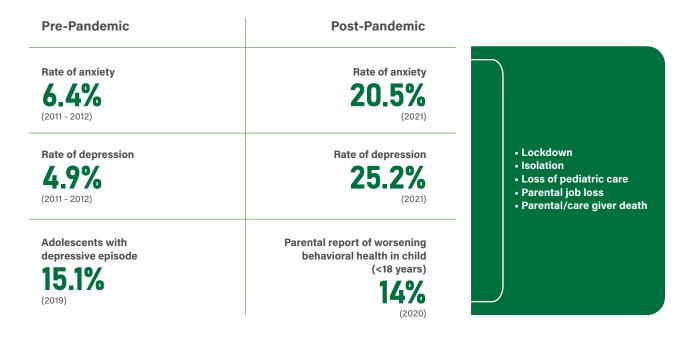


Figure 5: A schematic view of the acute increase in mental health in the U.S. adolescent population associated with the COVID-19 pandemic; Source: Pediatric Public Policy Council. Legislative remedies to mitigate the national emergency in pediatric mental health. Pediatric Res 92, 1207–1209 (2022). Other studies<sup>27</sup> have attempted to establish more specific factors that contributed to the mental health decline of adolescents during the pandemic. Figure 6 represents many of these factors that are relatable and consistent with the Bermuda experience.

Fear of the	Disrupted home	Prior trauma/mental
unknown	and school routines	health challenges
Prior mental health disorder	Extensive social media access and iteraction	Food insecurity
Separation, loss	Social isolation	Special needs /
and grief	and lonliness	disability

Figure 6: Factors contributing to child and adolescent vulnerability during the Covid-19 pandemic.

#### 3.3.3. The more common mental health issues and concerns

#### Anxiety

Anxiety is an emotion characterised by worry, apprehension, or dread about real or perceived threats. It is a common part of life, but when it becomes overwhelming for adolescents it can present as avoidance of activities or experiences, irritability, and difficulty sleeping.

#### Depression<sup>28</sup>

Occasionally sadness or even hopelessness is within the spectrum of healthy human emotions. However, when adolescents feel persistent sadness and hopelessness, they may be diagnosed with depression. It can be difficult to notice that an adolescent is depressed as they may not talk about their pervasive thoughts and may not even appear sad. In fact, depression might also cause an adolescent to make trouble or act unmotivated, appearing as a troublemaker or lazy. Extreme depression can lead an adolescent to think about suicide or plan for suicide.

#### Self-harm

Using a sharp object to make cuts, or scratches on one's body is a well-documented<sup>29</sup> form of self-harm by adolescents. It is most often an attempt to interrupt strong emotions and pressures that seem impossible to tolerate. They may also burn, scratch, or hit themselves; bang their head; pull their hair; pinch their skin; pierce their skin with needles or sharp objects; or insert objects under their skin. Between ages 13–20, 27% of European adolescents reported self-injury at least once<sup>30</sup>. Self-harm is more common in females and may not be detected as easily in boys

#### Bullying

Bullying happens everywhere including schools, social groups, online, and in all adolescent age groups. Based on US data<sup>31</sup>, more than a third of children (37%) report being bullied on school property and 18% report being electronically bullied over the last year. Adolescents are reluctant to report bullying to an adult, especially when it occurs online. The effects of bullying have potentially serious and lasting negative impacts on mental health and overall wellbeing. These include feelings of rejection, exclusion, isolation, low self-esteem, depression, and anxiety.

#### The falling age of puberty:

Although the exact age of puberty can vary, longitudinal studies<sup>32</sup> in several countries record evidence that puberty has been starting earlier in the last few decades. Factors that may affect this include improved nutrition, higher levels of obesity, greater stress levels, and exposure to environmental pollutants including endocrine disruptors. Experts say this shift towards earlier onset of adolescence contributes to the AMH crisis as children are forced to go through physical and mental changes before, they are emotionally mature enough to handle them. Children may experience sudden sexual desires they may not know how to manage, as well as experience anxiety, depression, and body dysmorphia.

#### 3.3.4. Signs and Warnings<sup>33, 34</sup>

As adolescents try to find themselves and navigate the biological, emotional, social, and environmental stresses that come with growing up, occasional incidents of undesirable behaviours are common and normal.

When behavioural signs and symptoms are persistent or intensify, it is a warning that the young person may be sliding backwards along the mental health continuum (Figure 2) and would benefit from some level of intervention.

- Lingering sadness, fear or worry
- Irritability
- Isolation from family and friends
- Changes in sleep, weight, eating habits
- Loss of appetite or increased appetite
- Drastic changes in mood
- Trouble focusing on tasks
- Shifts in academic performance
- Unexplained physical symptoms such as headaches, body aches and stomach pain
- Unexplained cuts, bruises, and abrasions
- Risky behaviour

Figure 7: Behaviours that may signal mental health issues.

## 4.

## **The Bermuda Environment**

AMH is influenced by the cultural, socioeconomic, political, and other environmental factors in the life of a young person. It is therefore important to frame the topic of AMH in Bermuda around an understanding of the circumstances of life in Bermuda.

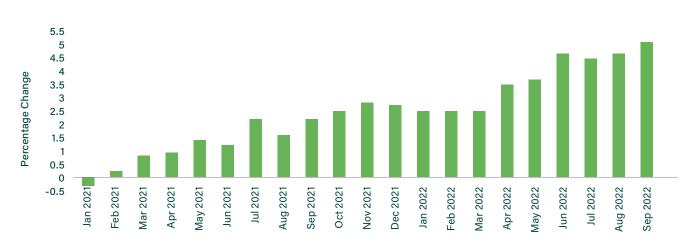
#### 4.1. Economy

The economic environment in Bermuda reflects high inflation rates<sup>35</sup>, high unemployment<sup>36</sup>, single parent household (87% headed by mothers with children)<sup>37</sup>, and the highest Cost of Living in the world<sup>38</sup>. At the time of this report, Bermuda's cost of living beats out all other countries in the world by wide margins including cost of rent, cost of living, and cost of groceries.

Many families are unable to provide the most basic of human needs, reliable food and shelter<sup>39</sup>. This is significant because food insecurity is associated with a 257% higher risk of anxiety and a 253% higher risk of depression<sup>40</sup>. Similarly, a large body of research<sup>41</sup> supports an association between lack of stable housing and internalising (e.g., depressive) and externalising (e.g., delinquent) behaviours among adolescents.

The data for the number of adolescents affected is unclear, but charitable organisations have stepped in to fill the gaps not addressed by Government services. *The Women's Resource Center* and *Coalition for the Protection of Children* identify food vouchers as uppermost on the list of requests they receive from the public; school breakfast programmes such as those offered by the *Seventh Day Adventist Church* attempt to mitigate the impact of food insecurity; and *Home* has set its sights to help end homelessness<sup>42</sup>.

In terms of more direct impact on adolescents, the 2019 unemployment rate for youth 16 to 24 actively seeking work was 23.8%<sup>43</sup> making this the largest unemployed age group. These older adolescents have already aged out of access to many youth and school programmes. Coupled with their unemployment, they have limited access to supports for mental wellness and contend with uncertainties about their future.



#### Inflation soars to 5.1%

% change on a year earlier to September 2022

Overall, unemployment and underemployment persist<sup>44</sup> and with escalating food prices<sup>45</sup> many families a re faced with having to do "more with less". Repercussions also include inadequate insurance coverage, lack of access to Employee Assistance Programmes and other supportive benefits for adolescent children of those affected.

Directly and indirectly, the reality of Bermuda's economy means increased stress on parents, teachers and other professionals. In turn, these stresses cascade on to adolescents already contending with social and emotional issues that affect their own mental health and wellness.

#### 4.2. Culture and Social Environment

A July 2022 forum titled *"Drugs, Gangs and Corner Boys. Is my Child Being Recruited?"*<sup>46</sup>, emphasised the pressing social issues related to drug and alcohol use in Bermuda. The forum provided compelling insights on violence and antisocial behaviour among Bermuda's young people, grooming methods used by gangs to recruit, and drugs that are being used. Culture is learned and socially shared, and it affects all aspects of an individual's life. Regardless of the level of personal involvement, all aspects of the culture and social environments in which adolescents operate, will have some impact on their mental health and wellbeing<sup>47</sup>.

#### 4.2.1. Drugs and alcohol

Substance use has been associated with increased or exacerbated instances of mood disorders leading to early onset or progression into psychotic disorders. From the adolescent perspective, however, high value is placed on the personal validation or peer-affirmation experienced through substance access or use.

It is unclear if current data is available but even as far back as 2012, the average age of onset of substance abuse, as identified in a Government of Bermuda 2012 survey<sup>48</sup> can be considered "alarming". The graph in **figure 8**. is sourced from the report and illustrates that children as young as 8-years-old acknowledge using marijuana. The study also found that more than 25% of 10-year-olds had tried alcohol, increasing to 33% for 11-year-olds.

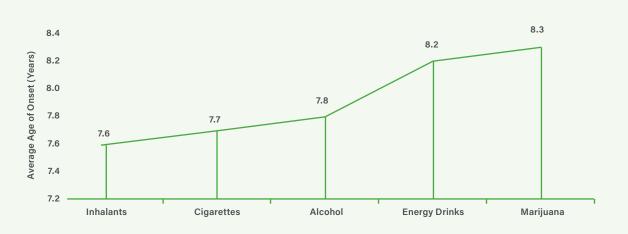


Figure 9: Average age of onset of substance use in Bermuda. Source: Report of the Survey of Students on Knowledge and Attitudes of Drugs and Health, 2012, p.21

**"Shatter"** (a glass-like cannabis extract), and **"Vaping"** are now also used extensively by Bermuda adolescents - as corroborated by Focus Counselling Services – see Footnote #49

Other Bermuda studies and reports<sup>49,50</sup> add insight into the widespread use of drugs and alcohol by adolescents. More specifically, the Bermuda Government commissioned two National School Surveys<sup>51</sup> in the past ten years to learn about substance use by middle and senior school students in Bermuda. Both affirm in detail the extensive access to and use of alcohol, tobacco, other drugs, and their impact on adolescent mental wellness. Drugs are readily available on school campuses<sup>52</sup> and treatment for young substance abusers is limited. Many are involved in the drug culture who may not themselves be users – and this comes with its own stresses and accountabilities

## *"I deal with children who have been smoking since they were 6 years old!"*

- Interview with clinical psychologist.

The situation is exacerbated by the fact that some students are coming from homes where they are left unsupervised, especially after school while parents are still at work. Substance use may also be hidden and difficult to detect. Pending marijuana legislation in Bermuda, spotlights the need for substance-oriented protective policies and legislation for adolescents.

## *"My experience is that mental health issues in Bermuda are notably impacted by substance use during adolescent years."*

- Interview with clinical psychologist.

#### 4.2.2. Gangs

#### "The older ones are looking to recruit new members to maintain the legacy of the gang – that's not just kids from broken homes but also honour roll students and straight-A students as they need them to be accountants and bankers in their well organised crime. They need them for money laundering and drug trafficking."

- Dany Rodrigues of Raleigh Bermuda, at a July 2022 Bermuda community event titled, "Drugs, Gangs and Corner Boys. Is my Child Being Recruited?<sup>53</sup>

Bermuda is no exception to the antisocial behaviour and criminal activity linked to gang culture common in many countries. Research affirms that the relationship between AMH and gang affiliation can operate in two directions - poor mental health can draw adolescents to gangs, and gang involvement can cause mental health problems<sup>54, 55.</sup>

Rates of psychosis, anxiety, alcohol and drug dependence, antisocial personality disorder and a history of attempted suicide are higher in gang members<sup>56</sup>. Concurrently, adolescents who are not involved can experience anxiety because they feel threatened, fear retaliation or guilt by association.

It is worth noting that involvement in gang behaviour in Bermuda transcends socioeconomic status. Adolescents from higher income households can still engage in antisocial behaviour while successfully compartmentalising their lives to avoid detection.

In a February 2022 gang violence update to the House of Assembly, the Minister of National Security asserted that children (boys and girls) are actively recruited from as early as eight years old, and their allegiances to gangs have led to the commitment of violent acts whilst in school, as reported in the Royal Gazette<sup>57</sup>.

This official reiteration of acknowledged gang culture in Bermuda is telling. It suggests that Bermuda will continue to experience related adverse effects. These potentially include theft, negative economic impact, vandalism, assault, gun violence, illegal drug trade, and homicide<sup>58</sup>, all of which are detrimental to the mental wellbeing of adolescents, regardless of their involvement.

For many adolescents, this reality is more than just news headlines. They have day to day hands on evidence of the culture and the cost of not adhering – much of which does not make the news! Some students are forced to make affiliations based on where they live. Girls are a valuable resource as for hiding incriminating articles and known to provide sex as a key part of the gang culture.

According to a school counsellor interviewed for this report,

"The psyche that many 10- to 18-year-olds have ever known in their lives is "town vs country," and the various associated sub-groups. It is critically important to understand that this is NOT in their imagination. Many are travelling with knives<sup>59</sup> to protect themselves and just like learning to ride a bicycle, it is important to learn what it takes to be part of the "crew", even if you are not directly involved".

Further, according to the Minister of National Security, and as reported in the Royal Gazette<sup>60</sup>, shootings and knife crime have become so commonplace they are now regarded as normal. According to the Minister violence is not limited to gangs, "but an issue where it is becoming commonplace to resolve issues with violence".

#### 4.2.3. Stigma

"[There is] stigma around discussing mental health, feelings and emotions; fears of families for accessing services, ongoing challenges with being able to afford activities, groups and hobbies as well as high stress levels of families due to increasing cost of living, holding multiple jobs and not being able to offer support to adolescents." Narrative survey respondent.

Public stigma reflects the negative or discriminatory attitudes that others have about mental illness. For individuals who may be struggling with their own mental health concerns, self-stigma reflects internalize attitudes, including shame and misinformation about their condition. As in other countries, Bermuda has long-held negative preconceptions and stigma about mental health<sup>61</sup>.

According to a recent comparison of mental health systems in the Caribbean,62

*"In Bermuda, stakeholders highlighted that attendance at the inpatient facility was often highly stigmatised in the community.* 

#### Some service users were reportedly hesitant to access outpatient services located on the same site, concerned they would be assumed to be experiencing severe mental illness and would consequently be discriminated against by community members."

The implication for adolescents is that they may delay or be unwilling to seek early help because of shame or fear of discrimination or bullying because of how they may be perceived by others. Instead, they may self-medicate with drugs or alcohol, and bury themselves in social media to cope with the negative stigma. The recognition to address the impact of mental health stigma in the community is echoed by professionals in the field:

## "Continuing to destigmatise the need for mental health support, and what general help and support looks like, is key. We have to continue to break barriers and increase access to support services for youth."<sup>63</sup>

#### 4.2.4. Family and parenting

#### "Parental misunderstanding and verbal abuse witnessing are two of the most commonly reported household dysfunctions in Bermuda" Bermuda ACE's study

Beyond the traditional nuclear family unit, family structures include same-sex spouses; civil partners; foster families; step-families; single-parent families; grandparent families; and co-parenting families. This suggests that children and adolescents may experience a mix of parenting approaches including authoritarian, authoritative, permissive, and neglectful styles<sup>64</sup>. Given that the family and parenting style has been shown to be one of the most important factors affecting AMH<sup>65</sup>, it is important for family units to have fundamental understanding of AMH.

Family and parenting issues related to adolescents cannot be untangled from early childhood experiences. Even before birth, a range of maternal and family variables have been established as setting children on an early trajectory toward either end of the mental health continuum. Key social and other issues that impact early years' parenting in Bermuda are detailed in the 2015 "Zero to Three in Bermuda" report.<sup>66</sup> By the time they are adolescents, children will have built subconscious decisions as to their emotional safety and security and resilience. Unfortunately, there is little formal training for parents that addresses how to raise mentally healthy children.

#### "We are required to be licensed to drive before we can take a car on the road, why isn't there some kind of license to raise children?" Interviewee

As children mature through adolescence, it is commonplace to challenge the authority of those responsible for them. Depending on the parenting style, a typical refrain from their parents will include statements such as:

"He's acting up." "She is rude." "I don't know what to do with them."

At this stage parents can often feel hopeless, and may resort to negative behaviour themselves, especially when they have an overwhelming number of competing demands for their time and energy. Even though Bermuda has programmes that can help to alleviate familial stresses, there may be other hurdles that keep eligible caregivers from participating (ref section 5.3).

When asked in the Bermuda ACEs study (p.30), "Did a parent, guardian or other household member spank, slap, kick, punch, or beat you up?", more than 60% of respondents answered in the affirmative.

The research is emphatic that adolescents being raised by single mothers are more likely than those raised by intact, two-parent families to experience a range of difficulties that can affect their mental health and wellbeing. Similar impairments are addressed in the literature concerning children of conflictual two-parent families<sup>67</sup>. As we have learned from the outcomes of ACEs, this can transcend generations. Indeed, our social statistics indicate that Bermuda currently has its lowest marriage rate on record and one of the highest divorce rates in the world. With more than half the adult population being single, it is no wonder that the proportion of single parent households in Bermuda continues to grow. And so, the cycle continues.

As much as parenting styles and habits are important for AMH, sometimes even the best parenting efforts do not yield positive outcomes. A range of external issues including those related to Bermuda's economy (ref. section 4.1) and its culture and social environment (ref. section 4.2), can result in multiple negative behavioural outcomes among adolescents. In turn, these outcomes can also exert undue strains on Bermuda families including increased parental depression and spousal and parent-child conflict, and effectively undermine parenting efforts.

#### 4.2.5. Incarceration and institutionalization

Bermuda was infamous for having one of the highest rates of incarceration in the world. Although the prison population rate for has declined in the past 15 years 68,69 the children of those incarcerated remain deprived of vital nurturing from a parent, most likely their father. Research tells us that children of incarcerated parents face profound and complex threats to their emotional, physical, educational, and financial well-being<sup>70</sup>. Adolescents who are themselves exposed to formal care systems face significantly increased risk to their mental health and wellness<sup>71</sup>. These environments include local and overseas care systems, foster homes, the juvenile justice system, or incarceration. Although data on the numbers affected were not found for this report, local health professionals cautioned in interviews that early mental wellness interventions should start with all children who have contact with Child and Family Services.

#### "A lot of work needs to be done to justify why as a community we should care and invest more on the people we consider to be the problem in our society". Interviewee in the justice system.

#### 4.3. Social Media

"My mood can change depending on the likes, comments, views, and follows I receive online. It does not matter if these are from my friends, or even people I do not know."

Bermuda 14-year-old adolescent.

According to the Pew Research Center<sup>72</sup> social media is "nearly ubiquitous" in the lives of teens. Studies<sup>73</sup> have established social media as a risk factor for adolescent mental health, with increasing adverse effects related to the time spent online. This is because adolescent brains are not fully developed, and they tend to lack emotional maturity, impulse control, and psychological resiliency. Knowing this, social media platforms are accused<sup>74</sup> of intentionally exploiting the neurophysiology of young minds with tenacious algorithms that keep and manipulate their attention. Effects of persistent social media has been associated with higher proportions of adolescent struggling with anxiety, depression, body image concerns, self-harm, and suicidal ideation.

The legal minimum age for use of most social media applications in the U.S. is 13 years<sup>75</sup> but it is not clear if or how well this is monitored by social media platforms. A 2011 study conducted in Bermuda's secondary schools<sup>76</sup> identified that 94% owned phones - this compares with 75% in the U.S. at that time. The study also found that most Bermuda's teens attending public schools spent more than four hours per day using their phones. Based on research suggesting than more than 3 hours a day is a heightened risk for adolescent mental health<sup>77</sup>, this is concerning.

Social media is not just one entity; it is a collection of tools, communities, and contexts. When used judiciously it can benefit adolescents by helping them develop communication skills, make friends, share ideas, and pursue areas of interest. However, the exposure to cyberbullying, peer pressure, rumour spreading, and unrealistic views of other people's lives coupled with manipulative conduct of media platforms can make it a mental health hazard.

Part of what makes online interactions so different is their persistent and often public nature. For adolescents already grappling with uncertainty about their identity and self-worth this can result in secondthoughts, doubt, regret, and shame about what they have said or what has been said about them, and who has or will see this information. This particularly resonates in a small island community like Bermuda.

#### 4.4. Diversity

Diversity, including differences in race, ethnicity, religion, sexual orientation, gender identity, and socioeconomic status, can play a significant role in shaping AMH. Experiencing discrimination or bias based on these differences can lead to negative mental health outcomes, including increased risk for depression, anxiety, and stress. On the other hand, a positive sense of identity and community can provide a protective factor and support mental health in adolescents from diverse backgrounds.

#### 4.4.1. Race

#### "I am ashamed and afraid to express how I am feeling with my family because I know they will be mad with me. They

will say I need to "toughen up" 16-year-old Black male adolescent

Issues and concerns about race remain tightly woven into the Bermuda social context. This not surprising in a country where racial segregation was the law and continued to be formalized and institutionalized until 1959. As research<sup>78,79</sup> suggests, adolescents are not immune from the lingering effects of colonization and segregation. As expressed in a 2014 Aspen Institute round table report on racial dynamics in Bermuda, "The concept of structural racism holds true for all societies historically organized by race, although each one evolves its own racial ideology, institutional arrangements and everyday conventions, discourses, wisdoms and etiquettes"80.

Race can play a significant role in shaping AMH, as experiences of discrimination and bias based on race can lead to negative mental health outcomes. Studies have shown that internalized racism, or the negative impact of racial discrimination on one's self-esteem and sense of identity, can also contribute to poor mental health outcomes in adolescents. Recent research has established that even wealth, education, and opportunity do not shield Black families from mental health issues to the same degree they do for White families<sup>81</sup>.

Several studies that draw attention to racial disparities in Bermuda<sup>82,83,84,85</sup> especially as they affect young Black males, reinforce the reality of the dynamics adolescents of all races must navigate. It is important to emphasise that all of Bermuda's adolescents are affected, regardless of their race. Indeed, a 2017 Bermuda Foundation Vital Signs report on Diversity and Inclusion notes that Black and White residents are equally likely to experience feelings of alienation because of their skin colour or race (29% vs. 31%, respectively).

#### The following are a few of the specific examples where race may impact AMH.

• Income and access to care: A 2014 Aspen institute roundtable report<sup>86</sup> adds observations about racial dynamics in Bermuda that can impact the island's adolescents. The report asserts that White Bermudians and non-Bermudians disproportionately earn higher incomes than Black Bermudians, despite the latter's predominance in the labour force.<sup>87</sup> This assertion is corroborated in the 2010 census<sup>88</sup>. Directly and indirectly, income disparity is definitively linked to access to care for adolescent mental wellness. The cost of professional counselling and therapy are financially out of reach for many parents wanting to intervene to sustain the mental wellness of a child.

• Education and racial sorting: Most White students attend privately funded schools and most Black students attend public schools, and this coincides with lower achievement levels among Black students.<sup>89</sup> While there is room for conversation and debate regarding education in Bermuda, this racial sorting based on "historical divisions in race, class, and culture"<sup>90</sup> contributes to the stresses that adolescents must navigate.

• Stigma and mistrust: As elsewhere, mistrust of the mental health care system and concerns about being viewed as weak or "crazy" have been long held in Bermuda's Black community. Although no studies were found to substantiate this in Bermuda, anecdotal observations persist that like in other countries, Black adolescents in Bermuda are more often misdiagnosed than their White counterparts when identifying mental health markers. Behaviour patterns such as 'irritability' may be labelled as depression in White adolescent, while the same can been seen as 'disruptive' in Black youth.

The 2014 Aspen Report cautions that **"Bermuda's Black youth ought to be viewed more as "canaries in the racial equity coal mine"**—that is, as a group whose problems point to deeper society-wide imperfections.<sup>"91</sup> This suggests that race remains a persistent issue in the environment that continues to challenge AMH in Bermuda.

#### 4.4.2. Sexual Orientation

Sexual orientation can play a significant role in shaping adolescent mental health. Experiences of discrimination and bias based on sexual orientation can lead to negative mental health outcomes. Adolescents who identify as lesbian, gay, bisexual, or other non-heterosexual orientations are at increased risk for depression, anxiety, and stress, and are also more likely to face challenges related to stigma, bullying, and family rejection.

Bermuda's cultural feeling towards sexual orientation is ever evolving but is likely still regarded as conservative by many of the youth. Phobic behaviour and prejudice based on orientation is still commonplace on the island and this can have discernible effects on adolescents. Research suggests that these effects correlate with factors such as family acceptance and bullying. An important point to note is that it is the stigma and discrimination, and not being LGBTQ itself, that predicts LGBTQ youth mental health difficulties. There is a paucity of data on the number of Bermuda adolescents directly affected due to their own or others' decisions or struggles with sexual identity. At a time when it is natural that post-pubertal adolescents are coming to terms with interests in romantic and sexual relationships, they are inundated by public debates and legislative quandaries that have put Bermuda in the international spotlight.

While the long-term effects are yet to be determined the research is clear that "Over the life course, membership of a sexual minority group is clearly associated with mental health problems of depression, anxiety and suicidal ideation regardless of the age when same-sex attraction, behaviour, identity or fantasy is expressed."<sup>92</sup>

#### 4.4.3. Other Diversity

Although they represent relatively small proportions of the adolescent population, it is worth noting that those with disabilities and those in the foster care system can be particularly vulnerable to mental wellness challenges. Adolescents with disabilities are up to five times more likely to suffer from mental, emotional and behavioural health disorders than adolescents without disabilities<sup>93</sup>.

**Disability:** Disabilities can be intellectual due to developmental delays, adaptive as in autism, neurodevelopmental as in ADHD, or physical such as in cerebral palsy, blindness, or deafness .... and others. Because not all disabilities are obvious, it is particularly important that decisions about the social experiences of adolescents within the school system are beneficial to their mental wellbeing. Concerns about bullying and social isolation add to the considerations for accommodating adolescents somewhere on the continuum between mainstream education versus "special needs" schools<sup>94</sup>.

#### As stated by an adolescent in the Narrative survey:

#### "As a person with a learning disability, I believe that there should be more support for those who have ADHD, dyslexia, etc. When they do not receive support from schools, or their families, they can develop self-destructive behaviours and be seen as a 'troubled kid'."95

**Foster Care:** For those in foster care, the goal is to provide a safe temporary setting away from their biological family. They have likely been exposed to situations such as domestic violence, neglect or different types of abuse. In the United States, research suggests that 60% of adolescents in foster care meet diagnostic criteria for at least one psychiatric disorder. Protecting the mental wellness of this population as they also navigate the inherent challenges of adolescence is crucial. Research involving Bermudian foster care adolescents<sup>96</sup> suggests that particular attention must be paid to build their resiliency if they are to be successful academically and otherwise.

## **Other Bermuda Considerations** 5.1. Adverse Childhood Experiences (ACEs)

Adverse Childhood Experiences (ACEs) are potentially traumatic events experienced during the first 18 years of life that can have negative and lasting effects on health and well-being. The effects can include physical, sexual, and emotional abuse; neglect; and food and housing insecurity. The foundational ACE's research<sup>97</sup> in the mid-1990's provided ground-breaking insights into how childhood trauma disrupts neurological development, and how that links to a variety of health and social outcomes, including early death. The fundamental connection is that adolescent responses to trauma can disrupt early brain development, compromise functioning of the nervous system, and weaken their immune system.

Scores of countries have since explored the frequency, impact, and associations of ACEs in their own jurisdictions. Bermuda's own ACEs study<sup>98</sup> was conducted from 2018 to 2020. The study reinforces the potential short and long-term impact that adverse experiences have on the Bermudian society. In addition to globally recognised causes of childhood trauma, the study highlighted **racism, traffic accidents** and **poverty** as particularly significant causes of psychological damage in Bermuda. The Bermuda study also reinforced that community-associated trauma has equally adverse effects on mental health as do individually centred childhood experiences.

In a foreword to the Bermuda ACE's report, the executive director of The Family Center emphasised the impact of ACEs on Bermuda's overall health, social, and economic wellbeing. While acknowledging that not everyone who suffers ACEs will experience similar harmful outcomes, they stressed the importance of addressing the phenomenon for Bermuda to become a healthier society. The elimination of ACEs remains aspirational, but the pursuit must be persistent.



Thirteen 13 specific experiences were explored in the 2018 Bermuda ACEs model. Since that study, **'Social Media Harms', 'Loss of a Loved One'** and **'Community Violence'** may well be considered as valid additions to the model, attributable to the adverse experiences from the COVID-19 pandemic and other threats in Bermuda.

The Bermuda ACEs model has strong concurrence with the factors<sup>99</sup> that have been most recently confirmed to be associated with the AMH Crisis in the United States. Further, throughout the U.S. Surgeon General's report, ACEs are highlighted as a critical component for addressing AMH from preventative, screening, and treatment standpoints.

Figure 10: The Bermuda Adverse Childhood Experiences (ACEs) Model. Source: 2018-2020 Bermuda Adverse Childhood Experiences (ACEs) Study.

Like the advisory on AMH in the U.S., the tangible evidence and significance of Bermuda ACEs remains as a red flag for adolescent mental health considerations. As echoed by the CEO of the Bermuda Health Council in the 2017 Bermuda report:

"We hope that this <ACEs> survey represents a wake-up call to all residents of this country that there are real risks to children within the community. These risks are concerning and quantifiable in many short- and long-term ways. It is therefore up to each member of this collective Bermuda house to find ways to support those who have been affected and prevent those who are currently safe from being placed in harm's way."

#### 5.1.1. Child sexual abuse

Child Sexual Abuse (CSA) is a particularly significant Bermuda ACE factor. It is worth highlighting because one in three adults report<sup>100</sup> being victims of sexual abuse prior to age 18. Given that at least in the United States, 88% instances of sex abuse are not reported<sup>101</sup>, the implication is that the ratio of those affected is well beyond one in three persons in the 2017 Bermuda report<sup>102</sup>. Victims of CSA can face immediate psychological consequences as well as chronic effects that can impact their adjustment throughout their development. Research<sup>103</sup> suggests that potential mental health consequences can last a lifetime, and even span generations.

Reliable statistics in Bermuda have been difficult to obtain. Different agencies, under different government ministries may have their own information, but this form of reporting is isolated and does not reflect the true scope of CSA on the Island. This is further compounded by gross underreporting which characterizes most CSA cases<sup>104</sup>.

In making a case for a Bermuda public sex offenders register, it was reported by a Parliamentary Joint Select Committee<sup>105</sup> that " ... if the year 2014 was taken for purposes of illustration only, with 173 reported child sex abuse cases in that year the number of unreported cases would be in the region of 1,268! This reality is hard to digest and almost too horrific to comprehend"

SCARS<sup>106</sup> is Bermuda's sole child sexual abuse prevention charity, and its primary mission is reducing the risk of child sexual abuse and increasing the number of advocates to support children who have been sexually molested, and their families. In 2017, SCARS released a seminal study on CSA in Bermuda sponsored by the Bermuda Health Council (BHeC).

#### Key findings from the SCARS/BHeC study include:

- The majority knew their abuser as either family, friend, or neighbour.
- Child-on-child sexual abuse is pervasive in Bermuda.
- Threats, tickling, physical affection, gifts, and shared interests are used for grooming.
- Overwhelmingly, people did not receive treatment and continue to experience anxiety, depression, PTSD, and fear of intimacy.
- Other health issues that respondents attributed to prior CSA included obesity, chronic pain, addiction, and autoimmune disease. Also, relationship issues like physical intimacy and physical contact aversion were cited.
- 71% of individuals, whether or not they had experienced CSA themselves, said that they know someone predominantly female who had been abused.

It is troubling to note from the SCARS/BHeC study that the incidence of CSA in Bermuda appears to be higher than is typical in other populations<sup>107</sup>. Not only are most adolescents not appropriately educated about protecting themselves from CSA, but there are also no known programmes or formal processes in place for helping to address this issue, other than through the criminal justice system.

SCARS has made considerable headway in the community with its evidence-based adult education and awareness<sup>108</sup> programme. However, there is a critical gap in Bermuda for relevant CSA training for children and adolescents. The Coalition for the Protection of Children offers a programme aimed at Primary and High School students that is complementary to the adult programme provided by SCARS. Unfortunately, because of issues of staffing and access to schools, the programme has been sporadic and has had limited reach. The dire need for all children and adolescent residents in Bermuda to have the protections associated with age-appropriate CSA training currently appears to be far out of reach. The implications for adolescent mental health in Bermuda are sinister, especially knowing that many suffer the emotional and mental health challenges in silence.

#### 5.2. Bermuda Suicides

It is important to address the issue of adolescent suicide because it is frequently cited as one of the three leading causes of death in adolescents<sup>109,110</sup>. Risk factors for adolescent suicide are multifaceted, including low self-esteem, substance use problems, sexual abuse, and bullying. More recently, communication through digital media about suicidal ideation and behaviour has become a significant concern for this age group.

Compared to other countries, Bermuda does not appear to reflect the global trend in successful adolescent, or indeed, adult suicides<sup>111</sup>. One adolescent suicide was reported in 2021, but data for attempted suicides or treatment for suicidal behaviour was not found for this report.

A report by LOSS<sup>112</sup> reveals that as of September 1, 2021, the Bermuda Coroner's office had recorded 37 on-Island deaths by suicide since 2009. They also report that between January 2000 and December 2019, the Bermuda Hospitals Board (BHB) admitted 528 cases of attempted or suspected suicide, including self-harm by injury and poisoning. The numbers of adolescents represented in these figures is not known.



#### **Suicide Mortality Rate**

Suicide mortality is an important proxy for the prevalence of mental health disorders in a country. Mental health disorders are a major impediment to the well-being of populations in developed and developing countries. Mental disorders, especially depression and substance abuse, are associated with 90% of all suicides.

Figure 11: Bermuda Suicide Mortality Rate Comparison. Source: Bermuda Vital Signs Report. Ref Footnote #58

The frequency of adolescent suicide in Bermuda appears to reflect relatively low rates compared to other jurisdictions. The reasons for this are not known. One likelihood is that living on a small Island with a close-knit population may be a key protective factor. Correspondingly, it is worth noting that the world's lowest suicide rates<sup>113</sup> are attributed to the islands of Antigua, Barbados, and Grenada that are also characterised as close-knit Island communities<sup>114</sup>.

Bermuda's low suicide mortality rate does not obviate concerns about the reality of attempted suicides, suicidal ideations, and other related behaviours among adolescents. Indeed, it has been queried by some<sup>115</sup> whether dangerously high speed and aggressive bike riding in Bermuda may somehow be related to adolescent suicidal ideations. While suicide mortality may be low, thoughts of suicide or a desire to be "out of the picture" result in worsening of emotional and physical wellbeing. This deterioration on the mental health continuum can then spiral down into effects like social isolation, low levels of functioning and acute substance abuse and addiction.

#### **5.3. Access and Barriers to Support Services**

"Bermuda's health system is not easy to navigate. We often hear entirely reasonable queries of "how to I do such and such?", "where can I get xyz?", "who can I tell something bad happened?

#### For those who work in the system the answers aren't always immediately at hand as the system is complex. " As reported in the Bermuda Government publication 'Vital Signs' 2017<sup>116</sup>

	Who is affected?		
Barrier	Families, including adolescents	Professionals & Service Providers	Considerations
Knowledge and awareness about AMH	Х		
Racial and ethnicity issues	Х		See section 4.2 "Culture and social environment"
Financial barriers including third-party reimbursement	Х		Families with insurance coverage are more likely to visit their primary doctor. Even so, the co-pay may be out of reach for many.
Gate keeper system of insurance companies	Х	X	<ul> <li>The need for referrals by a family doctor may limit access for those who do not have a GP</li> <li>Families may be reluctant to obtain referrals from their GP because they do not want to have "it" on their records.</li> <li>The system of single problem health visits may turn families away from seeking help where they can 'lay it all out on the table'.</li> </ul>
Stigma of receiving mental health support and confidentiality concernsw	Х		See section 4.2 "Culture and social environment" Confidentiality concerns can be a critical barrier to adolescents seeking to address mental wellness concerns. Apart from strong desires for privacy that are characteristic of adolescence, a lack of trust that their information will not be shared by (or with) parents and others may hold them back from getting much needed support.
Silo services—no fluidity across agencies	Х	Х	Programmes and services tend to operate in isolation, and there is a reluctance by professional providers to support a comprehensive approach and share data
Top-down treatment programs and rigid strategies	X	X	<ul> <li>Difficulties entering the consultation process.</li> <li>Families who get medical services from Government clinic users, are likely to see a different doctor each time and are therefore unable to develop the trust and confidence needed to ask for mental wellness support.</li> <li>Limited direct access to mental wellness consultation and referral resources. This is particularly important for adolescents themselves because they may resist discussing their problems with parents or school officials.</li> <li>Families may prefer not to see the provider to whom they are referred.</li> </ul>
Need for training in mental health issues and consultation support		X	Most educational and recreational programme providers with whom adolescents interact are not educated enough to respond appropriately when adolescents present with mental wellness issues
Time constraints to provide supports in addition to traditional workloads (e.g., teachers)	Х		<ul> <li>Teachers, youth programme supervisors may too busy to intervene appropriately when adolescents present with mental wellness issues.</li> <li>Essential AMH programmes that are best delivered in the school setting have stiff competition with other programmes for the limited time that is available outside of the academic school curriculum.</li> </ul>
Limited capacity issues	X		Programmes and services have limited capacity. Families may face long waiting lists or may be considered as not serious enough symptomatically to warrant immediate service and be asked to return after things have worsened.

#### **Other Considerations**

On the issue of coaching versus therapy

"Coaching has been reserved for the privileged for years, which in Bermuda, historically, would have predominately been White, male executives, or White male talent. The bottom line is, coaches provide another avenue to holistic wellbeing, including mental wellbeing, and can be available for all people.

Coaching has not generally carried the stigma associated with therapy and because of that, I think that it can be a safe entryway [for adolescents] into the helping professions." Jessica Lightbourne, the chief executive officer of the Bermuda Coaching Network<sup>117</sup>

#### • Who to call in an emergency?

For adolescents who may be in crisis, there is no readily known mental health hotline. During the interviews for this report, an overwhelming majority of residents, were unaware of, or could not recall the Mid Atlantic Wellness Institute (MWI) hotline<sup>118</sup>. Everyone interviewed could recall the Police emergency 911 number. The need for an easy to recall three-digit number specifically for mental health.

Since July 2022, "988" has been designated the three-digit number for the U.S. **Suicide and Crisis Lifeline**. The number provides free and confidential support to people in emotional distress or suicidal crisis 24 hours a day, 7 days a week – by phone, text or chat. Crisis counsellors can resolve the urgent needs of most callers, reducing the need for an in-person response. SAMHSA which oversees the Lifeline, estimates that more than 80%<sup>119</sup> of crises are resolved on the phone. People can also call or text this number to talk about issues that affect mental wellbeing including substance abuse, economic worries, relationships, sexual identity, getting over abuse, depression, mental and physical illness, and loneliness.

Because adolescents tend to prefer communicating by text or chat rather than talking on the phone, such an approach should be considered for Bermuda because it gives them greater agency over maintaining their mental wellness.

#### **5.4. Bermuda Risk and Protective Factors**

#### 5.4.1. Risk Factors

The preceding sections of the report have addressed a broad variety of risk factors that can affect AMH in Bermuda. These include substance abuse, stigma; negative family environment; exposure to bullying; social difficulties; academic stress, food and housing insecurities; early adversities; trusted adult supervision; experiences with racial and sexual orientation prejudices; loss of family, social media; and mental healthcare geared more towards treatment than protection and prevention.

An area not yet addressed but relevant to Bermuda relates to research that tells us that genes play a role in adolescent mental health<sup>120</sup>. Bermuda may be particularly susceptible because of the small gene pool associated with its population size. In addressing the incidence of Schizophrenia, the Bermuda Hospitals Board acknowledges that "The causes are not fully understood but there are clear genetic factors ...."<sup>121</sup> Further, studies in epigenetics suggest that negative experiences of parents can get embedded in their biology resulting in disproportionately high negative health and social outcomes that can then be inherited by their children<sup>122</sup>. This makes it all the more important to address adolescent mental health within the broader context of public health in Bermuda.

#### 5.4.2. Protective Factors

Protective factors for adolescent mental health include physical activity; sleep; nutrition; academic progress; interpersonal and social skills; nurturing and supportive environments; peer friendships; and a feeling of belonging.

Specific to Bermuda, the following protective factors are worth noting:

Close-knit population	Within a close-knit island community, "everybody knows everybody". Bermuda is a small community, and the chances of noticing 'unusual' behaviour are good. The local culture emphasises the importance of family, closeness, and interest in others. There's an unwritten rule that when you have to say hello to everyone you encounter. Such closeness diminishes the possibility to fall through the cracks. Even if family members do not notice "something amiss", it is likely that others would.
Faith and religion	Faith and religion are tightly woven into the Bermuda social structure. At least 80% of the population claims religious affiliation <sup>123</sup> and the Island is said to have one of the highest number of churches per capita in the world <sup>124</sup> . Churches and their leaders have influence and play a role in Bermudian culture. Several studies emphasize that religiosity and spirituality have a positive effect on mental wellness <sup>125,126</sup> . Research suggests that religious participation in adolescence is associated with greater psychological well-being, resilience, and lower risks of mental illness <sup>127</sup> . The protection church affiliation is likely to confer on Bermuda adolescents may be significant given the large numbers of residents associated with religion.
	It is worth noting that there may be other aspects to religious affiliation that may not be as healthy for adolescent mental wellbeing. In interviews for this report, some residents cautioned that adolescents may find themselves confronted with challenges like "Are you praying enough?" Such responses to their issues may add guilt to already fragile emotional issues that may best be addressed by professionals. Similar protective effects apply for adolescents who practise habits such as mindfulness <sup>128</sup> , meditation, journaling <sup>129</sup> and positive self-talk.

#### Protective Factors that help Bermuda adolescents sustain Positive Mental Health

Broad variety of touchpoints for adolescents.	Notwithstanding lack of evidence of their effectiveness, impact or sustainability, there is no shortage of programmes, services and charities that compete for the attention of adolescents in Bermuda. Whether school-affiliated, private, or part of the Ministry of Youth, Culture and Sport <sup>130</sup> , a wide variety of sporting activities are available to adolescents. In addition, private and Third sector organizations offer participation in many clubs, camps, clinics, and other youth programmes and activities.
	In addition, adolescents are in regular contact with school and other professional and social networks.
	These touchpoints go beyond protective potentials of a close-knit community because those that supervise these activities are expected in their professional roles to look out for the wellbeing of those in their care.

6.

## **Bermuda Stakeholders**

#### Overview

Successful stakeholder engagement is arguably the most crucial aspect of supporting positive AMH. All stakeholders have an important role to play. Intentionally or otherwise, they can have a positive or negative influence on how children and youth progress on the mental health continuum.

For the purposes of this report, the scope of the Bermuda Stakeholders section overview is limited to:

- Identifying the key groups of individuals who impact AMH in Bermuda
- Understanding how positive mental health and wellbeing is understood and supported in each group.
- Gauging awareness, usage and perceived effectiveness of existing services, programmes, and resources.
- Identifying research-based, evidence-based or evidence-informed resources or practices that may positive mental health in adolescents.

It is important to note that a comprehensive stakeholder analysis including identification of all stakeholders who have an interest in AMH is outside the scope of this report. Those stakeholders identified or referred to in this report are highlighted for purposes of illustration only.

In terms of Evidence-based practices (EBPs) that support positive mental health in adolescents, there are hundreds of programmes that have been documented globally<sup>131</sup>. One highly regarded registry is SAMHSA's "National Registry of Evidence-based Programs and Practices<sup>132</sup>". Each practice has been independently reviewed and has met NREPP's minimum requirements for inclusion in the registry. Another registry of note is the Annie E. Casey Foundation's "Blueprints for Healthy Development"<sup>133</sup>.

Successful implementation of any EBP requires careful consideration including its cultural relevance; implementation supports and resources needed to maintain fidelity; potential conflicts with existing practices and value proposition to stakeholders.

The stakeholder groups in Figure 12 are identified based on their potential to broaden, promote, and strengthen positive AMH in Bermuda.

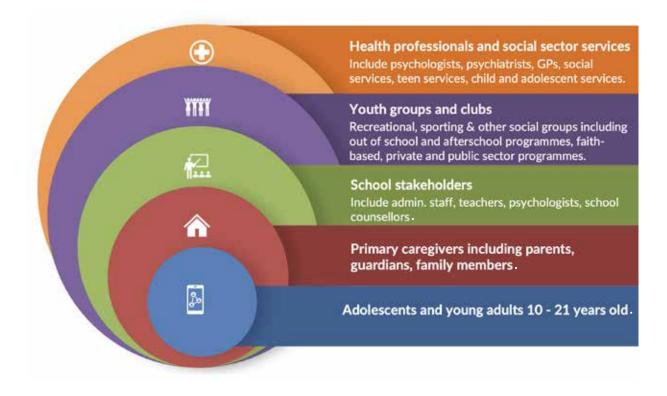


Figure 12: Stakeholder groups identified for the Bermuda adolescent wellness project.

#### 6.1. Adolescents

**Adolescents:** This stakeholder group represents individuals 10 to 21 years in Bermuda. The 2022 adolescent population in Bermuda is approximately 8,000<sup>134</sup> representing 12.5% of the total population. This proportion appears to be similar to that of other countries: adolescents (age 10 to 19) represent 13% of the total U.S. population<sup>135</sup>, and approximately 12% in Canada and the UK.

The significance for the Bermuda community is that within a relatively short period of about 8 years, ALL of today's adolescents will be bona fide adults. How they navigate the issues that affect their mental health and wellness through the adolescent years sets the tone for their future adult lives. This includes the wellbeing of their own children and the overall social and economic future of Bermuda community.



Figure 13: Relative proportion of adolescents in the Bermuda population.

#### 6.1.1. How they perceive their own mental health and what may affect it

Bermuda adolescents appear to have a good basic understanding of the idea of positive mental health and that mental health is not just about being happy.

#### Agree/Disagree with Statements About Mental Health

Among Those Age 14 -21 Years

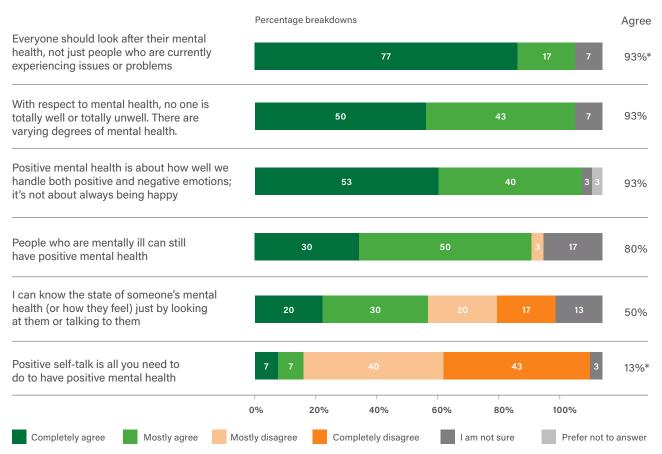


Figure 14: Adolescent perspectives on mental health and wellbeing. Source: 2022 Narrative Survey.

They do not appear to associate the concept of mental health with the same degree of stigma as in the adult population. Their openness and even advocacy for broader community understanding about mental health is exemplified by adolescent individuals and groups like Purplement<sup>136</sup>.

- Their statements suggest they infrequently feel understood or that their opinions are valued.
- They have an uncertain outlook on the future.
- They express that further education is warranted for how to self-assess their mental wellness.

# "Bermuda adolescents often struggle with tension between school and home cultures. They are often forced to switch from one to the other in order to 'fit in'. They struggle to disassociate from school culture when at home and from school culture when at home." School counsellor.

The following illustrations are based on information from the Narrative survey and corroborated in more general terms from interviews and other research.

#### Factors Influencing How You Feel

Key Unaided Mentions, Among Those Age 10 - 21 Years

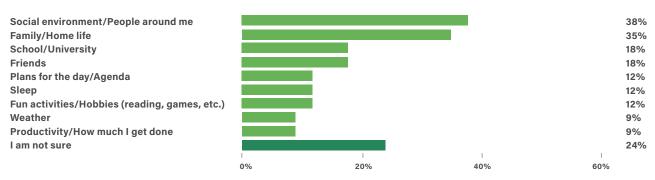


Figure 15: Factors that affect how adolescents feel

#### Who You Turn to When Feeling Overwhelmed, Stressed Out, or Depressed

Total Aided Mentions, Among Those Age 10 - 21 Years

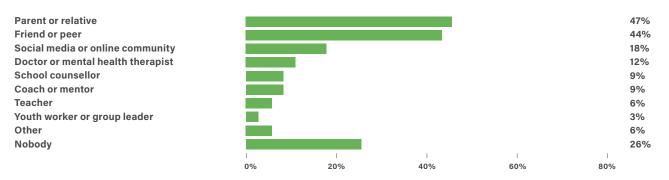


Figure 16: Who adolescents turn to when feeling stressed

#### What Makes You Feel Positive and Good About Yourself

Key Aided Mentions, Among Those Age 10 - 21 Years

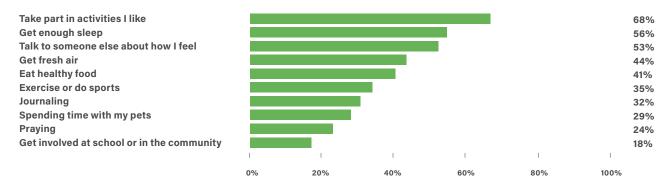


Figure 17: What makes adolescents feel good about themselves

Adolescents who responded to the survey cite their social environment and their family or home life as where they generally feel comfortable and where they seek support when needed. They cite parents, relatives and friends or peers as someone they would turn to when feeling overwhelmed, stressed out, or depressed.

They did not appear to recognise the importance of more reflective and spiritual actions for their wellbeing.

## 6.1.2. Awareness, usage and perceived effectiveness of existing services, programmes, and resources.

- They believe that resources and additional programmes for enhancing positive mental health are needed to increase youth confidence and positivity.
- They would like programmes and services that are more relevant to their own interests
- the #1 reason for using drugs was boredom.

When asked, most adolescent appeared to be unaware of the scope of available programmes and services that could potentially support mental wellness – except for those with which they were personally involved. Overall, they spoke instead to the need for greater opportunities in terms of mental health and confidence building resources – including therapists, counsellors, mentoring and other activities to increase connection and support. Their wish list also included more and better access to mental health care, in-school health professionals, implementing a mental health hotline, affordable mental health care services, regular mental health checks/testing, and a public education campaign in schools to promote positive mental health.

#### 6.1.3. What adolescents can do for themselves.

It is important for adolescents to have some level of agency in maintaining their own mental health and wellness; and where possible, to be advocates for their peers. Important steps<sup>137</sup> that adolescents can take to protect, improve, and advocate for their mental health include the following:

• Take care of mind and body: There is a plethora of evidence that point to a direct link between factors like quality of sleep quality; physical activity; and breakfast consumption with the psychosocial health of adolescents<sup>138,139</sup>. Keeping a regular schedule, outdoor activities, good hydration and avoidance of substance abuse are also linked to positive mental health.

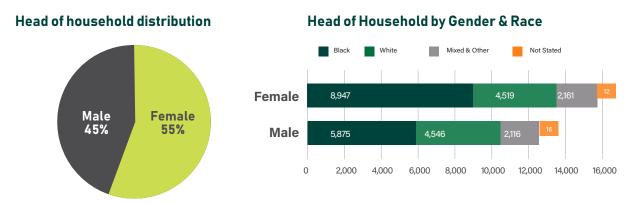
- **Practice techniques to manage and protect against stress:** There are compelling bodies of evidence for practices like journaling; daily affirmations<sup>140</sup>; meditation; arts; and music<sup>141</sup> in supporting AMH. Evidence is growing<sup>142</sup> that the use of selected Apps like 'Headspace', 'Calm', 'SmilingMind', and others can help reduce stress and provide supportive practices to reinforce positive mental health in adolescents.
- Help others in the community: Volunteering helps to build a sense of purpose and is positively associated with mental health and well-being<sup>143</sup>.
- **Build healthy relationships:** Spending time with friends, family members, in social groups and others with whom honest conversations can be had can be a powerful buffer to stress and a source of wellbeing.
- Be intentional about the use of social media: Making self-contracts about factors such as time spent, use of privacy settings and controls, content consumed and when to ask for assistance can help to mitigate the some of the potential negative outcomes associated with use of social media.
- Learn how to manage difficult emotions: Research suggests that a critical aspect of building resilience involves learning to "ride the wave of emotion"<sup>144</sup> rather than try to bury or hide from difficult feelings. This helps adolescents to develop non-judgemental and mindful perspectives that strengthen the ability to adapt successfully in the face of stress and adversity.
- Remember that mental health challenges are real, common, and treatable. Keeping in mind the mental health continuum (See section 3.2 of this report) and that there are many ways mental health challenges can be addressed is essential. Being proactive by identifying in advance trusted adults, friends or family members to talk to about stressful situations involving self or others provides an added sense of agency for adolescents.

# 6.2. Primary Caregivers

Primary Caregivers: This stakeholder group represents parents, guardians, and family members.

#### Who are the primary caregivers?

To a great degree, primary caregivers can be associated with also being head of their household. In Bermuda, women are predominantly the head of household. For one-parent households, 87% are headed by women.<sup>145</sup> . Further broken down by race, black women (53% of the female population) are twice as likely to carry this responsibility than white women.



## Women as Heads of Household in Bermuda

Figure 18: Gender distribution of heads of households in Bermuda. Source: 2016 Census of Population Housing Report.

### **One Parent Household**

#### Marital Status, Females Age 15+

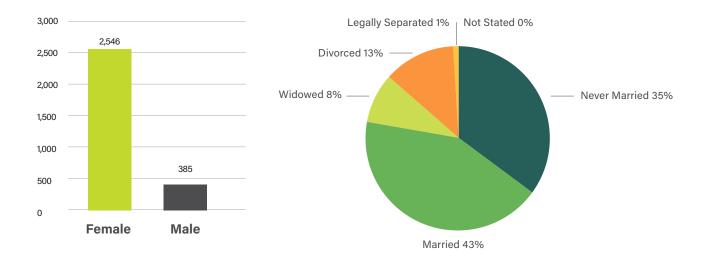


Figure 19: Women as heads of one-parent household; Marital status of women in Bermuda. Source: 2016 Census of Population Housing Report.

It is important to understand this picture of the predominant primary caregivers of adolescents because it throws light on overarching issues that inevitably impact those in their care. These include issues of gender equity and inequality, underemployment, and the stresses of "The Superwoman Syndrome"<sup>146</sup>.

In a 2022 Women's Resource Centre report<sup>147</sup> some of the issues identified as being associated with this primary caregiver population included:

- Latchkey kids who miss the nurturing and learning from interaction with parents.
- Adolescents who struggle with a sense of worth from a young age. This is especially evident in homes where empowered female behaviour is not the norm.
- Many lack access to supportive networks and/or do not know how to leverage them.

According to the 2000 census<sup>148</sup>, over 50% of black female-headed households live at or below the poverty line. The Poverty in Paradise documentary (2010)<sup>149</sup> explores this population in depth and portrays a compelling and weighty reality of the adverse impact on their children. The documentary opens a window into the lives of low-income and working-class mothers some of whom are homeless, jobless and in despair. Even highly motivated parents who are advocating for their children's needs appear to be weighed down by the circumstances of being poor in Bermuda.

As emphasised by Bermuda's Minister of Social Development and Seniors in 2022 "Women have struggled for their rights within the cultural, social, political, and economic spheres, and Bermuda is no exception... These gender inequalities continue to create bias in our community."<sup>150</sup>

### If we can make the lives of women better, our children will do better. Interviewee

In addition to female heads of households, other primary caregivers in Bermuda are identified and addressed in the "Family and Parenting section 4.2.4" of this report.

When primary caregivers are struggling with managing stress and their own emotional health, it is almost inevitable that this can potentially be perpetuated in the lives of their children. A critical factor in adolescent mental wellness in Bermuda is an understanding by family caregivers of the significance of their role.

# 6.2.1. What primary caregivers can do to support AMH

# *"There are no perfect parents, perfect children or perfect people. We can only do our best, and we all need help once in a while."*

The following are some of the ways in which primary caregivers can help to promote and support AMH:

#### Learn about mental health

- Access available educational resources to better understand mental health and wellbeing of adolescents and others, including self.
- Look out for warning signs of distress in household members
- Know how to seek help (in advance when possible) when, where, and how to seek help
- Model non-judgmental and positive attention to personal wellbeing.

#### • Provide supportive, nurturing, stable, and predictable home environment - as far as is possible.

- Establish schedules including mealtimes and bedtimes that that can be relied upon.
- Minimize exposure to domestic issues and stressful topics like financial or marital challenges.
- Be intentional in learning or refreshing good parenting skills including communication skills.
- Facilitate stable relations at home to help protect against toxic stress and promote resilience and overall well-being.

#### Stay connected with school and social networks

- Increasing family and school connectedness during adolescence is associated with multiple positive mental health outcomes and has the potential to promote overall health through adulthood.<sup>151</sup>
- Have early and open discussions about social issues including exposure to substance abuse and gang culture.
- Stay current on topical issues in the community that may directly or indirectly affect adolescents.

# 6.3. School Stakeholders

**School stakeholders:** This group includes administrative and support staff, teachers, counsellors, psychologists, and other professionals in the school system.

# "Teachers are not qualified counsellors but as they interact with students daily, they can know when one is experiencing mental health challenges." Teacher

In Bermuda, education is compulsory for children between the ages of 5 and 16 and provided free up to 19 years. Parents are charged with the legal responsibility of ensuring enrolment of students and regular school attendance.

There are limited numbers of older adolescents in the educational system - Academic and PACE students -, and an unknown number of students home-schooled. Bermuda adolescents are mostly represented by the approximately 2,150 students in the public middle and high schools combined; and approximately 1,600 students in private schools. This reflects a ratio of 60:40 adolescents in the public school system compared to the private school system<sup>152</sup>. This is important to note because the quality of education and accompanying mental health and wellness support services are perceived to be higher in the private school system<sup>153</sup> that happens to serve fewer of the Island's adolescents.

## 6.3.1. Perception of adolescent mental health in schools

Schools play a unique and vital role in the lives of children and adolescents. Violence and perceived bullying – both by teachers and other students – as well as excessive pressure to succeed can undermine children's mental health. By contrast, a supportive school environment with positive relationships between students and with teachers and administrators can bolster AMH.

**Sections 4 and 5** of this report identify a broad range of other social issues that can also impact the expression of mental health and wellness in the school setting. This emphasizes the role of teachers and administrators in providing a supportive school environment for students as well as for themselves.

It is fair to expect that the school setting presents a stage on which the combination of issues that affect AMH and can be observed in full display. The following are reflections<sup>154</sup> from a public high school teacher who in seven years of teaching had seen three pupils murdered and another two incarcerated:

#### Impact on students:

- "I think that even more so, what hurts is to see the impact on students now in our classrooms, when their good friend or cousin or girlfriend or boyfriend is murdered. It's devastating.
- "There's this feeling of hopelessness it's almost like a cloud that covers the students when someone dies. .... That hopelessness, I think, starts to breed a numbness towards life and a numbness to your own future."
- "They're starting to think 'maybe I won't make it out alive', or 'maybe those closest to me won't make it out alive, and even if I do, I'll be so wounded that a good part of me won't make it out alive."
- "We're looking at hopelessness towards survival, where they're so worried that, if they go to a party, someone might mistake them for someone else or someone might accuse them of something."
- "From their perspective, they believe the future is very bleak in Bermuda there's violence, it's very difficult to get a job, and if they do get a job, it'll be very difficult to support themselves." Impact on the teachers:
- •" I cope by crying just a little bit and then gathering up my strength to try harder the next year to convince those next group of students that it won't be them that it can't be them.

Figure 19: A high school teacher's reflections on the impact of collective trauma. Source: The Royal Gazette, Oct 25, 2022.

# 6.3.2. Awareness, usage and perceived effectiveness of existing services, programmes, and resources.

Because of the compulsory attendance laws, adolescents spend most of their time within the school system for 7 to 8 hours a day, and more if engaged in after school activities and clubs. Given the extensive periods of contact, schools have a vital role to play in adolescent mental health and wellness.

As adolescent mental health worsens, the quality of supports within the school system becomes even more important. However, to fit a robust support system within and adjacent to the school curriculum leaves schools struggling with several implementation challenges. These include gaining teacher and administrator buy-in; limited time and resources; school accountability for academic outcomes (rather than social-emotional outcomes); and limited parent involvement. Even when third-party professionals and organizations offer AMH supports to schools it can be difficult to determine where the priorities should lie.

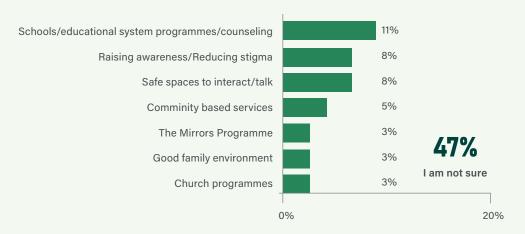
#### **Observations and quotes:**

- "As teachers, we need to be sold and get trust and confidence in the education system. I love education, but I do not see myself staying in the system."
- "So many people/services during the pandemic were overwhelmed even with teaching via Zoom, the mental health piece really stood out".
- School stakeholders, health professionals and youth group/club workers note that the lack of access to resources, and a high workload/lack of time hinder their ability to promote and support positive mental health in adolescents.
- School professionals feel constrained in supporting some adolescents because their primary caregivers do not cooperate.
- There have been several national surveys of school children that assess mental issues. We need to act.
- "Negative behaviours get reported to counsellors, but we have no training (like SCARS) to help us recognize Red Flags."
- When children "air dirty laundry" to their teachers/counsellors, any action taken may make matters worse for the children at home.
- •" The awareness that corporal punishment of children is still lawful in the Bermuda school system is problematic for the students, teachers and parents and should be for Bermuda society."

Community expectation of schools:

### Most Critical to Promote Maintenance of Positive Mental Health in Bermuda Adolescents

Key Unaided Mentions, Among Those 22 Years or Older



When asked what one existing or new programme, service, action, resource, or anything else they believe is most critical to promote the maintenance of positive mental health in Bermuda adolescents, initiatives related to the educational system were most frequently identified.

Figure 20: Bermuda residents identify the school system as most critical to support AMH.

#### **Notable Quotes:**

*"Education - raise the knowledge about mental health and build more and community-based services on the prevention side for improved identification and early intervention for the greatest impact."* 

"Mental health well-being should be built into the educational system. Teachers / school social workers/ counselors can do check-ins, quick mental health exercises teaching children to relax, release and providing a safe space to engage in when emotionally overwhelmed, or just needing some additional support."

# 6.3.3. What schools can do to support AMH.

- Expand social and emotional learning programs and other evidence-based approaches that promote healthy development.
  - Provide universal access to social, emotional, and behavioural learning such as the PATHS<sup>155</sup> programme a curriculum set out to help students with social skills and to manage feelings and emotions and to get along with others. The Paths programme is standard in some of Bermuda's elementary schools.
  - Provide access to a variety of approaches that include positive behavioural interventions and digital media literacy education in the public and private school system.
  - Ensure that every student in the school system has access to age-appropriate approaches that are delivered with the required levels of fidelity.

#### • Invest in a whole-of-school approach to mental health.

- Take a holistic approach this means considering all the ways in which schools affect children's development and well-being. It should seek to encourage a positive school environment that makes students feel safe and connected.
- Establish protocols and provide places and spaces that allow students to take voluntary time out from classes when they feel overwhelmed.
- Provide regular mental health and psychosocial well-being training for teachers and staff to understand when and how to provide prevention, intervention, and support to students.

#### - Strengthen teachers' knowledge and socioemotional competencies.

- Support teachers and other school staff to build their capacity so that they, in turn, can help adolescents learn about mental health and develop healthy.
- Provide access to programmes<sup>156</sup> provide the skills and tools for teachers to recognize signs of changes in mental health among students, including trauma and behaviour changes – and to take appropriate action when needed

#### Support staff mental health.

Workshops and support systems that address the issues that may impact the mental health of teachers are essential. The mental health of teachers in turn affect that of the adolescents in their care.

#### Consider cultural issues.

Research specific to Bermuda<sup>157, 158</sup> offer insights into how Black Bermudian males navigate conflicts between school values and the those in community-based learning spaces like sports, social clubs and neighbourhoods. This study <sup>159</sup> suggests that a Black Bermudian male can experience educational success when his educational journey inside and outside of school provides balance between his knowledge and acceptance of his identity. Recognition of this and other cultural issues helps to avoid dissonance that may otherwise be experienced by students.

Support for improving the mental health infrastructure of schools is an issue in which schools, teacher organizations, psychologists, paediatricians, primary care providers, and mental health advocacy groups can partner.

# 6.4. Youth Groups and Clubs

**Youth Groups & Clubs:** This stakeholder group includes recreational & sporting groups (e.g., out of school and afterschool programmes, youth mentoring/youth development, faith-based groups, and private and public sector youth workers.

# "Wellness and resilience – we should always be talking about this in every decision we make in designing our programmes" Executive Director, Nonprofit programme.

This group plays a significant role in the lives of Bermuda's adolescents with 135 organisations identified as Helping Services<sup>160</sup>. The list includes some Government services but is predominantly made up of non-profits who have potential opportunity to support the mental health and wellbeing of adolescents. They are a mainstay in the community, and many have been supporting adolescents after school and during school vacations for several years.

The social and recreational programmes and services they provide often leverage experiential learning about social respect, decision making, and dealing with emotions. This helps to build resilience, especially for adolescents who may have had earlier hardship.

There is no question that the majority of local youth programmes have inherent value. However, when viewed as a whole, the challenges they face include the following:

- Financial constraints competition for limited funding resources
- Limited access programmes are typically offered on a first come, first served basis; many programmes are seasonal because of resource constraints
- Inconsistent standards of practice
- Siloed, fragmented and unevaluated programme offerings
- Lack of data to drive decisions
- · Limited access to staff training and certifications
- Fidelity issues when evidence -based practice programmes are implemented

Despite these challenges, this stakeholder group continues to provide an impressive number of programmes and services to Bermuda's adolescents. The different agencies provide their own unique programmes to serve different adolescent populations, and each has its own solution to a perceived need in the community. However, given what we now know about the pervasive nature of AMH, it will benefit the community for agencies to become intentional in, at the very least, acknowledging the AMH issue in their programming.

## 6.4.1. What youth groups and clubs can do to support AMH

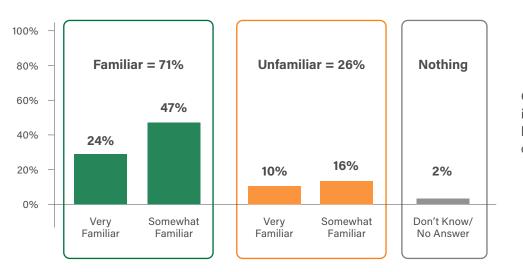
The following recommendations extracted from and/or informed by those in the U.S. Surgeon General's Advisory on Youth Mental Health<sup>161</sup>, also resonate for Bermuda.

- Educate the public about the importance of mental health, and reduce negative stereotypes, bias, and stigma around mental illness.
  - Community groups can play a key role in fostering open dialogue about mental health and correcting misconceptions and biases.
  - It's particularly important for youth groups to engage with stakeholders that have an influence over young people, such as families, educators, health care professionals, juvenile justice officials, faith leaders, and the media.

- Implement evidence-based programs that promote healthy development, support adolescents and their families, and increase their resilience.
  - These include youth enrichment programs e.g., mentoring, skill-based parenting and family relationship approaches, and other efforts that address social determinants of youth health such as financial constraints, exposure to trauma, and lack of access to health care.
- Address the unique mental health needs of at-risk youth, those experiencing racial biases, LGBTQ+ youth, and youth with disabilities.
  - Youth-serving organizations should think intentionally about how and to whom programme services are offered. For example, actively recruit and engage those who have historically been prevented from equal access to opportunities and may benefit the most from services.
  - Recruit programme staff directly from communities being served.
  - Build programme staff capacity to recognize personal biases, as well as structural challenges.
- Elevate the voices of adolescents and their families.
  - Adolescents are experts on their own lives, so it is important to engage them in all phases of programming, from ideation to implementation.
  - Gather feedback to understand what is and isn't working.
  - Include adolescents and families directly in delivering services, for example by creating peer support programs and providing volunteering opportunities.

# 6.5. Community

There appears to be an encouraging level of community awareness of the concept of positive adolescent mental health and well-being. 24% of residents asked in a first-quarter 2022 Bermuda Omnibus Survey<sup>162</sup> asserted they are very familiar with the concept, and 47% said they were somewhat familiar.



One-half of residents report<sup>163</sup> interacting with adolescents between the ages of 14 and 21 on a regular basis.

Figure 21: Bermuda residents' reported familiarity with the concept of positive metal health when applied to adolescents 14 to 21.

Residents aged 35-54 are most likely to report interacting with adolescents, while this is also true of those who report being familiar with the concept of positive mental health and well-being in adolescents.

## 6.5.1. Bermuda residents' suggestions for sustaining positive mental health

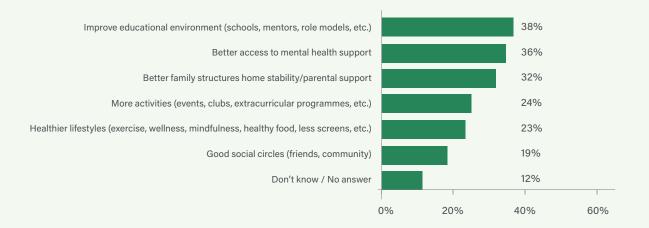


Figure 22: Key mentions (unaided) to help build and sustain positive adolescent mental health and wellbeing.

When asked to identify up to three aspects that would help build and sustain positive adolescent mental health and well-being in Bermuda, the two most common responses were to improve the educational environment (38%) and to provide better access to mental health and support (36%). This is followed by mentions of better family structures and home stability (32%), more activities (24%), healthier lifestyles (23%), and good social circles (19%).

Better access to mental health support is more commonly mentioned by younger residents and those who are familiar with the concept of positive mental health and well-being. Mentions of improving educational environment is higher among white residents, those familiar with the concept of positive mental health and well-being, and those who interact with adolescents when compared to their counterparties Women, those aged 35-54 as opposed to those who are older, and those who are familiar with the concept of positive mental health and well-being are more lilkely to mention more activities.

Together, the community awareness findings bode well for potential community awareness and/or advocacy efforts to support nurturing of positive mental health in the adolescent population, rather than just focus on treatment of mental illness.

# 6.6. Legal Framework – Advocacy Policy & Legislation

There do not appear to be any legislation or policies specific to the mental health of adolescent population in Bermuda. A 2014 analysis<sup>164</sup> of the network of legislation geared towards securing the welfare of children in Bermuda identified gaps and opportunities related directly and indirectly to adolescent mental health and wellbeing. It is not known whether legislative work may be currently underway, but it is safe to say that AMH legislation and policy review is of critical importance.

# 6.6.1. Why focused legislation is important

The establishment of mental health legislation and policy in Bermuda would help to facilitate the work of the different stakeholder groups by establishing national guidelines for:

- Accountability
- Financing
- Prevention and early intervention
- Training
- Equity
- Public health approaches
- Access to crisis care

# 6.6.2. Global approaches to adolescent mental health legislation:

The World Health Organization (WHO) framework for Child and Adolescent Mental Health Policy and Plans has formed the basis for several countries<sup>165</sup> across the world to develop their own policies and strategies for supporting the mental health of adolescents. Policymakers and planners have access to well-researched and tested frameworks for establishing national approaches including:

- Child and Adolescent Mental Health Policies and Plans
- Mental Health Financing
- Mental Health Legislation and Human Rights
- Advocacy for Mental Health
- Organization of Services for Mental Health
- Planning and Budgeting to Deliver Services for Mental Health

# 6.6.3. Covid has increased the urgency for AMH related legislation

In the United States, the exacerbation of adolescent mental health issues precipitated by the COVID pandemic have led to an accelerated number and scope of legislative policies and updates. Examples of recent actions to address AMH crisis include:

- The 9-8-8 lifeline Implementation Act launched a three-digit number as a lifeline for adolescents to call, chat or text for information, support, or crisis response.
- National Institute of Mental health Strategic Plan
- Youth Crisis Guidelines
- Safer Communities Act increases the number of health professionals in schools
- School mental health days allows students to be excused for mental health or behavioural health reasons, similar to sick days.

# **Report Summary & Recommendations**

#### A Vision for AMH in Bermuda

Through collaboration and coordination of government, third sector, and the business community, all adolescents regardless of economic status, will have access to a seamless integration of the high-quality supports they need to learn, grow and sustain healthy and resilient lives.

# 7.1. Report Summary

The adolescent transition from being a child to becoming a self-reliant adult is fraught with biological, physical, psychological, and behavioural changes that can be challenging to navigate. It is well established that this is one of the most dynamic and influential periods of human development. During this time, it is important to build and sustain the resiliency needed to stay within the healthy and coping zones of the mental health continuum. The purpose of this report has been to understand positive mental health within the context of the AMH landscape in Bermuda.

The report finds a landscape that is as broad in scope as the variety of touchpoints in an adolescent's life! It is influenced by what has been recognised as a global AMH crisis that Bermuda has not escaped, exacerbated by the COVID-19 pandemic. Bermuda's environment, including the economy, cultural and social influences, issues of diversity and long-established ACEs all contribute to the challenges that affect AMH. And, as in other populations, attention is being paid to the part played by the potentially deleterious nature of social media.

While concerns about access and barriers to support services further legitimise the concerns about AMH, there is relief in knowing that Bermuda has some mitigating protective factors. Bermuda also has access to well-tested evidence-based approaches that can be applied locally, as has successfully been demonstrated by some stakeholders.

There is opportunity across the board to improve the roles played by all stakeholders - adolescents themselves, their primary caregivers, school stakeholders, youth groups and clubs, health professionals and social sector services.

Ultimately, supporting the mental health of Bermuda's adolescents long-term will require a whole-of-society effort to address entrenched challenges, reinforce legal frameworks, strengthen the resilience of young people, support their families, and mitigate the impact of social and cultural issues. "Positive investment in the systems, policies, and programs that support adolescents can help create trajectories that will shape the rest of their lives and the multi-generational communities they share."<sup>166</sup>

# 7.2. Recommendations

Suggestions for practical action are centred around FOUR Strategic Priorities. The goal of these strategies is to improve the scope, capacity, access and impact of providers, programmes, and services. They will also bolster resources and strengthen community awareness and engagement.

# 7.2.1. Information and Education

#### Goals:

- Build knowledge & awareness about adolescent mental health in the community targeted at adolescents themselves, parents, and all workplaces.
- Publicly distribute information about availability and access to all available resources

Why this is important: Building awareness about mental health is essential to improve understanding about the mental health continuum and increase access to available resources for adolescents and others. It will help to break the misconceptions and stigma associated with mental health in the community and shed light on coping strategies for adolescents. A notable precedence for successful implementation of this approach in Bermuda has been the SCARS organization information and education about child sexual abuse. This call to action from the ACEs report <sup>167</sup> also holds true for AMH:

"We need to reach a "tipping point" of awareness throughout the community as opposed to only in those who work intimately in the field. Success in this regard would lead to a state of advanced collaborative engagement, rooted in problem solving, that cannot be de-railed."

## 7.2.2. Standards of Practice

#### Goals:

- Establishment of national standards for classification and delivery of youth serving programmes
- Reinforce integration of evidence-informed practices that support adolescent mental wellness.

Why this is important: Standards of practice related to AMH for youth groups and clubs, health professionals and social sector services are essential to set expectations and establish minimum standards. This includes the levels of awareness, standards, systems, policies, and processes around which they function. This will provide opportunities to address well-meaning approaches that remain siloed, fragmented, unevaluated and that overlook the science.

# 7.2.3. Governance

#### Goal:

- An intentionally structured and nationally integrated adolescent mental wellness framework.

**Why this is important:** Given the ongoing crisis and its heavy and increasing burden of financial and other costs to the community, it is critical to consider AMH within its broader public health sphere. Governance will ultimately require a national strategy with shared ownership and vision for AMH in Bermuda. This allows for national goals and targets to aim for and a variety of outcome measures to guide progress.

Issues of who will spearhead this approach and key stakeholder roles will need to be addressed. However, opportunity exists to initiate the coordination of elements such as data collection, policy, and regulation in which all stakeholders have interest.

Governance at the national level is arguably the only way to break the ineffective siloed and fractured to service delivery that currently exist.

# 7.2.4. Support/incubate bright spots

#### Goals:

- Bring emerging and innovative ideas to fruition
- Scale existing exemplary programmes and services

**Why this is important:** Despite the challenges observed in this report, there are AMH programmes that stand out and hold themselves to higher than required standards. They implement evidence-based approaches and integrate evaluation systemically. Innovation awards can help extend the reach of such programmes and help bring innovative AMH ideas to fruition.

Among relevant stakeholders, this will 'sharpen the saw' and share strategies for improved effectiveness in programme and service delivery.

## 7.2.5. Footnotes and Works Cited

1. The Bermuda Omnibus Survey is a syndicated quarterly phone survey of about 400 Bermuda residents to track economic, political and social issues. Questions specific to adolescent mental wellness were commissioned in the Q1-2022 survey

2. Survey conducted by Narrative Research Bermuda on behalf of the Bermuda Foundation - a total of 98 age-identified respondents completed the survey.

3.WHO on Adolescent Health https://www.who.int/health-topics/ adolescent-health#tab=tab\_1

4. As described by several authors including Stetka, B. (2017) Extended Adolescence: When 25 Is the New 18, Scientific American.

5. Sawyerr, S. et al. (2018). The age of adolescence. The Lancet Child & Adolescent Health, Volume 2, ISSUE 3, P223-228, March 01, 2018 6. Cunha, J.P. (2021) https://www.emedicinehealth.com/what\_are\_the\_ three\_stages\_of\_adolescence/article\_em.htm

7. A broad range of studies include the Adolescent Brain Cognitive Development (ABCD) Study - the largest long-term study of brain development and child health in the United States. https://abcdstudy.org/ 8. Bodeker et al., 2020 Bodeker, G. & Pecorelli, S. & Choy, L. & Guerra, R. & Kariippanon, K. (2021). Well-Being and Mental Wellness Well-Being and Mental Wellness.

9. Ibid.

10. Lavoie, J., Pereira, C. & Talwar, V. (2016). Children's Physical Resilience Outcomes: Meta-Analysis of Vulnerability and Protective Factors. Journal of pediatric nursing. 31. 10.1016/j.pedn.2016.07.011.

11. World Health Organization (WHO). (2019, October 2). Mental health. 12. Bermuda ACEs. Hines T, Guthman S. "2018-2020 Bermuda Adverse Childhood Experiences (ACEs) Study."

13. Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Bu Jones, L., Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review The Lancet Public Health, 2(8), e356-e366. 14. Marshall M. (2020). The hidden links between mental disorders. Nature, 581

15. There is an abundance of literature on the mental health continuum. The earliest study found is Keyes, C.L.M. (2002) The Mental Health Continuum: From Languishing to Flourishing in Life Journal of Health and Social Behavior.

16. Illustration is based on information from The Mental Health Continuum is a Better Model for Mental Health (2020). ©Mental Health Commission of Canada (2018).

17. Protecting Youth Mental Health. Dec. 2021, The US Surgeon General's Advisorv

18. Country data reviewed for this report include Australia; Bangladesh; Canada; China; Guernsey, Europe; Ireland; UK; U.S.; Turkey. 19. Richel, M. (2022) 'It's Life or Death': The Mental Health Crisis Among

U.S. Teens, The NY Times Company

20. https://www.royalgazette.com/health/news/article/20220502/ teenagers-reporting-higher-levels-of-social-anxiety/

21. Kessler R.C., Angermeyer M, Anthony J.C, et al. Lifetime prevalence and age-of-onset distributions of mental disorders in the WHO Mental Health Survey Initiative. World Psychiatry 2007; 6: 168-76

22. Substance Abuse and Mental Health Services Administration. (2021). Key substance use and mental health indicators in the United States: Results from the 2020 National Survey on Drug Use and Health (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56).

23. WHO Adolescent Mental Health Nov 2021 https://www.who.int/newsroom/fact-sheets/detail/adolescent-mental-health

24. Warren, D. (2022) The State of Mental Health in America 2022: Youth Prevalence and Access to Care. Behavioral Health, Next Step Solutions 25. Ren et al., 2020; Robinson et al., 2022; Şimşir et al., 2021; Wu et al.,

2021; Jones et al., 2021; Yeasmin et al., 2020; Almis et al., 2022; O'Sullivan et al., 2021; Tang et al., 2021; Ma et al., 2021

26. Shah, S.I., On behalf of the Pediatric Public Policy Council. Legislative remedies to mitigate the national emergency in pediatric mental health. Pediatric Res 92, 1207-1209 (2022).

27. Studies including Rider, E. et al. (2021) Mental health and wellbeing of children and adolescents during the covid-19 pandemic. British Medical Journal 374: bmj.n1730

28. Centers for Disease Control and Prevention

29. Orchinik L.J. (2022) Helping teens who self-harm. https://www. nemours.org/services/child-psychology.html

30. Steinhoff, A. et al (2021). Self-injury from early adolescence to early adulthood. Eur Child Adolesc Psychiatry. 2021; 30(6).

31. 2022 Boys & Girls Clubs of America National Youth Outcomes Initiative Member Survey

32. Souza, J. (2022) How Early Puberty Affects Children's Mental Health. Child Mind Institute

33. Landry, M Clinical manager, DotCom Therapy in a Dec 2021 interview https://www.yahoo.com/lifestyle/parents-childrens-mental-healthnational-emergency-161713452.html

34. Orchinik, L.J. (2022) https://www.nemours.org/services/childpsychology.html

35. Consumer Price Index Reports, May 2015-2021

36. Close to 10% of the Bermudian workforce was unemployed in Nov 2021, according to the Minister of Labour as reported: https://www. royalgazette.com/politics/news/article/20210628/almost-one-in-tenbermudians-out-of-work-labour-force-survey-shows/

37. 2016 Census of Population and Housing Report

38. According to Numbeo.com and as reported in Dec 2021 https://www. royalgazette.com/year-in-review/article/20211231/bermuda-tops-cost-ofliving-index/

39. Bermuda civil society project: analysis of social service agencies, 2010. 40. Fang, D., Thomsen, M.R. & Nayga, R.M. The association between food insecurity and mental health during the COVID-19 pandemic. BMC Public Health 21, 607 (2021).

41. Including Coley, Leventhal, Lynch, & Kull, 2013; Cotton, Lohman, Brooks, & LaGasse, 2018

42. https://www.wrcbermuda.com/; https://www.coalition.bm; https:// home.bm/

43. Government of Bermuda, Department of Statistics. The Labour Force Survey Report of May 2019

44. Government of Bermuda, Department of Statistics. The Labour Force Survey Report of May 2019

45. https://www.royalgazette.com/general/news/article/20221208/foodprices-rise-by-more-than-10-latest-inflation-figures-show/

46. As reported in The Royal Gazette Jul 26, 2022: https://www. royalgazette.com/crime/news/article/20220726/young-people-using-awide-variety-of-drugs/

47. Kehusmaa, J. et al (2022). The association between the social environment of childhood and adolescence and depression in young adulthood

https://www.sciencedirect.com/science/article/pii/S0165032722002166 48. Government of Bermuda. Report of the Survey of Students on Knowledge and Attitudes of Drugs and Health, 2012, p.21 extract

49. Raynor, K. and Tankard, S. (2020) Marijuana Survey 2020 Report of the Survey of Middle and Senior School Students on Marijuana

50. Focus Counselling Services "Substance Use and Youth -Is there a problem?" a presentation on the 2019 National School Survey 51. National School Survey 2015. Survey of Middle and Senior School Students on Alcohol, Tobacco, Other Drugs, and Health. Government of Bermuda; Department for National Drug Control. (2012). National School Survey 2011. Survey of Middle and Senior School Students on Alcohol, Tobacco, Other Drugs, and Health. Government of Bermuda. Department for National Drug Control. (2012, 2016).

52. IBID

53. https://www.royalgazette.c om/crime/news/article/20220726/parentsgrooming-young-people-to-join-gangs/

54. Coid, J. et al. (2013). Gang membership, violence, and psychiatric morbidity. American Journal of Psychiatry, 170(9), 985-993 55. Hughes et al (2015) The mental health needs of gang- affiliated young

people. UK Centre for Public Health 56. Ibid

57. https://www.gov.bm/articles/gang-violence-update

today. Int. journal of Culture & Mental Health. Vol 5, Issue 3

58. McDaniel D. Risk and protective factors associated with gang affiliation among high-risk youth: a public health approach. Inj Prev. 2012 Aug;18(4):253-8

59. 'Alarming increase' in knife crimes https://www.royalgazette.com/ crime/news/article/20220718/alarming-increase-in-knife-crimes/ 60. https://www.royalgazette.com/crime/news/article/20220520/weeks-

appeals-for-an-end-to-senseless-cycle-of-violence/ 61. Malik, M. and Simmons, C. (2021) Mental Health Services in Bermuda

PG. 47

### 7.2.5. Footnotes and Works Cited

62. Walker, I.F., Asher, L., Pari, A. et al. Mental health systems in six Caribbean small island developing states: a comparative situational analysis. Int J Ment Health Syst 16, 39 (2022).

63. Camilly Lovell, Alcohol and drug counsellor at Pathways Bermuda; As reported in the Royal Gazette, Jul 2022. https://www.royalgazette.com/ crime/news/article/20220726/young-people-using-a-wide-variety-ofdrugs/

64. Sanvictores T, Mendez MD. Types of Parenting Styles and Effects on Children. [Updated 2022 Sep 18]. In: StatPearls [https://www.ncbi.nlm. nih.gov/books/NBK568743/]

65. Newman K., Harrison L., Dashiff C., Davies S. (2008). Relationships between parenting styles and risk behaviors in adolescent health: an integrative literature review. Rev. Lat. Am. Enfermagem 16, 142–150. 66. Bradshaw, E. (2015). Zero to Three in Bermuda Report. Prepared for through the Bermuda Community Foundation and sponsored by the Hemera Foundation; the Early Childhood Development Project and Research Funds at BCF, the Gutteridge family, the Bank of Bermuda Foundation and private donors.

67. Hannighofer, J. et al. Impact of Relationship Status and Quality (Family Type) on the Mental Health of Mothers and Their Children: A 10-Year Longitudinal Study Front. Psychiatry, 29 November 2017 Sec. Psychological Therapy and Psychosomatics Vol. 8 - 2017 | https://doi. org/10.3389/fpsyt.2017.00266

68. Walmsley, R. and Fair, H. (2021) World Prison Population Brief 13th edition. Bermuda's incarceration rate (per 100,000 of population) was listed as the 11th highest in the world in 2012.

69. Incarceration rates by country 2022, https://worldpopulationreview. com/country-rankings/incarceration-rates-by-country

70. Martin, E. (2017). Hidden Consequences: The Impact of Incarceration on Dependent Children. National Institute of Justice Journal.

71. Greeno E.J. et al (2018). Psychological Well-Being, Risk, and Resilience of Youth in Out-Of-Home Care and Former Foster Youth. J Child Adolesc Trauma. 2018 Mar 17;12(2):175-185.

72. Anderson, M & Jiang, J. Teens, Social Media and Technology 2018. Pew Research Center

73. Studies including, Riehm KE, Feder KA, Tormohlen KN, et al. Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth. JAMA Psychiatry. 2019;76(12)

74. In addition to findings from scientific research, lawsuits such as that taken out by the Seattle public school system against Instagram, YouTube, TikTok, Google and Snapchat reinforce such accusations.
75. The age set Congress in the Children's Online Privacy Protection Act (COPPA), which prohibits websites from collecting information on children younger than 13 years without parental permission. The onus is on parents to restrict access because platforms accept whatever age the use provides.

76. Davis, K. (2011). The Role of New Media Technologies in the Lives of Bermuda's Youth

77. Studies including, Riehm KE, Feder KA, Tormohlen KN, et al. Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth. JAMA Psychiatry. 2019;76(12)

78. Hodgson, E. (2008) The experience of racism in Bermuda and in its wider context. Commission for Unity and Racial Equality (CURE) Ministry of Culture and social rehabilitation, Government of Bermuda. 79. Mar, S. (2022) The Trauma of Colonization. https://www.

publichealthpost.org/research/the-trauma-of-colonization/

80. Codrington, R. and Lawrence, K. (2014) Racial Dynamics in Bermuda in the 21st Century: Progress and Challenges. The Aspen Institute, p.8. 81. Assari S. et al. Money Protects White but Not African American Men Against Discrimination: Comparison of African American and White Men in the Same Geographic Areas. Int J Environ Res Public Health. 2021 Mar 8;18(5):2706

82. Mincy et al (2010). A Study of Employment, Earnings, and Educational Gaps between Young Black Bermudian Males and their Same-Age Peers, Center for Research on Fathers, Children and Family Well-Being, Columbia University School of Social Work.

83. Hopkins, D. et al (2007), Review of Public Education in Bermuda: Commissioned by the Ministry of Education, Sports and Recreation, Government of Bermuda. 84. Jeffries B.S. (2022). Race and Racism in Bermuda. Genealogy. 2022; 6(4):89. https://doi.org/10.3390/genealogy6040089

85. Codrington, R. and Lawrence, K. (2014) Racial Dynamics in Bermuda in the 21st Century: Progress and Challenges. The Aspen Institute 86. Ibid

87. Bermuda Job Market Employment Brief. Department of Statistics, Government of Bermuda

 The 2010 Census of Population & Housing: Final Results, p.24
 Race in Bermuda: A Statistical Perspective. Profiles of Bermuda. September 2009

90. Douglas, T. (2012) Border crossing brothas': A study of Black Bermudian masculinity, success, and the role of community-based pedagogical spaces. Doctoral Dissertation, The University of North Carolina at Greensboro. (p.5).

 Codrington, R. and Lawrence, K. (2014) Racial Dynamics in Bermuda in the 21st Century: Progress and Challenges. The Aspen Institute (p.14).
 Spittlehouse, J., Boden, J., & Horwood, L. (2020). Sexual orientation and mental health over the life course in a birth cohort. Psychological Medicine, 50(8), 1348-1355

93. Carey, J. (2021). Helping teens with disabilities prevent and treat depression, anxiety. In University of Illinois College of Applied Health Sciences, News Oct.6 2021

94. Dame Marjorie Bean Hope Academy and K. Margaret Carter Centre integrate social-emotional, educational and therapeutic needs in the education of those with "special needs."

95. Narrative survey open comment

96. Zuill, Z. D. (2016) "The Relationship Between Resilience and Academic Success Among Bermuda Foster Care Adolescents" (2016). Walden Dissertations and Doctoral Studies. 2184

97. Felitti, V. J. et al (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 14(4), 245–258.

98. Bermuda ACEs. Hines T, Guthman S. "2018-2020 Bermuda Adverse Childhood Experiences (ACEs) Study." The study was sponsored by the Bermuda Health Council and hosted by The Family Center.

99. Protecting Youth Mental Health: The U.S. Surgeon General's Advisory Dec 2021; page 7.

100. The SCARS & Bermuda Health Council (BHeC) Survey on Child Sexual Abuse in Bermuda (2017). Report presentation on file. 101. Report from the Parliamentary Joint Select Committee on the

necessity for a public sex offenders register Child Protection Sex Offender Register (2018)

102. SCARS & Bermuda Health Council (BHeC) Survey 2017 103. World Health Organization (WHO), London School of Hygiene and Tropical Medicine. (2010). Preventing intimate partner and sexual violence against women. Taking action and generating evidence. Geneva: World Health Organization.

104. World Health Organization http://apps.who.int/iris/

bitstream/10665/43499/1/9241594365\_eng.pdf

105. Report from the Parliamentary Joint Select Committee on the necessity for a public sex offenders register Child Protection Sex Offender Register (2018)

106. www.scars.bm

107. World Health Organization http://apps.who.int/iris/

bitstream/10665/43499/1/9241594365\_eng.pdf

108. SCARS reported in 2017 being the first country in the world to train 10% of its adult population, and by 2021 this number had grown to more than 21% (SCARS 2021 Annual report)

109. American Academy of Pediatrics national Emergency Declaration Oct 19, 2021

110. Klonsky E.D., May A.M., Saffer B.Y. Suicide, Suicide Attempts, and Suicidal Ideation. Annu Rev Clin Psychol. 2016; 12:307-30.

111. March 23, 2018, Bermuda Vital Sign Health & Personal Wellbeing mental Health Convening Report

112. LOSS is a Bermuda self-help group for Bermuda residents bereaved by suicide. http://www.loss.bm/understanding-suicide

113. World population Review. Suicide Rate by Country 2023

114. Corbin, A., Punnett, B. J., & Onifa, N. (2012). Using cultural metaphors to understand management in the Caribbean. International Journal of Cross Cultural Management, 12(3), 269–275

## 7.2.5. Footnotes and Works Cited

115. Bermuda Health Council (BHeC) and Department of Health (DOH) (2011) Health in Review: An International Comparative Analysis of Bermuda Health System Indicators. Bermuda Health Council: Bermuda. (p.32)

116. Bermuda Government Vital Signs (2017) Volume 1, Issue 2

117. As quoted in the Bermuda Royal Gazette: https://www.royalgazette. com/health/news/article/20211015/major-conference-to-addressislands-mental-health-issues/

118. The MWI website lists (441) 239-1111 as their 24-hour Mental Health Crisis Line

119. SAMHSA (2020) National Guidelines for Behavioral Health Crisis Care – A Best Practice Toolkit

120. Xia L, Yao S. (2015) The Involvement of Genes in Adolescent Depression: A Systematic Review. Front Behav Neurosci. 2015 Dec 21; 9:329.

121. Bermuda Hospitals Board (n.d.) Schizophrenia. https://bermudahospitals.bm/schizophrenia-460/

122. Monaco, A.P. An epigenetic, transgenerational model of increased mental health disorders in children, adolescents and young adults. Eur J Hum Genet 29, 387–395 (2021).

123. Bermuda Government Department of Statistics 2010 census (p.15) 124. Bermuda Tourism Authority History and Culture Fact Sheet - https:// www.gotobermuda.com/sites/default/files/2022-08/history\_and\_ culture\_fact\_sheet\_final.pdf

125. Estrada, C.A.M., Lomboy, M.F.T.C., Gregorio, E.R. et al. Religious education can contribute to adolescent mental health in school settings. Int J Ment Health Syst 13, 28 (2019).

126. Idler, E. (ed.), (2014) 'Religion and Physical Health from Childhood to Old Age' in Ellen L. Idler (ed.) Religion as a Social Determinant of Public Health New York, 2014; online edn, Oxford Academic

127. Ying Chen, Tyler J VanderWeele, Associations of Religious Upbringing with Subsequent Health and Well-Being from Adolescence to Young Adulthood: An Outcome-Wide Analysis, American Journal of Epidemiology, Volume 187, Issue 11, November 2018, Pages 2355–2364, AND https://www.hsph.harvard.edu/news/press-releases/religiousupbringing-adult-health/

128. Tang D.F. et al. Effects of mindfulness-based intervention on adolescents' emotional disorders: A protocol for systematic review and meta-analysis. Medicine (Baltimore). 2021 Dec 23;100(51) 129. Stice, Burton, Bearman and Rohde, 2006; Koopman, Ismailji, Holmes,

Classen, Palesh and Wales, 2005

130. The Ministry has released a "2022 to 2027 National Sports Policy" with goals that reinforce the value of sport for adolescents - https://www.gov.bm/sites/default/files/National\_Sports\_Policy\_Book\_2022-2027.pdf 131. Burkhardt, J. et al. (2015). An overview of evidence-based program registers (EBPRs) for behavioral health, Evaluation and Program Planning, Volume 48, Pages 92-99, ISSN 0149-7189.

132. NREPP; http://nrepp.samhsa.gov

133. http://www.blueprintsprograms.com

134. Bermuda population projections 2016 to 2026, Government of Bermuda Department of Statistics

135. U.S. Census Bureau. (2022, April 5). National Population by

Characteristics: 2020-2021. Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2020, to July 1, 2021.

136. Self-awareness and media advocacy about adolescent mental health is exemplified by PurpleMent - https://www.tiktok.com/@ purplement?lang=en; https://www.instagram.com/purplement.media/ 137. Many of these steps are informed by the research conducted for The US Surgeon General's 2021 Advisory on Protecting Youth Mental Health. 138. O'Neil A, Quirk SE, Housden S, Brennan SL, Williams LJ, Pasco JA, et al. Relationship between diet and mental health in children and adolescents: A systematic review. Am J Public Health. (2014) 104 139. Sawa S, Hashizume K, Abe T, Kusaka Y, Fukazawa Y, Hiraku Y, et al. Pathway linking physical activity, sleep duration, and breakfast consumption with the physical/psychosocial health of schoolchildren. J Child Health Care. (2021) 25:5–17

140. Cascio C.N., et al. Self-affirmation activates brain systems associated with self-related processing and reward and is reinforced by future orientation. Soc Cognition and Affect Neuroscience. 2016 Apr;11(4):621-9.
141. WHO Evidence network Synthesis report: Fancourt, D. and Finn, S.

(2019) What is the evidence on the role of the arts in improving health and well-being?

142. Huberty J. et al.(2019)Efficacy of the Mindfulness Meditation Mobile App "Calm" to Reduce Stress Among College Students: Randomized Controlled Trial. JMIR Mhealth Uhealth. 2019 Jun 25;7(6)

143. https://idontmind.com/journal/pay-it-forward-for-your-mental-health?rq=pay

144. "Riding the wave" is a metaphor for self-regulating the ebbs and flows of emotions. Although it can be self-taught, it is often integrated into social emotional learning programmes offered in schools and social learning contexts

145. 2016 Census of Population and Housing Report

146. The term 'The Superwoman Syndrome' is based off a book by Marjorie Shaevitz published in 1984 and described as range of physical, psychological, and interpersonal stress symptoms experienced by women who are navigating multiple &/or conflicting roles.

147. Bradshaw, E. (2022) Women's Resource Centre Strategic Review Report

148. The Bermuda Government 2020 Census, Department of Statistics. 149. Poverty in Paradise: The Price we Pay (The Bermuda Coalition for Children documentary2010)

150. The Royal Gazette, Mar 12, 2022. https://www.royalgazette.com/general/news/article/20220310/ /

151. Riley J. Steiner, Ganna Sheremenko, Catherine Lesesne, Patricia J. Dittus, Renee E. Sieving, Kathleen A. Ethier; Adolescent Connectedness and Adult Health Outcomes. Pediatrics July 2019; 144 (1)

152. Bermuda Digest of Statistics 2020. Government of Bermuda Department of Statistics

153. Bermuda Vital Signs Study, 2016; Bermuda Vital Signs Special COVID-19 Pandemic Edition

154. https://www.royalgazette.com/education/news/article/20221005/ deaths-of-young-people-creates-sense-of-hopelessness-says-teacher 155. The PATHS® (Promoting Alternative Thinking Strategies) curriculum is a social-emotional learning program designed to reduce

aggression and behavior problems and to increase emotional and social competencies. 156. An example of such a programme is Mental Health First Aid

157. Douglas, T.M.O. (2012) Border crossing brothas': A study of Black Bermudian masculinity, success, and the role of community-based pedagogical spaces. Doctoral dissertation, The University of North Carolina at Greensboro

158. Douglas, T.M.O. (2014) Conflicting Messages, Complex Leadership: A Critical Examination of the Influence of Sports Clubs and Neighborhoods in Leading Black Bermudian Males. Planning & Changing, Vol. 45 159. Douglas, T.-R. M. O., & Arnold, N. W. (2016). Exposure in and Out of School: A Black Bermudian Male's Successful Educational Journey. Teachers College Record, 118(6), 1–36. https://doi. org/10.1177/016146811611800606

160. A Bermuda Government directory of agencies in Bermuda that offer support services to families and children, seniors and persons with disabilities. https://helpingservices.bm/about-the-directory/ 161. Office of the Surgeon General (OSG). Protecting Youth Mental Health: The U.S. Surgeon General's Advisory [Internet]. Washington (DC): US Department of Health and Human Services; 2021

162. The Bermuda Omnibus Survey is a syndicated quarterly phone survey of the Bermuda community to track economic, political and social issues conducted by Narrative Research Bermuda 163. IBID

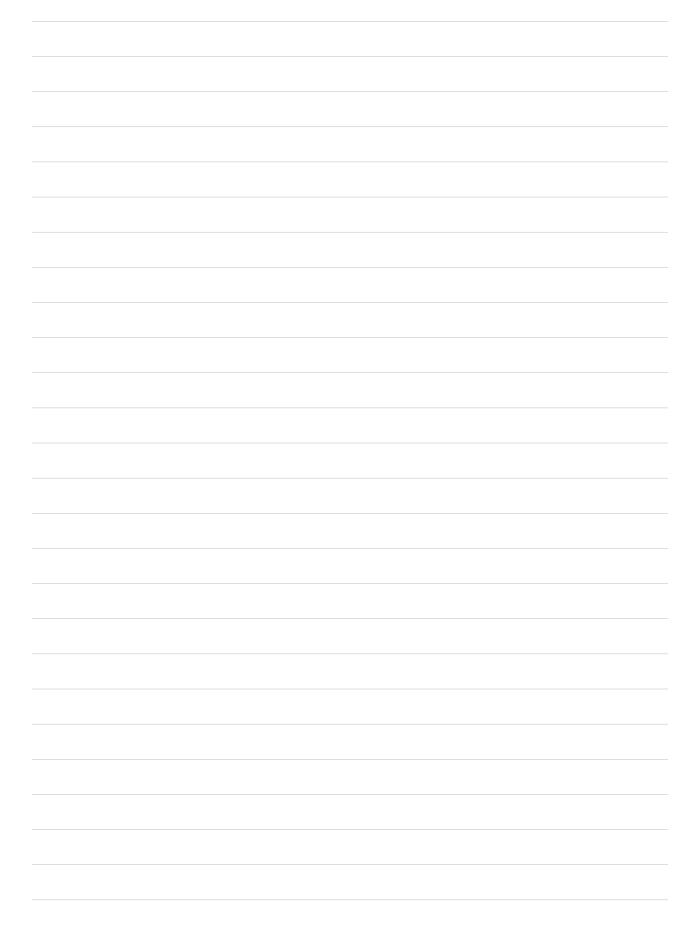
164. Report on the Assessment of the Situation of Children in Bermuda (2014) Pages 93 to 101. Report commissioned by the Inter Agency Committee for Children and families.

165. McGorry P, Bates T, Birchwood M (2013) Designing youth mental health services for the 21st century: examples from Australia, Ireland and the U.K. Br J Psychiatry Suppl. 2013;54:0–5.

166. Dr. Ron Dahl, Founding Director of the Center for the Developing Adolescent, UCLA

167. Bermuda ACEs. Hines T, Guthman S. "2018-2020 Bermuda Adverse Childhood Experiences (ACEs) Study." The study was sponsored by the Bermuda Health Council and hosted by The Family Center.

## Notes







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