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Acting against suicide: understanding a major public health threat in Latin America



Commissioned by

Janssen  Neuroscience

PHARMACEUTICAL COMPANIES OF *Johnson & Johnson*

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About this report

Content disclaimer: This report focuses on a topic that may be triggering, sensitive or difficult for some readers.

Acting against suicide: understanding a major public health threat in Latin America is a report by Economist Impact. It describes the current burden, effective policy responses and areas in need of action on suicide across the Latin American region. This research also provides an assessment of areas of opportunity in five countries: Argentina, Brazil, Colombia, Mexico and Panama. The report seeks to identify the challenges faced by these countries in addressing suicide, putting the needs of individuals at the centre of the policy conversation. The research was commissioned by Janssen but independently conducted by Economist Impact.

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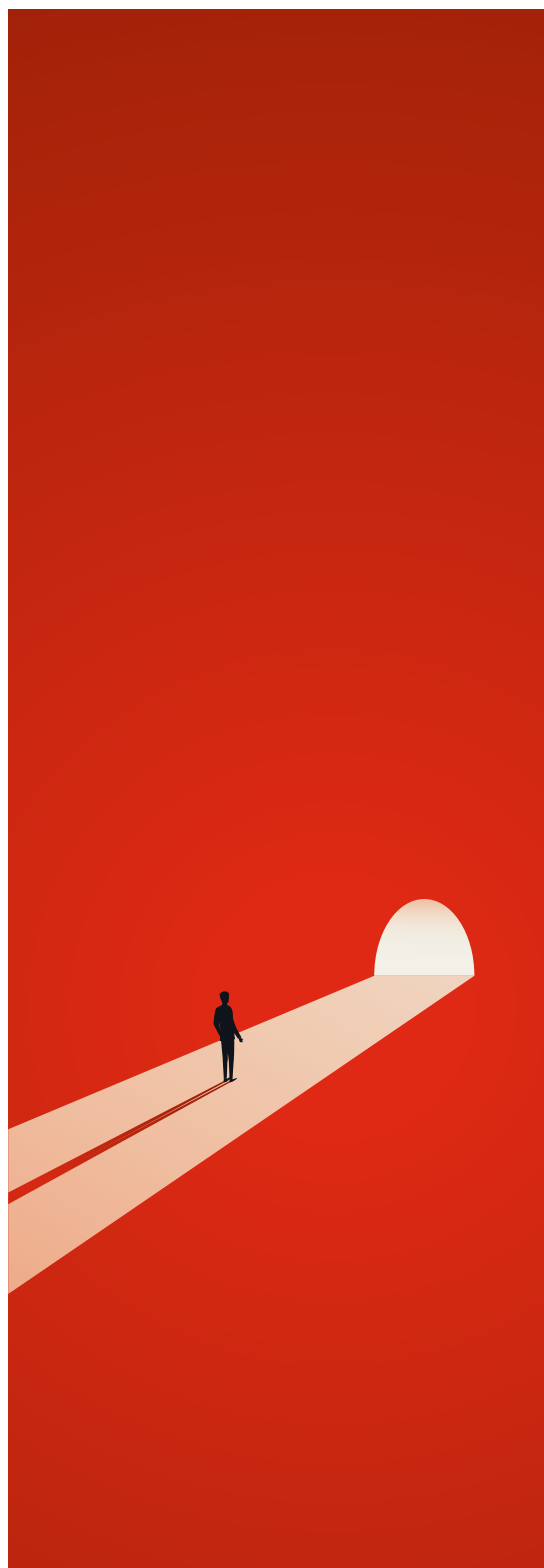
Executive summary



Every 40 seconds, someone somewhere in the world commits suicide.¹ In 2019, approximately 700,000 deaths globally resulted from suicide, the second leading cause of death among 15- to 29-year-olds and the fifth leading cause among 30- to 49-year-olds.² Worldwide, more than one in every 100 deaths (1.8%) results from suicide.³ It is important to note that many suicides are due to psychiatric illness, with the most common risk factors being depression, substance use disorders and psychosis.⁴ Depression is the most prevalent mental illness in the world. In Latin America, 5% of the adult population is impacted by depression and 3.4% by anxiety. According to the World Bank, 6 out of every 10 individuals in Latin America with depression do not receive treatment,⁵ and individuals suffering from major depressive disorder have a 20-fold higher risk of suicide than the general population. Further, even when depression is less severe, depression can still be detrimental to an individual's daily life, personal relationships and work, and thus must still be treated.⁵

On a global level, suicide and self-harm are recognised public health concerns: suicide deaths are a key indicator in the UN Sustainable Development Goals, and the WHO has set a worldwide target of a 10% reduction in rates by 2030.^{6,7} If global rates are to be significantly reduced, we must prioritise tackling the risk factors associated with suicide. In addition to this, low- and middle-income countries (LMICs) should increase efforts related to reducing suicide rates and the prevalence of mental health illness, as almost 80% of suicides globally occur here.^{3,8} Latin America is one LMIC-dominated region where, in contrast to a global decline, suicide rates are increasing.⁹

In order to assess this issue in more detail, Economist Impact performed a pragmatic literature review to assess the landscape of mental health with a specific focus on suicide and its relevant risk factors in Latin America (including five focus countries—Argentina, Brazil, Colombia, Mexico and



Panama), which was complemented by a search of grey literature to retrieve guidelines, policies and frameworks that were not listed in scientific databases. We also spoke to a range of regional experts—including clinicians, academics, community experts, advocates and policymakers—to understand country-level details and validate findings.

Findings & calls to action

Increase funding allocated towards mental health. The cost of mental disorders annually across Latin America is estimated at US\$30.6 million (this figure is based on the value of lost mental capital that children and young people would contribute to economies if they were not impacted by mental health conditions).¹⁰ At present, mental healthcare is underfunded in the region, with this study's countries of interest spending as little as a quarter of what the WHO deems necessary. A lack of funding can be attributed to limited financial resources or to a general lack of prioritization consistent with the level of awareness about the seriousness of suicide as a public health issue. As a starting point, governments across the region should work towards prioritising the issue of suicide/mental health in policy agendas as a way to increase the portion of funding across both promotion and protection to match the WHO's recommended figure.¹¹

Take action to raise awareness of suicide due to depression and combat stigma related to acknowledging and seeking help for mental health issues. Communication is key. Therefore, in an attempt to overcome the issue of stigma surrounding seeking mental health care, awareness-raising programmes and campaigns need to be geared towards improving the mental health literacy of the population. At the same time, an open environment should be created for discussions of mental health between friends, family, colleagues and so on. A multi-sectoral approach is needed whereby stakeholders work together in tackling stigma and any misconceptions around suicide, depression and other prevalent mental health issues. In many instances, individuals are not able to recognise their depression and therefore do not seek help, pointing to the importance of improved mental health literacy. While ongoing communication on this issue at the population is vital, there is an opportunity to implement a range of activities, including spreading awareness during campaigns on, for example, World Mental Health Day (October 10th), World Suicide Prevention Day (September 10th) or on International Survivors of Suicide Loss Day. This already occurs in some Latin American countries.

Regular reporting of suicide mortality data and the monitoring of mental health conditions including depression can aid policy development and planning. Data collection is paramount in order to understand the scale of the burden and which populations are most at risk. Currently, governments and health services do not have a reliable understanding of the scale and intricacies of the burden of mental illnesses



and suicide in their countries, due to poor data collection as well as the poor quality of data. In part, the same stigma attached to mental illness and suicide that causes individuals to not seek help can impact the plausibility of reported cases, leading to the misclassification of deaths by suicide and even inaccurate descriptions of attempted suicide and the prevalence of certain mental conditions such as a depression. Therefore, it is important for countries to invest in surveillance to build a comprehensive and accurate picture of the suicide and mental health burden, and to consistently monitor mental health. This must be carried out alongside reducing stigma so that the reporting and monitoring of this issue yield robust data for policy development.

Work to counter the geographical, social and economic inequalities that create barriers to access across the region.

The region faces significant divides between rural and urban populations as well as poorer and wealthier individuals, which creates a disparity in the provision of health services, including mental health care. An integrated approach must be taken in which multiple stakeholders work together to ensure that care can be accessed promptly, regardless of income or location.

Understanding suicide

All mental disorders, including depression, are associated with an increased risk of suicide. Research has noted that depression is a strong risk factor for suicide¹²: individuals suffering from major depressive disorder (MDD) have a 20-fold higher risk of suicide than the general population.¹³ MDD is reported by the World Health Organisation (WHO) as the largest contributor to disability globally, significantly impacting several aspects of a person's life, including self-worth, sleeping patterns and cognitive abilities. A 2008 study including 1,835 hospital emergency department patients from Argentina, Brazil, Chile, Colombia and Mexico found that the prevalence of MDD ranged from 23% to 35%.¹⁴ To add to this, UNICEF reported in 2021 that anxiety and depression account for nearly 50% of mental disorders among adolescents aged 10-19 in the region.¹⁰ Unfortunately, depression in Latin America is often left undiagnosed and untreated. In a 2012 PAHO/WHO article it was noted that six out of every ten people who have depression in Latin America and the Caribbean do not seek or do not receive the treatment they need.¹⁵

It is important to note that while depression is one of the main risk factors associated with suicide/suicidal ideation, there are other risk factors as well. The WHO has organised risk

factors for suicide into five categories: health systems, society, community, relationships and the individual. Table 1 presents, on one side, risk factors and, on the other, protective factors for suicide. Risk factors refer to characteristics of a person or their environment which increases the likelihood or attempt of committing suicide, while protective factors refer to personal or environmental characteristics that reduce the likelihood or attempt of committing suicide.^{16,17}

This report therefore seeks to create a thorough picture of the burden of suicide related to depression in Latin America, to evaluate national policymaking on suicide and mental health, and to review surveillance measures and the state of mental healthcare (including workforce and unmet needs). The study includes research and insights collected in English, Spanish and Portuguese across Latin American countries, with a particular focus on Argentina, Brazil, Colombia, Mexico and Panama. This report also includes information about suicide, suicidal ideation and suicide attempt (as defined below). Combining a literature review with expert input and desk research, the report points to actions that can be taken by a variety of stakeholders to mitigate the impacts for people in the region who reach the stage of suicidal ideation.

Table 1: Risk and protector factors for suicide across health systems, society, community, relationships and the individual

Health systems	
Risk Factor	Protective Factor
<p>Limited healthcare resources (eg lack of trained specialised mental health professionals) and stigma attached to seeking care for mental health disorders or suicidal attempts can delay prompt access to care. Across Latin America, high inequality, poverty and high rates of illiteracy can worsen the lack of access to adequate mental health care.</p> <p>For example, Colombia found that some depression is reported to have been caused or worsened by a lack of resources and by daily struggles. In addition, living in poverty was noted as a barrier to high-quality care.¹⁸ One provider commented that they were unsure of how to treat a patient's depression without addressing their social environment.¹⁸ Moreover, insufficient training for primary care providers in the detection and management of depression (particularly at medical schools outside of the Colombian capital) can result in missed opportunities to detect cases early and to manage them appropriately. Thus the depression might go untreated until the person experiences a crisis and needs a higher level of care.¹⁸</p>	<p>Assured availability of resources at different care levels and reduced inequities in access to care are structural improvements for a protective ecosystem. Some countries in Latin America are taking steps to address issues related to their mental health systems, such as structural challenges, limited resources and inequities in access to care.¹⁹</p> <p>In 2016, experts across mental health education from various Latin American countries met to explore ways to implement the Mental Health Gap Action Programme (mhGAP) training.²⁰ Experts from this meeting compiled a document with a list of recommendations to improve mental health training in nonspecialist care settings.</p>
Society	
Risk Factor	Protective Factor
<p>Stigma, easy access to means of suicide and the unsafe portrayal of suicide in the media can increase the risk of suicide.</p> <p>UNICEF reported that during the covid-19 pandemic, stress and anxiety as a result of the uncertainty and lack of social contacts impacted adolescent mental health alongside motivation levels and educational performance.¹⁰</p>	<p>Awareness and education programs to improve mental health support (in the workplace or in an educational institution) are key factors to end stigma around mental health and suicide more broadly at the societal level.</p>
	<p>The harms to mental health caused by the covid-19 pandemic in school/university settings could be an opportunity for schools to incorporate mental health education and workshops into the curriculum.</p>

Community	
Risk Factor	Protective Factor
<p>Our communities can have an impact on our mental health. Suicide rates are high among vulnerable groups who experience discrimination, such as refugees and migrants; indigenous people; lesbian, gay, bisexual, transgender and queer individuals; and prisoners.²¹ In addition, triggering event- and community-associated risks including wars and disasters can impact mental health and incite suicidal behaviours.</p> <p>Violence and trauma are noted to be the most important social factors related to suicide since living in such conditions can increase emotional stress. For example, in some Latin American countries such as Venezuela, Honduras and Colombia, political instability and high rates of violence can result in trauma and suicidal behaviour. Studies have also shown that armed conflict in Colombia, which has displaced more than 8.1m people, has increased the incidence of mental health issues, exacerbated by a lack of investment in mental health services.^{22,23}</p> <p>Migrants may experience traumatic events such as sexual assault and robberies while crossing the Darien Gap into Panama, which can be risk factors for suicide or worsening mental health if not treated promptly.</p>	<p>Communities can also give individuals a feeling of belonging. Social support in communities can help protect vulnerable groups from suicide through the establishment of social connectedness.²⁴ A study looking at risk and protective factors for suicidal behaviours in Mexican youth highlighted that emotional support through social relationships has positive effects on mental health.²⁵</p> <p>Communities can also increase awareness-raising attempts through campaigns as a way to break down stigma. The WHO highlighted that a suicide prevention champion (such as an influential member of the community like a faith leader or someone with a lived experience) can accelerate awareness of suicide and mental health and make it easier to openly discuss the topics.²⁶</p> <p>Overall, it is paramount to understand a community because it is the best place to identify local needs and priorities.²⁴ Similarly, experts consulted for this work noted that training people in the community can more effectively address population mental health issues than training healthcare providers.</p>
<p>Unemployment and financial insecurity can induce stress and decrease social wellbeing. Rates of suicide increase during periods of economic crises, when unemployment and poverty rates are high.²⁷</p>	<p>Employment and financial security, overall, have been associated with a decreased risk of suicidal behaviour compared to unemployment.²⁸</p> <p>Some jobs related to unfavourable working conditions or jobs that are particularly taxing to mental or physical health may be a risk factor for suicidal behaviour, as highlighted by evidence on the association between psychosocial work risks and suicide.²⁸</p>

Relationships	
Risk Factor	Protective Factor
<p>Family relationships can be considered a risk factor if there is a lack of communication between family members, violence or sexual abuse, feelings of rejection and constant conflict.²⁹ For example, in Mexico, a survey to evaluate family cohesion and adaptability was conducted with a group of adolescents who had attempted suicide and were in a hospital for mental health disorders. The survey, which compared this group with a control group, found that factors such as loneliness, lack of understanding and rejection from parents, plus a negative perception of the family milieu, were risk factors for suicide. Additionally, a systematic review conducted in 2018 found that, in Mexico, family issues and detachment from the family were associated with suicidal ideation.²⁹</p>	<p>Family relationships play a key role in Latin American culture and can also be considered a protective factor.</p> <p>A study investigating familism and the family environment among suicidal Latinas recruited from social service agencies and hospitals in New York City found that tight-knit families were less likely to have teens who attempted suicide when compared with moderately close or loosely knit families.³⁰ Familism, or familismo, highlights supportive family relationships and prioritises family, and it is often associated with psychological health.³¹ While that study is not specific to any of our countries of interest, the idea that familism could protect individuals against suicidal behaviour could be applied broadly since family relationships are considered a protective factor against suicide.</p>
Individual	
Risk Factor	Protective Factor
<p>Individual risk factors include mental disorders such as depression, anxiety, alcohol dependence, schizophrenia, and epilepsy. Other risk factors are lack of education, certain personality traits, attempted suicide, genetic predisposition, chronic pain and a history of childhood trauma.</p> <p>Research conducted in Colombia found that a lack of education impeded identifying and managing depression at the primary care and patient level in the country.¹⁸ Individuals may not recognise their symptoms, and uneducated older adults may see their depression as a symptom of old age.¹⁸</p>	<p>Individual protective factors could include coping skills, physical activity and health, family connectedness, religious participation, positive attitude to mental health treatment, biological/psychological resilience and positive social values.²⁵ For instance, patients in a study conducted in Peru shared that their religious faith was what kept them going.³²</p>

In this report, we use the following terminology:

Suicide: *Suicide* has been defined as death caused by self-inflicted harm in the deliberate attempt to kill oneself.³³

Suicide attempt: Attempted suicide has been described as a nonfatal but self-directed and potentially injurious behaviour with the intent of death.³⁴ A suicide attempt may result in injury and is likely to have further serious emotional and social consequences.^{1,35}

Suicidal ideation: Thoughts about killing oneself or wanting to be dead are termed *suicidal ideation*; however, suicidal ideation is not accompanied by preparatory behaviours.³⁶ In most instances, having suicidal thoughts is linked to an underlying mental health issue, such as depression, that can be treated.³⁷ For example, suicidal ideation has been reported to be high among those who suffer from MDD.³⁸ On a global scale, more than 60% of individuals who have attempted suicide are affected by MDD.¹³ Suffering from MDD can involve feelings of sadness and hopelessness as well as a loss of interest in hobbies or daily activities.

Self-harm or self-inflicted harm: *Self-inflicted harm* or *self-harm* refers to a situation in which an individual injures or causes harm to themselves as a way to deal with or express extreme emotional distress and internal turmoil. All of these areas require appropriate and timely intervention, as the impact of suicide, suicide attempt and suicidal ideation can harm not only the individual but can also impact family members, friends, local communities and health professionals.³ Interventions include raising awareness about suicide and mental health among the general population in an attempt to reduce stigma and among healthcare professionals so that they can identify mental health patients at risk, particularly those suffering from MDD. The aftermath of a suicide should also be prioritised, a stage known as postvention.³⁹ This focuses on reducing the risk of suicide among those who are at high risk after exposure to the event and on healing after the grief caused by suicide.⁴⁰

The burden of suicide in Latin America

In Latin America and the Caribbean, suicide accounts for 10% of injuries, and it inflicts an emotional toll beyond the individual to family and friends, health services and the broader society and economy.^{3,8} As its incidence worsens across the region, the need to improve policymaking, surveillance, care and prevention only increases.

45,800 deaths by suicide occur annually in Latin America.³

In contrast to global trends, suicide has been a rising problem in Latin America over the past three decades.² Whereas the global suicide rate declined by 36% between 2000 and 2019, the rate in Latin America and the Caribbean rose by 17% (although a slight decline was recorded over the last two years of that period).^{2,7} Although outside the scope of this report, it is worth pointing out that a study estimated a 35% increase in depressive disorders and a 32% increase in anxiety disorders in Latin America and the Caribbean due to the covid-19 pandemic.⁴¹

Furthermore, in 2019, suicides were one of the major causes of injury deaths in the region (injury deaths primarily refers to deaths resulting from traffic accidents, falls, drowning, burns, poisoning and acts of violence against oneself or others, among other causes).³ At present, approximately 45,800 deaths by suicide occur annually in Latin America, with an age-standardised suicide rate of 5.23 per 100,000 population (8.39 for males and 2.12 for females).^{3,42} A burden of disease study on suicide in Latin America (1990-2019) found that suicides in Brazil accounted for one-third of the total self-harm deaths in Latin America in 2019, followed by Mexico (19.2%) and Argentina (12.4%).^{3,8} That same year, suicide mortality rates and disability-adjusted life years (DALYs)* associated with suicide were highest in Argentina, Ecuador and Uruguay. Tables 2 and 3 present the change in age-standardised mortality and DALY rates for both sexes from 1990 to 2019 for the five countries covered in our study (full data provided in Appendix 1).

A study of the suicide burden in Latin America between 1990 and 2019 found that the sociodemographic index (SDI) (a composition indicator of economy, education and fertility)

* DALYs are the sum of the YLL (years of life lost) and the YLD (years lived with disability). DALYs in Table 3 quantify the loss of healthy life attributable to suicide by measuring the difference between the actual and the ideal situation, in which one lives the standard life expectancy in perfect health.

increased across all Latin American countries, including our countries of interest, but that the age-standardised DALY rate differed by country during the study period.³ For instance, Mexico has seen an increase in suicide-related DALYs, while Brazil and Panama have seen decreases (see Table 3). Interestingly, although Brazil is the largest country in the region, it has the greatest decrease in its own rate over time to

suicide mortality rates and DALY rates among our countries of interest. One explanation could be around the inaccuracies of suicide death records as a result of difficulties in establishing the intentionality of death as well as social stigmatization. Moreover, it has also been reported that suicide death is usually coded as death by undetermined cause, such as drowning or accidental poisoning.⁴³

Table 2: Percentage change in suicide mortality rate, both sexes, 1990-2019^{3,8}

% change in the age-standardised mortality rate (95% UI) per 100,000, 1990-2019			
Country	Male	Female	Both
Argentina	26.7 [17.7, 36.9]	-3.0 [-11.4, 5.3]	21.5 [13.4, 29.7]
Brazil	-20.0 [-25.3, -11.2]	-27.2 [-31.9, -21.5]	-21.7 [-26.3, -14.3]
Colombia	12.4 [-15.2, 45.0]	21.5 [-11.0, 59.6]	13.3 [-14.4, 45.6]
Mexico	55.6 [28.7, 86.9]	79.2 [43.7, 121.0]	58.5 [34.1, 85.5]
Panama	-1.1 [-26.9, 30.4]	-5.1 [-29.9, 26.3]	-2.4 [-27.3, 27.2]

Note: The negative figures in the table represent a decrease in the age-standardised mortality rate, while positive figures represent an increase.

UI = uncertainty intervals.

Table 3: Percentage change in DALY rate, 1990-2019³

% change in the age-standardised DALY* rate (95% UI) per 100,000, 1990-2019			
Country	Male	Female	Both
Argentina	53.0 [40.7, 66.9]	7.7 [-1.9, 18.0]	42.1 [31.7, 53.0]
Brazil	-16.6 [-22.7, -7.8]	-24.7 [-29.5, -18.4]	-18.4 [23.2, -11.0]
Colombia	13.7 [-14.4, 47.9]	23.5 [-9.1, 62.5]	16.1 [-11.8, 49.5]
Mexico	66.0 [38.0, 98.7]	88.8 [53.4, 131.2]	70.2 [44.5, 97.2]
Panama	-1.7 [-28.2, 30.5]	-6.1 [-30.5, 24.5]	-2.6 [-28.0, 27.5]

Note: The negative figures in the table represent a decrease in the age-standardised mortality rate, while positive figures represent an increase.

UI = uncertainty intervals.

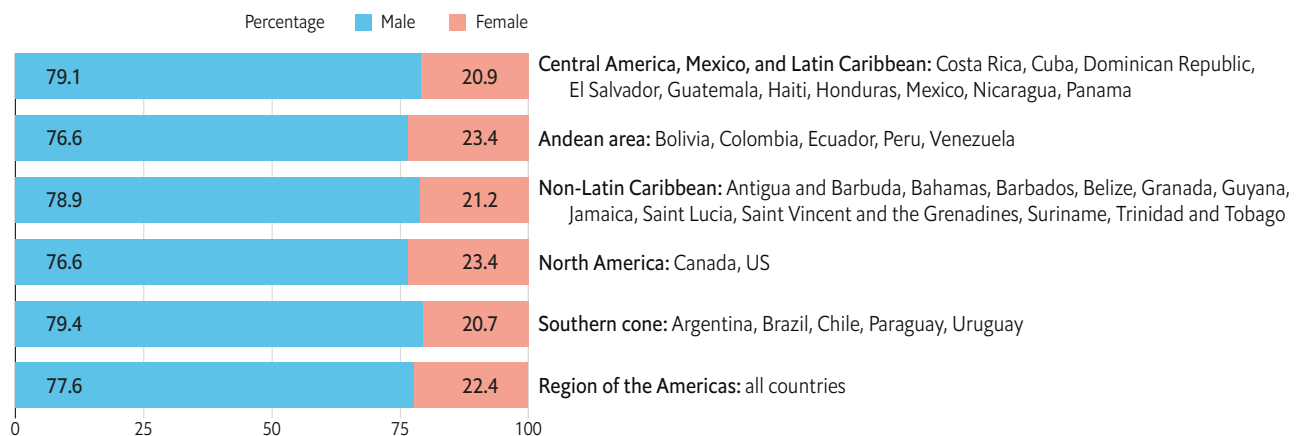
The suicide gender gap—distinct globally, but a chasm in the Americas

Globally, suicide does not occur equally by gender: In every region of the world, more men than women die by suicide, even though more women have suicidal thoughts.³ In Latin America and the Caribbean, this phenomenon is even more pronounced (see Figure 1). The male-to-female ratio of suicides in Latin America and the Caribbean in 2019 was around 4 to 1, compared with approximately 2.3 to 1 globally.³ High male rates of suicides are consistent across the sub regions of Latin America and the Caribbean. On a country level, the male-to-female suicide ratio in 2019 was 4.9 to 1 in Panama, 4.1 to 1 in Argentina, 4 to 1 in Mexico, 3.7 to 1 in Brazil and 3.5 to 1 in Colombia.⁴⁴

The reasons behind the global gender disparity in suicide rates are not clear, although social context is thought to be an important factor. For example, it is often seen as more acceptable for women to seek help for health concerns.⁴⁵ In some parts of Latin America, expectations of traditional or aggressively masculine

behaviour may make men less prone to seek help. Machismo[†] is not unique to Latin America, but it is far from absent in the region; the word itself originates from Mexican Spanish.⁴² For example, the kind of masculinity that underplays emotions and instead focuses on strength and virility is an important part of “gaucho” culture that still holds in certain rural areas of Argentina and Brazil.^{3,8,42} Such expectations are common across the region, and research shows that the undermining of men’s emotions and their need to communicate them is a precursor to suicidal ideation. In addition, alcohol use and misuse are seen as more acceptable for men, as men start consuming alcohol at an earlier age than women, and consume alcohol more frequently. Research such as a University College London study has indicated that substance misuse is often a risk factor for suicide and self-harm.^{3,8,46,47} In addition, a study conducted in Mexico found that there was a notable difference between the sexes and suicide. The data highlighted women’s higher incidence of depression and anxiety, while men were found to be more affected by antisocial behaviour and substance use. To clarify, these are separate analysis extrapolated together.⁴⁸

Figure 1: Sex-specific proportion of total age-standardised suicide mortality rates in the region of the Americas and subregions, 2019⁷



Source: PAHO, Suicide Mortality in the Americas.⁷

Graphic insight: Economist Impact

[†] *Machismo* is a term referring to a patriarchal structure of society, in which a man is considered the breadwinner and head of a household.

Age and suicide

Consistent with global trends, suicide is more prevalent among older age groups (70 and above) than younger ones (ages 15 and under) in Latin America. In a world where countries are becoming proportionally weighted toward the older population, as they are in Latin America, mental health issues, including suicidal ideation, will become an increasing challenge for healthcare systems. According to a report by the Pan American Health Organisation (PAHO),⁷ as age increases, so does suicide mortality. The link between older adults and suicide involves a range of factors, including chronic illness and pain, dependence on others, loneliness, financial instability, loss of purpose, feelings of abandonment and functional disability.^{3,8,49} Depression is often a risk factor for poor prognosis of chronic disease, which in turn affects quality of life, functional capacity and emotional wellbeing.⁵⁰

Suicide is the third most common cause of death among 15- to 19-year-olds in Latin America and the Caribbean, with more than ten adolescents taking their own lives per day.³⁹

However it is important to reiterate UNICEF's findings that anxiety and depression accounts for nearly 50% of mental health disorders among 10-19 year olds in the region.⁵¹ Therefore efforts to tackle mental health issues including suicide ideation, should be spread out across both young and elderly populations. According to a 2021 PAHO regional report looking at suicide mortality in the Americas, suicide rates per 100,000 population were higher among older individuals across all five countries of focus in this study,

especially in Argentina, with the suicide rate at 14.25 per 100,000 population among 80- to 84-year-olds.⁵² In Brazil, Colombia, Mexico and Panama, the suicide rate per 100,000 among 80- to 84-year-olds was recorded at 12.09, 9.77, 9.51 and 8.76, respectively. Argentina had the highest suicide rate among individuals ages 85 and over, at 17.19 per 100,000.⁵²

While there is an elevated prevalence of suicide among older people in Latin America, DALYs linked to suicide are highest among males ages 10-49.³ Young adulthood and adolescence involve periods of change that can be characterised by emotional, social and physical instability that can result in stress and depressive symptoms. In addition, the impacts of recovery from suicide on health can last for a lifetime, impacting the DALY count as well. In 2019, the estimated prevalence of mental disorders among adolescents (across both sexes) ages 10-19 in Argentina, Brazil, Colombia, Mexico and Panama ranged from 12.1% (in Mexico) to 17.1% (in Brazil).⁵³ Unchecked, the impacts are severe: suicide is the third most common cause of death among 15- to 19-year-olds in the region, with more than ten adolescents taking their own lives per day.⁵³ Some experts consulted for this study suggested that suicide among younger people is increasingly prominent, particularly in light of the pandemic: "One thing that we observe in terms of the trends in our population is that the increase [in suicide rates] has particularly skyrocketed among the youth population," says Paulina Arenas Landgrave, a doctor of psychology at the Universidad Nacional Autónoma de México in Mexico City.

The burden of attempted suicide and suicidal ideation

Attempted suicide, as well as the mental health challenges that can lead to suicidal ideation, can cause their own significant burden. For example, social and psychological impacts affect the individual in question, their family and their peers; also, long-term disability can result from an injury

due to a suicide attempt.⁵⁴ All of these factors can also have an economic impact in terms of lost productivity, reduced care capacity or increased DALYs. However, it is worth noting that the way DALYs are captured (years lived with disability + years of life lost)⁵⁵ could pose limitations on the estimation of the burden of mental health conditions such as depression. In general, suicide mortality data from this region are described as “irregular” when compared with data across European countries.^{26,56} In addition, delay in the reporting of data has been highlighted as another issue in the region.²⁶ The stigma around mental illness and suicide in the region can impact the plausibility of reported cases, leading to the misclassification of deaths by suicide and even inaccurate descriptions of attempted suicide and the prevalence of certain mental health conditions such as depression.⁵⁶ This could explain the high variability among suicide rates across the different countries, as noted in a study of suicide in Latin America, stating that reported deaths highlight variability in the region, from 0.5% in Mexico to 24.7% in El Salvador.⁴² Therefore, as a starting point, the stigma attached to suicide, attempted suicide, its ideation and mental illness more broadly across the region must be addressed to improve monitoring systems that measure the prevalence, incidence and demographic patterns and to effectively collect regular and robust data. By having a complete picture of the landscape, policymakers will be able to confidently develop and evaluate strategies and policies to combat suicide.⁵⁴

Better understanding the burden: the gaps in surveillance

The adoption of health information systems (HISs) and electronic health records (EHRs) has created a powerful resource for epidemiologic and risk-prediction studies. Longitudinal data modelled from EHRs in the United States have shown the potential to support early detection of individuals at high risk for suicide and self-inflicted injury,

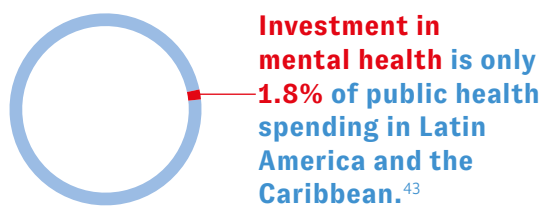
enabling patients to receive the professional care they need.⁵⁷

Unfortunately, the use of HISs and EHRs to screen for and potentially prevent suicide is lacking in Latin America. Several of the study countries register suicide cases (and, in some cases, suicide attempts), which at least helps to inform the existing burden. Brazil collects and analyses data on cause of death, including suicide, by DATASUS, the IT department of SUS, the Brazilian Unified Health System. Panama compiles suicide data based on the administrative records of public health facilities (Minsa and CSS), private and civil registry offices. Colombia and Mexico also collect data on suicide attempts (in Colombia’s case, reporting is supposed to happen on a weekly basis, collected by Saludata, a government-related agency for health data), and Mexico collates data on suicide-related DALYs and QALYs (quality-adjusted life years) for use in policymaking. Mexico’s data on suicide are collected by the National Institute of Statistics and Geography. Argentina’s mortality data, including deaths due to self-inflicted injuries, is reported by the Ministerio de Salud de la Nación (MSAL), though data is not broken down for suicide.

Although these countries do operate surveillance related to suicide, the experts we spoke to raised concerns that the way that data are collected and monitored gives rise to inaccuracies. “We know that [in Brazil] there is DATASUS, a system of monitoring and surveillance about so many attempts and about suicides”, says Karen Scavacini, a psychologist and co-founder of Instituto Vita Alere, a suicide prevention institute in São Paulo. “However, we really don’t know the correct data [to collect], and we don’t even know if the data we have are correct.” Experts consulted for this report also pointed to the difficulty of relying on surveillance systems in rural areas, where underreporting is thought to be significant, especially among indigenous communities.

Mental health financing in Latin America

One challenge in achieving consistent, adequate mental healthcare across Latin America is the variation in how health services are financed.⁵⁸ For example, in Colombia, healthcare coverage is almost universal to its population and mandates that certain standards of care be maintained across the country (however not at the same rate for all health conditions). At the same time, coverage in Argentina's federal system can be patchy. Mental health spending varies across Argentina's provinces from 0.5% to 5% of total health spending.⁵⁸ Both examples show how healthcare can be fragmented, and have a significant impact on care access and delivery.



In general, the costs of mental disorders are high, yet in Latin America they are met with relatively limited public healthcare spending. For instance, the cost of mental disorders annually across Latin

America is estimated at US\$30.6 million (based on the value of lost mental capital – that children and young people would contribute to economies if they were not impacted by mental health conditions).¹⁰

Despite trying to increase awareness of the impact of mental health conditions in the region, there is still inadequate investment in mental health overall – only 1.8% of public health spending in Latin America and the Caribbean.⁵¹ This figure compares to an already insufficient global median spent on mental health services, 2.8% of government health spending.⁵⁹ In general, the WHO recommends that investment in mental health be 5% of the health budget due to the prevalence of mental disorders and the impact on healthcare.⁶⁰

At a country level, the spending on mental healthcare as a proportion of total public health spending is consistent with the regional average in Argentina (1.6%),⁶¹ Brazil (1.6%), Colombia (1.8%) and Mexico (1.8%), but the figure is notably higher in Panama (3%). Moreover, in all five countries, the cost of mental health care is included in reimbursement schemes, although patients in Colombia and Mexico pay 20% of the total costs of mental healthcare and medicines (see Table 4).⁵⁸

Table 4: Government expenditure on mental health and the total payments provided for services and medicines across Argentina, Brazil, Colombia, Mexico and Panama, 2020*

Country	Government expenditure on mental health as a % of total government health expenditure	Patients' cost at the point of service for mental health services for the majority of persons	Patients' cost for psychotropic medicines for the majority of persons
Argentina ⁶²	1.6% [†]	0% (fully insured)	0% (fully insured)
Brazil ⁶³	1.6%	0% (fully insured)	0% (fully insured)
Colombia ⁶⁴	1.8%	At least 20%	At least 20%
Mexico ⁶⁵	1.8%	At least 20%	At least 20%
Panama ⁶⁶	3.0%	0% (fully insured)	0% (fully insured)

* These points refer to treatments that are included in the formularies and may not apply to all available treatments

† Full data for Argentina were not available in the WHO Mental Health Atlas 2017 or 2020⁶¹

Insurance coverage specifically for suicide-related care is far more limited despite progress in some areas. “Recently, some health insurance companies [in Brazil] have been providing coverage for suicide risk for suicidal behaviour, but it is not the majority of companies,” says Alexandrina Maria Augusto da Silva Meleiro, member of the Brazilian Association for Suicide Studies and Prevention (ABEPS). “Most health insurance companies still put up a barrier to mental health treatment. They have made a lot of psychotherapy available, but with a reduced number [of sessions] per year, which for some works [and] for others would need to be longer than the standard sessions per year.”

Below, we provide brief summaries of funding and access for mental health services. Funding and allocation of resources for mental health services vary widely across each country (refer to Appendix 2 for more information on mental health financing by country). Access to care also differs, with some countries performing better than others.

Argentina

In Argentina, there is a national department of mental health (DGSM) responsible for issuing guidelines and proposals to the Ministries of Health. However, these guidelines do not have direct binding authority because Argentina is a federal country, and health management is not fully delegated to the federal government.⁶⁷ Each province independently allocates limited funds to the mental health sector, typically ranging from 0.5% to 5% of the total health budget, which is inadequate.⁶⁷ Both at the national and provincial levels, the budget for mental health falls below the standards recommended by the World Health Organization (WHO). Furthermore, at the national level, a significant 65% of the mental health budget is directed towards psychiatric hospitals, leaving insufficient resources for community-based services.^{58,67}

Mexico

Mexico is committed to ensuring that healthcare is available to the most vulnerable populations. The INSABI (Instituto Nacional de Salud para el Bienestar) programme provides access to

health services to over 43% of the population not covered by social security. And yet mental health services are underfunded in Mexico.⁵⁸

Covered mental health services are limited to preventive medicine, external consultation and, in some cases, brief hospitalisation. Furthermore, of the country's 32 states, only eight mention mental healthcare financing in health financing documents. Additionally, only three states have established minimum budgets for mental healthcare.⁵⁸

Colombia

Colombia provides near-universal healthcare coverage, though quality and access of care can vary across clinical settings. The country's two-tier system provides poorer levels of care for people not supplemented by employer-based insurance; poorer or subsidised regimes tend to be found in rural areas, where healthcare resources are scarce.⁶⁸ Services, therefore, are not uniformly available across the population. In general, the investment in mental health is reported to be low; additionally, corruption, hindered reforms, health system debts and closure of mental health hospitals and clinics are all obstacles to progress.^{23,68}

Brazil

In Brazil, mental health is reported to be an underfunded area.⁶⁰ The country's United Health System (Sistema Único de Saúde, or SUS) has organised the management and funding of health across three federated tiers (country, state and city), and it is financed through tax contributions and based on comprehensive care and equal access.⁶⁹

Panama

Community care receives 56% of mental health spending in Panama, which, amongst other benefits, helps to distribute access more equitably across urban and rural areas.⁵⁸ "In the provinces, we have an integrated system where both insured and uninsured people can access any type of health facility," says Vanessa Flores, coordinator of mental health for Panama's Social Security Fund. "In each facility, there is usually a mental health team or they [patients] are referred to a facility that has the mental health team."

Policy and practice: the provision of mental health and suicide services

Another challenge to achieving consistent, adequate mental healthcare across Latin America is the prioritisation of mental healthcare in law and policy.⁵⁸ The existence of mental health and suicide policies cannot be taken for granted in the region or worldwide.⁵⁸ In general, such policies can be considered powerful tools in improving the mental health of a population,⁷⁰ improving the quality of mental health services,⁷¹ reducing the overall burden of mental disorders and increasing awareness and creating a community dialogue about mental health issues and suicide. Policies can be administered in many ways, for example, in the form of programmes, mental health plans, strategies and legislation at various levels.⁷⁰ In 2021, the WHO introduced LIVE LIFE, an implementation guide to help countries reduce the burden of suicide through evidence-based actions. The document includes six core domains: (1) situational analysis, (2) multi-sectoral collaboration, (3) awareness-raising and advocacy, (4) capacity building, (5) financing and (6) surveillance, monitoring and evaluation.²⁶ The guide also provides examples of activities across these domains that have been carried out in various countries as a way to inspire decision-makers in other countries to adopt similar practices within their local contexts.²⁶

The WHO releases a Mental Health Atlas every three years that provides an insightful compilation of data on mental health policies, legislation, human resources, financing, the availability and utilisation of services, and data collection systems.⁵⁸ The document highlights one objective of the Mental Health Action Plan 2013-2030, which is to strengthen effective leadership and governance for mental health, including law, policies and plans for mental health (in keeping with international human rights). The plan emphasises the importance of having such activities in place for policymakers to track progress and identify areas that need attention.⁵⁸

World Health Organization's **LIVE LIFE** implementation guide, **core domains**:

- **situational analysis**
- **multi-sectoral collaboration**
- **awareness-raising and advocacy**
- **capacity building**
- **financing**
- **surveillance, monitoring and evaluation.**²⁶

To expand on the WHO's Mental Health Atlas, the 2020 edition includes information and data from 171 of 194 (88%) WHO member states about the progress towards mental health targets: 86% have a standalone policy or plan for mental health, and 65% of member states have a standalone mental health law.²

For these metrics, the policy approach in the Americas is mixed: An impressive 91% of member states have a standalone and/or integrated mental health policy or plan (more than any other region), yet only 61% (n = 20) have a mental health law,⁵⁸ better only than Africa (49%, n = 19). In this context, mental health law refers to legislation for civil and human rights protection for people with mental disorders; involuntary admission and treatment; guardianship; and professional training and service structure.⁵⁸ On standalone suicide-specific prevention policies, strategies or plans, the Americas better the paltry global average of 21% policies, but policy exists in only a third (33%) of countries. Over half of the region's countries have no suicide-prevention policy (standalone or integrated) at all.⁵⁸

Below, we provide a brief breakdown by country of the policy landscape relating to mental health and suicide. It is important to look at the policy activities in each country to observe what is being prioritised (if anything) and what needs improving. It is worth noting that since each country has different levels of burden related to suicide, suicide attempt and ideation, policy priorities will differ. (Refer to Appendix 2 for more information on national and regional suicide policies by country.)

In 2010, Argentina enacted the National Mental Health Act which emphasises patient rights and favours community care over hospitalisation.

Argentina

In 2010, Argentina enacted the National Mental Health Act, which emphasises patients' rights and favours community care over hospitalisation, treating hospitalisation as a last resort. This law further aims to develop approaches to managing mental health at the professional level, such as promoting multidisciplinary teams that involve all the relevant professions in delivering mental healthcare. The Mental Health Act also notes that general hospitals should have a psychiatric unit and cannot refuse to admit patients with psychiatric illnesses. Moreover, the Act prohibits the creation of new asylums, and the requirement of a legal order for hospitalisation and discharge has been removed. The criterion for admission has been changed from "dangerousness" to oneself or others to certain and "imminent risk".⁷² In addition, the Department of Mental Health (DGSM) released a National Mental Health Plan in 2013. However, there has been a lack of funding, shortage of staff at DGSM, lack of epidemiological orientation and a lack of power over specific provincial policies. Many of the provinces in the country have enacted their own mental health laws.⁷²

One study mentions that the law establishes the presumption of capacity; it applies to all health providers, from the public, private and social security sectors and acknowledges cultural diversity and the protection of personal and collective identity. However, because the Argentinean health system is fragmented, different sectors coexist side by side, with poor central regulation, and there is an absence of a robust and prolonged democratic tradition, resulting in another obstacle to the subordination of conflicting sectors of the health system to the principles of the Ministry of Health.⁷²

One specific law attempts to counter the fragmented nature of the country's federal system, noting that "psychosocial care, scientific and epidemiological research, professional training in the detection and treatment of people

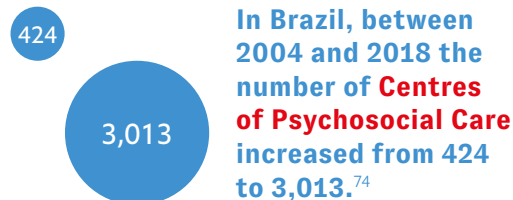
at risk of suicide and assistance to families of victims of suicide are of the national interest for the whole of Argentina.”⁷³ This law calls for “the coordinated, interdisciplinary and inter-agency approach to the problem of suicide, the development of actions and strategies to achieve public awareness, the development of care services and training of human resources, and promoting network support of civil society for the purpose of preventing, detecting people at risk, treatment and training.” However, it is not clear to what extent the law is being implemented or enforced.

Brazil

The country’s mental health policy—echoing the key principles of the Declaration of Caracas, an accord made between PAHO, the WHO and Latin American governments in 1990—is based on patients’ human rights and community-based services.⁷⁴ Brazil also has the National Policy for the Prevention of Self-Mutilation and Suicide, which aims to strengthen permanent education and health strategies, especially in terms of communication, prevention and care.

Community mental health services are based on a network of mental health services (known as the Rede de Atenção Psicossocial).⁷⁴ Individuals who have moderate to mild mental health issues are treated by primary care physicians under mental health specialist supervision.⁷⁴ Individuals with moderate to severe mental disorders are treated by mental health specialists in outpatient services. Those who have psychosis or alcohol or drug disorders are treated in Centres of Psychosocial Care (CAPS) by teams who provide continuous treatment for those with severe and persistent mental disorders.⁷⁵ Between 2004 and 2018, the number of CAPS increased from 424 to 3,013.⁷⁴ Despite this significant expansion, health services are unevenly distributed across the country, with the majority of CAPS services concentrated in the southern part of the country, where 56% of the population resides; most of the mental health services are located in São Paulo.⁷⁴

Similar disparities are at play in the provision of mental health services for young people. The number of specialist community care centres for children and adolescents (known as CAPSi) rose from 32 to 136 between 2002 and 2022. However, there is an average of one CAPSi per 1.3m people in Brazil, a number that pales in comparison with the 1 in 200,000 in the wealthiest areas of the country.⁷⁶



Colombia

Research has noted that mental health law and policy development have been informed by epidemiological data on the trends of mental disorders in the country,⁷⁷ as well as Colombia’s continuous 60-year period of armed conflict. The collaboration between judicial and health systems has fast-tracked the process for mental health interventions. In 2011, even though the Obligatory Plan of Health noted that the country’s national health system should provide each patient with 30 individual or group psychotherapy sessions (regardless of a patient’s stage of illness) and unlimited sessions for victims of armed conflict, no relevant evidence was found that could corroborate such coverage.

In 2013, the Colombian government passed Law 1616, which granted all Colombians the right to mental health services, and in 2018 this law was improved to prioritise the integration of mental health care into primary care.¹⁸ One country-wide study was conducted to better understand the barriers to depression care in Colombia by examining the experiences of various

stakeholders, including healthcare professionals, healthcare administrators and community organisation representatives. Their insights confirmed the importance of integrated care models, especially incorporating depression care in the primary care setting.¹⁸

In 2021, the Ministry of Health and Social Protection launched a strategy for the prevention of suicidal behaviour as part of the National Mental Health Policy.⁷⁸ Depression, suicide and psychoactive substance use are among the main focal points of the policy, which aims to promote mental health as an individual, family and collective right.⁷⁸

Mexico

Only two of the 32 Mexican states have a regional suicide policy.⁷⁹ The National Health Law does not establish in-depth suicide prevention methods, although suicide prevention is one of its articles.



The law states that reducing the incidence of suicide is the responsibility of federal, state and municipality governments. However, this same law does not mention suicidal ideation or suicidal behaviour, does not consider care for either in the health service and does not offer a prevention strategy.

Panama

In 2020, the National Assembly of Panama presented a bill that established general rules and guidelines for mental healthcare, making the government responsible for coordinating diagnostics, treatment and rehabilitation with other interested parties.⁸⁰ This bill would also have created a national mental healthcare plan, with strategies and actions to be revisited every seven years, and it would be covered by the public healthcare system for every citizen. However, the bill was partially vetoed by the president and returned to the National Assembly at the time of this study.⁵⁸

A year later, in 2021, a law establishing mandatory care for suicidal behaviour was approved.⁸⁰ The law makes the reduction of suicide a responsibility of multiple government ministries and patient organisations. It also establishes the training of healthcare workers to care for people affected by suicidal ideation, promoting support networks within communities and establishing suicidal conduct as a metric in the National Information and Epidemiological Surveillance system.⁸¹

Gaps, shortages, delays and barriers: care needs to reduce the suicide burden in Latin America

Workforce and resource shortages

One cause of treatment gaps in Latin America is the relatively low number of mental health specialists and facilities in countries across the region.⁸² One study has aimed to reach a global consensus on the optimum number of psychiatric beds. Through the Delphi process, the authors were able to reach a consensus that 30 would be the minimum and 60 would be the optimal number of psychiatric beds per 100,000 population.⁵⁸ The difference in rates of community beds and psychiatric beds in general hospitals is even more pronounced (see Table 5). Often people do not receive specialist treatment because there is simply nowhere for them to go.

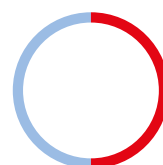
There are shortages, too, of people trained and employed to treat people with mental disorders. According to a 2022 WHO report, half of the world's population lives in countries where there is one psychiatrist to tend to 200,000 or more people.

While the mental health workforce in the US numbers 125.2 per 100,000 people, across South and Central America the rate is less than one-tenth of that, at 8.7 per 100,000. A recent, formal recommendation for the target ratio of mental health workforce per capita was not found at the time of this study.

Looking more closely at some of the countries that we focused on, data from 2020 show that Panama had 5.84 psychiatrists and 3.81 nurses per 100,000 people. Among the main gaps in the provision of services is a lack of day-centre rehabilitation clinics in the rural areas of the country.⁵⁸

Unequal distribution of health workers also plays out between public and private health systems. “We have enough psychiatrists in Brazil,” says Dr da Silva Meleiro. “But the problem is that you don’t find them in public services, only in health plan services, because [public services pay] so poorly.”

In Mexico, the ratio of psychiatrists to the population is lower than that of Panama, at 1.56 per 100,000 people (the global average is 3.96 per 100,000).⁵⁸ Yet the distribution of these specialists is grossly uneven: They are concentrated in the country’s three richest, most urban states.⁸⁴ These figures reflect broad geographic disparities, regional inequality in wealth and an unequal and



Only 50% of psychiatrists in Mexico work in the public health sector.⁸⁵

Table 5: Mental health workforce* and bed numbers across the Americas⁸³

Per 100,000 population, 2017

Subregion	Mental health workforce*	Median number of beds in mental hospitals	Median number of psychiatric beds in general hospitals	Median number of community residential facility beds
US	125.2	23.6	11.5	15.2
Central America [†]	8.7	3.9	0.2	0
South America [‡]	8.7	9.0	0.3	0.8
Caribbean [§]	69.2	75.3	4.7	2.8

* Includes psychiatrists, child psychiatrists, other medical doctors, nurses, psychologists, social workers, occupational therapists and other paid workers in mental health.

[†] Central America (Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama)

[‡] South America (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela)

[§] Caribbean (Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, Dominica, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Grenada, Guyana, Suriname, Trinidad and Tobago, US Virgin Islands)

fragmented healthcare system, as is the case in many of the region's large LMICs.⁸⁴ In addition, only 50% of psychiatrists in Mexico work in the public health sector, mainly at psychiatric hospitals, creating a dearth of specialists in general hospitals.⁸⁵

In terms of available workers, Argentina is at the other end of the spectrum. Its 14.52 psychiatrists per 100,000 population thoroughly outstrips the global average and exceeds the 9 per 100,000 recorded in Europe.^{58,67} Yet these numbers hide weaknesses. There is a lack of trained social workers, and nurses who specialise in psychiatry are also scarce. Perhaps most important, the large numbers of specialists in the country do not necessarily have sufficient know-how to do the job effectively.⁶⁷ "There are many psychologists," says Martín Juan Etchevers, a psychology professor and researcher. "But perhaps they are not [always] trained."

Treatment gaps

The inconsistent funding of mental health services in Latin America is, not surprisingly, echoed by inconsistencies in the care available. Globally, a high proportion of adults and children (with higher numbers among vulnerable groups such as indigenous individuals) with serious mental illness remain untreated, which increases the prevalence of mental disorders and the burden of disease, with knock-on impacts on suicide rates, suicide attempts and suicidal ideation.⁸² But treatment gaps are especially pronounced in Latin America, with severe consequences. According to the National Mental Health Survey conducted in Colombia in 2015, less than 50% of people with mental disorders received any type of care.¹⁸ A Mexico-based study found that diagnosis and treatment gaps for mental health conditions may be key contributors to the increase in the country's suicide rate from 3.5 to 5.3 per 100,000 inhabitants over 18 years.⁸⁶ These examples show the reality of the difference between coverage and

access to care when it comes to mental services in the region.⁸⁷

In the region, delays in treatment are common and can be drastic—if care is provided at all. Evidence suggests that only a minority of individuals with mental disorders have received treatment in the preceding year, and initial treatment contact is frequently delayed for many years.⁸⁸ The treatment gap for moderate to severe mental disorders is far more pronounced than for severe mental disorders alone.⁸⁸

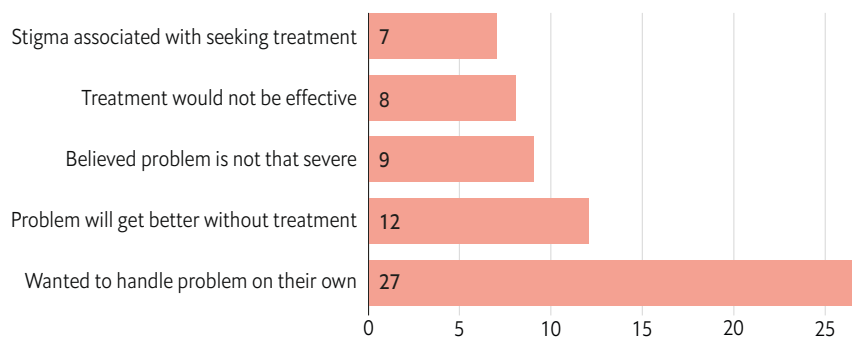
In a 2019 study of 6,700 adults conducted in six countries of the Americas, Mexico featured a large treatment gap: only 20% of people who require mental healthcare receive it.^{89,90} Social inequalities, including lower education levels and family income, are highly associated with this disparity.⁹⁰ Across the region as a whole, data suggest an average gap in treatment of 69.9% for severe mental disorders, 74.7% for severe to moderate disorders, 76.7% for anxiety disorders and 83.7% for one of the region's key suicide risk factors, substance use disorders.⁸²

Barriers to seeking care

Although there are clearly gaps in available treatment, there are an array of barriers that prevent or discourage people from seeking it—including the aforementioned shortfall in care and resources. Even in terms of suicide and suicidal behaviours, the biggest barrier to treatment is that people have a low perceived need for help. Research shows that this is a leading reason globally (among 58% of people experiencing suicidal ideation), as well as those who have executed planned and unplanned suicide attempts.⁹¹ See Figure 2 for a breakdown of more specific attitudes to seeking treatment, retrieved from World Mental Health (WMH) surveys carried out in 21 countries across six continents (participants were 18 years and over).⁹¹ These include Africa (Nigeria, South Africa), Asia (India, Israel, Japan, Lebanon, China [Beijing, Shanghai and Shenzhen]), Australasia (New Zealand), Europe (Belgium, Bulgaria, France, Germany, Italy, the Netherlands, Romania, Spain, Ukraine) and North and South America (Brazil, Colombia, Mexico, US). The focus of this global study was to examine mental health treatment and barriers to care among suicidal individuals.

Figure 2: Attitudinal barriers to seeking treatment amongst individuals who presented any suicidal behaviour in the past year but did not receive treatment, across surveys carried out in 21 countries⁹¹

Reasons for not seeking treatment, percentage



Source: Treatment of suicidal people around the world, 2011.⁹¹
Graphic insight: Economist Impact

Overall, data from the Americas show that nearly 43% of individuals with a mental disorder (for at least 12 months) who do not access treatment do not perceive the need to. The most frequent attitudinal barrier is that they want to address the problem on their own.⁹² The consequences are especially severe in the region: WMH survey data for Colombia and Mexico show that 3.6% of those in Colombia and only 2.9% of those in Mexico with anxiety disorders showed signs of receiving treatment in the year after the onset of illness; for substance use disorders, the proportions were 0.9% in Colombia and 3.6% in Mexico. In Argentina, WMH survey data showed that people delay seeking treatment for lengthy periods of time, sometimes as long as two or three decades, and in due course seek treatment if their disorder persists for a long time. Such delays not only create an eventual burden for the country's mental health system (because of the intensity of care needed at later stages) but also hugely affect the individual, their families and society.⁹³ Often, individuals with anxiety disorders may not seek treatment until they have developed a comorbidity, thus exacerbating the overall severity of illness and the care burden.

Stigma surrounding mental disorders is certainly a problem in Latin America, especially among men.

Stigma is certainly a problem in Latin America, especially among men. "In the Panamanian case, there is still stigma, and we have to continue working on the stigma of patients with mental illnesses," says Dr Flores. Similarly, Dr Etchevers sees the same issues at play in his own country: "Society's perspective [in Argentina] rejects the idea of mental illness, rejects the idea of treatment, and rejects the idea of diagnosis."

The psychological impact of the covid-19 pandemic, however, has helped to counter the stigma of seeking help for (or even acknowledging) mental health problems. Experts we spoke with mentioned that the pandemic was a catalyst pushing the community and social media to address mental health issues. "The pandemic brought more people to be aware and sensitised to the issue," says Dr Flores. When Dr Etchevers' team conducted studies of mental wellness during the pandemic, "almost 40% said they recognized that they needed some assistance."

In addition to the perception-related barriers, structural barriers are also a key reason people do not receive treatment for mental disorders, including those linked to suicide and suicidal thoughts. Worldwide, these include limited finances, lack of availability of treatment, problems with transportation and the inconvenience of attending treatment appointments. In a region of predominantly LMICs like Latin America and the Caribbean, the first three of these reasons are particularly relevant, with transportation an especially salient issue in the region's vast spread of rural areas that may be far from treatment centres. Indeed, WMH surveys spanning 15 countries (including Argentina, Colombia and Mexico) reported that failure to seek care and delays in receiving treatment are both higher in developing countries, as well as amongst older people and men.⁹³

A lack of awareness-raising efforts

The perception-based barriers that prevent people in Latin America and the Caribbean (and elsewhere) from seeking help for mental health problems are often exacerbated by a lack of government action to promote health services. Suicide, self-harm and suicidal ideation can often be prevented with timely, evidence-based and low-cost interventions, such as raising awareness of the tools and resources that are available to those affected.⁹⁴ Effective suicide awareness

programmes should be delivered in relevant settings; should be multifaceted, comprehensive and inclusive of community-based strategies; and should adopt an approach to ensure the edification of at-risk groups.⁹⁵ In general, this study uncovered a sore lack of such initiatives in Latin America, and those that were found were limited in their ambition. Argentina and Mexico hold a day for suicide prevention awareness (September 10), utilising WHO campaigns that promote actions for prevention. In Brazil, since 2014, the Federal Council of Medicine and the Brazilian Association of Psychiatry have partnered in the September Yellow campaign to disseminate suicide awareness efforts throughout the country. “In terms of mental health, [the Brazilian government] has carried out more campaigns compared with other years, but there is much lacking in terms of care,” says Dr Scavacini. “We have been talking more about mental health in general and also of adolescents and children, including [awareness raising] by the government, but there is still a lot to do.” In 2019, Colombia and the Colombian Psychiatry Association launched the #PrevenirEsPreguntar campaign: suicide can be prevented. This campaign focused on placing the issue of suicide and suicidal ideation

in open dialogue, prompting individuals to ask questions that save lives and to detect alarm signals (these include expressing thoughts about death or suicide, having self-destructive behaviours, changes in habitual behaviour), and disclosing what can be done to prevent suicide. The campaign recommended that individuals ask their loved ones, or people they knew who were showing warning signs of suicide, if they were thinking of committing suicide and encourage them to seek help in the form of making an appointment with a psychiatrist.

Additionally, experts mentioned mental health campaigns with well-known people, such as actors and athletes, who have been impacted by mental health challenges. The aim of such campaigns is to raise awareness. Experts noted that it is also important that the healthcare system be prepared to accommodate the extra demand that the campaigns may generate, given the growing rate of suicide in the region along with the burden of underlying mental illnesses. That is, once people are more aware and stigma has been reduced, they are more likely to look for medical assistance.

Addressing the realities of suicide: key areas of focus for policymakers and governments in Latin America



Increase funding allocated to mental health care.

Mental health in the region is critically underfunded, with countries allocating as little as 25% of the recommended WHO budget share for mental health within their overall government health expenditure. A lack of funding could be the result of limited financial resources or a general lack of awareness about the seriousness of suicide/mental illnesses as a public health issues, underestimating the amount of funding needed across this area.²⁶ Increasing the portion of funding to match the WHO's recommended figure is one of many ways to set the gears in motion towards timely, comprehensive care and equitable access for all. Additionally, it has been reported that by providing adequate funding for mental healthcare, economic returns have the potential to be high. For example, the WHO reported that the return on investment in mental healthcare intervention in Peru was two to five times higher than what was projected.⁹⁶ Equally, insurers must take definitive steps (and be incentivised to do so, whether through regulation, reward or both) to ensure that they adequately cover all necessary services. Spending an appropriate amount on mental healthcare provision will help policymakers do their part to care for people's mental health and to take on suicide. One crucial part of the evolution of health services will involve strengthening the focus of care on healthcare provision, by improving timely access for all, driving down the need for hospital beds and easing the route to care for people living outside of larger, urban areas. Adequate funding will also reduce the barriers related to infrastructure and the cost of accessing mental healthcare.⁹⁷ However, while working on making care widely available through community programmes, governments cannot afford to continue under-resourcing hospital-based care. Hospital care will still be needed for more severe patients, who will continue to exist, albeit in lower numbers if timely care is achieved.

To combat suicide, policymakers need to look at the broad and interrelated drivers spanning mental health issues such as anxiety and



depression, lifestyle-related issues such as substance misuse (including alcohol) and socioeconomic issues such as social deprivation and income inequality. Suicide, suicidal ideation and attempt, as well as self-harm, are the consequence of multiple stressors; these will require determined, coordinated action on the part of multiple government departments, as well as other stakeholders.

Regular reporting of suicide mortality data and the monitoring of mental health conditions including depression can aid policy development and planning.

As it stands, governments and health services do not have a reliable understanding of the scale or intricacies of the mental health and suicide burden in their countries. This is a result of many factors, from a lack of data collection, a lack in the quality of data and the delay in the reporting of data. Stigma plays a key role as many individuals may not be comfortable with coming forward for help regarding their mental illness, suicide attempt or ideation. Stigma can also impact the plausibility of reported cases, leading to the misclassification of deaths by suicide and to inaccurate descriptions of attempted suicide and the prevalence of certain mental health conditions such as depression.

With unreliable data, it becomes difficult to understand the scale of the burden and who the hardest-to-reach populations are (geographically and in terms of attitudes towards mental health). In addition, health services are left with a partial or inaccurate assessment of the burden. For example, much of the data around youth suicide rates is from before the pandemic, an event which has dramatically impacted these rates. Research has shown that the lack of consistent and reliable data on suicide and attempted suicide is an obstacle to determining the efficacy of strategies and plans to reduce suicide and suicide attempts. It is therefore essential to develop an integrated health information system (HIS) for data on each of these actions, which can then be recorded and analysed by healthcare professionals and policymakers. Such data could be used with machine learning to predict suicidal behaviour.⁹⁸ However, without breaking down stigma first, the data collected in the region may never provide a full and accurate picture of the burden.

Take action to raise awareness of suicide due to depression and combat stigma related to acknowledging and seeking help for mental health issues.

Latin America is affected by a range of attitude- and perception-related barriers to seeking care for mental health challenges and suicidal thoughts. Many people in the region believe that a mental health issue is a problem to be solved alone (or will sort itself out with time), while others are discouraged from speaking up, even to friends and family, because of stigma related to dominant cultural attitudes such as machismo (for men). Suicide rates are also high among vulnerable groups who have experienced discrimination



(for example, refugees and migrants; prisoners; and lesbian, gay, bisexual, transgender and queer individuals).

At the national level, governments should take action to create an environment where people can openly talk about mental health with each other through improved mental health literacy. This can be done by increasing and amplifying communication about the seriousness and impact of mental illnesses, the benefits of seeking help, and how to access care. PAHO recently launched a new campaign known as “do your share to support mental health” in an attempt to reduce stigma and discrimination experienced by people living with mental health conditions. The campaign invites individuals to share their stories and experiences with mental health on social media using #DoYourShare. In addition to this, individuals can access the PAHO website for materials on what they can do to reduce stigma and discrimination, and ways they can share their story.⁴¹ Moreover, some countries across Latin America have certain tools in place such as crisis hotlines as a way to reduce suicide attempts and to offer mental health support over the phone. In Colombia, the SalvaVidas line is available 24 hours a day, 7 days a week via email, WhatsApp, phone calls and Facebook. The line provides an array of services from tools to improve coexistence, advice on issues that are not immediate risk factors but can become causes of suicide, referrals, and psychological first aid.⁹⁹ Everyone is able to access this service, though priority is given to adolescents and young people with suicide ideation, Venezuelan migrants and refugees and female victims of gender and intra-family violence.¹⁰⁰ The line consists of psychologists and volunteers with experience in providing emotional support. Since September 2019, they have saved 612 lives.⁹⁹

As a starting point, governments can refer to the communication engagement tool provided by the WHO or the LIVE LIFE implementation guide for suicide prevention across countries. The WHO toolkit provides step-by-step guidance in creating a suicide action plan that is tailored to the community. For example, policymakers can think about working with local media to develop educational campaigns that inform people about suicide, encourage mental health and reduce stigma.²⁴ Similarly, the LIVE LIFE implementation guide²⁶ provides six core domains, including awareness raising and advocacy, which highlights collaboration between the ministry of health and the media as well as other stakeholders. Continuous communication of the issue is paramount, and the LIVE LIFE implementation guide suggests that this could be carried out in environments that are accessed by individuals who could be at risk or are seeking help (e.g. communication in the form of leaflets, adverts and posters being placed on public transport, in the workplace, or at schools).²⁶ The LIVE LIFE implementation guide also provides case studies of awareness-raising efforts implemented in other countries at both the national and community levels, examples that our countries of interest could think about modelling.



Work to counter the geographical, social and economic inequalities that create barriers to access across the region.

Individual countries in Latin America face significant divides between urban and rural, poorer and wealthier populations. Often, the economic divide mirrors the geographical one—as does the provision of health services, including mental healthcare. It has been reported that individuals living in poverty have limited access to adequate mental health care, which can worsen the proliferation of inequality across countries in the region. It is also widely recognised that those who are poor have a higher risk of suffering from mental illness like depression as these individuals face more difficulties in life and have less access to adequate care.⁵

Similarly, where truly universal healthcare is not available, poorer urban residents can find themselves effectively locked out of care for mental health problems and suicide ideation. Social and economic exclusion can be drivers of mental health problems and suicidal thoughts. Policymakers and other stakeholders in government sectors, the general public health sector, mental health services, vulnerable groups, survivors of suicide and their families, the media and nongovernmental organizations (NGOs) must work to ensure that those in need, wherever they live and however much they earn, can access the care they need when they need it.

Looking to the future, we believe each of the above actions is essential to reduce the impact of suicide. Prioritising postvention is also vital as the care continuum does not end once a suicide occurs or is attempted. The unresolved grief and trauma of those left behind must be addressed, as empirical evidence shows that exposure to suicide increases the risk of subsequent suicide as well as other negative mental health sequelae.⁴⁰ Uruguay offers an example of postvention in the region. An NGO known as Último Recurso (the Last Resort) aims to stop suicide through telephone helplines, clinical attention, workshops and postvention groups. The groups are made up of two suicidologists trained in group psychotherapy and social psychology. In Brazil, social media and online networks have played a vital role in developing a postvention culture. Suicide survivors are able to search for information about suicide and suicide grief support. Brazil has numerous postvention discussion groups available online, for example, an online Facebook survivor support group known as Grupo Virtual de Enlutados pelo Suicídio: Sobreviventes (Survivors: Suicide Bereaved Virtual Group) that includes members from different parts of the country.¹⁰¹

Postvention activities can create a world in which suicide is destigmatized, those impacted are supported and accurate information is available. Progress is possible in reducing the painful effects of suicide, but only if stakeholders are willing to commit to the actions needed to change the structural and attitudinal barriers across the region.

Calls to action:

- **Increase funding allocated to mental health care**
 - **Regular reporting of suicide mortality data and the monitoring of mental health conditions including depression can aid policy development and planning**
 - **Take action to raise awareness of suicide due to depression and combat stigma related to acknowledging and seeking help for mental health issues**
 - **Work to counter the geographical, social and economic inequalities that create barriers to access across the region**
- 

Appendix 1: Epidemiological data for suicide in study countries

Table 6: Age-standardised suicide mortality rate across both sexes per 100,000^{3,8}

Age-standardised mortality rate (95% UI) per 100,000				
Country	Gender	1990	2019	% change
Argentina	Both	8.6 [8.3, 8.8]	10.4 [9.8, 11.1]	21.5 [13.4, 29.7]
	Male	13.8 [13.3, 14.3]	17.5 [16.3, 18.7]	26.7 [17.7, 36.9]
	Female	4.1 [3.9, 4.3]	4 [3.7, 4.3]	-3.0 [-11.4, 5.3]
Brazil	Both	7.3 [7.1, 7.5]	5.7 [5.7, 6.2]	-21.7 [-26.2, -14.3]
	Male	11.8 [11.4, 12.2]	9.5 [8.9, 10.5]	-20.0 [-25.3, -11.2]
	Female	3.1 [2.9, 3.2]	2.2 [2.1, 2.5]	-27.2 [-31.9, -21.5]
Colombia	Both	4.7 [4.5, 4.9]	5.3 [4.1, 6.8]	13.3 [-14.4, 45.6]
	Male	8 [7.6, 8.4]	9 [6.8, 11.5]	12.4 [-15.2, 45.0]
	Female	1.6 [1.5, 1.7]	2 [1.5, 2.6]	21.5 [-11.0, 59.6]
Mexico	Both	3.8 [3.7, 3.9]	6 [5.1, 7]	58.5 [34.1, 85.5]
	Male	6.7 [6.5, 6.8]	10.4 [8.6, 12.4]	55.6 [28.7, 86.9]
	Female	1.1 [1.1, 1.1]	2 [1.6, 2.4]	79.2 [43.7, 121.0]
Panama	Both	4.8 [4.5, 5.2]	4.7 [3.6, 6.1]	-2.4 [-27.3, 27.2]
	Male	8.1 [7.5, 8.8]	8 [6.1, 10.4]	-1.1 [-26.9, 30.4]
	Female	1.5 [1.4, 1.7]	1.4 [1.1, 1.9]	-5.1 [-29.9, 26.3]

UI = uncertainty intervals

The data presented in this table comprises only male and female categories and does not include the transgender or queer population.

Table 7: Age-standardised DALY* suicide rate across both sexes per 100,000^{3,8}

Age-standardised DALYs* rate (95% UI) per 100,000				
Country	Gender	1990	2019	% change
Argentina	Both	368.6 [355.5, 383.2]	523.7 [490.7, 560]	42.1 [31.7, 53.0]
	Male	553.9 [529, 579.6]	847.7 [783.7, 918.3]	53.0 [40.7, 66.9]
	Female	197.4 [186.9, 207.8]	212.6 [195.2, 230.2]	7.7 [-1.9, 18.0]
Brazil	Both	326.9 [317.6, 338.2]	266.7 [253, 290.4]	-18.4 [23.2, -11.0]
	Male	520.7 [503.2, 539.6]	434 [407.9, 480.1]	-16.6 [-22.7, -7.8]
	Female	143 [137.4, 149.5]	107.7 [101.1, 118.5]	-24.7 [-29.5, -18.4]
Colombia	Both	239.1 [227.6, 251.1]	277.5 [211.2, 354.4]	16.1 [-11.8, 49.5]
	Male	393.3 [370.7, 416.3]	447.2 [339.3, 571.9]	13.7 [-14.4, 47.9]
	Female	93.4 [86.2, 100.4]	115.3 [86.2, 149]	23.5 [-9.1, 62.5]
Mexico	Both	180.7 [176.8, 184.6]	307.6 [262.3, 357]	70.2 [44.5, 97.2]
	Male	310.4 [303.2, 317.5]	515.2 [430, 616.3]	66.0 [38.0, 98.7]
	Female	59.1 [57, 60.9]	111.6 [90.2, 135.3]	88.8 [53.4, 131.2]
Panama	Both	238.9 [220.7, 257.6]	232.8 [176.2, 302.9]	-2.6 [-28.0, 27.5]
	Male	392.7 [357.7, 427.8]	386.1 [291.6, 504]	-1.7 [-28.2, 30.5]
	Female	82.6 [73.4, 93.3]	77.5 [57.8, 100.5]	-6.1 [-30.5, 24.5]

UI = uncertainty intervals

The data presented in this table comprises only male and female categories and does not include the transgender or queer population.

*DALYs are the sum of the YLL (years of life lost) and the YLD (years lived with disability). DALYs in this table quantify the loss of healthy life attributable to suicide by measuring the difference between the actual and the ideal situation, in which one lives the standard life expectancy in perfect health.

Appendix 2: Latin American scorecard for Acting Against Suicide

Assessment for addressing the burden of suicide

Methodology

A. Framework ideation

- In order to provide evidence-based research to address unmet needs relating to suicide ideation, the Economist Impact team developed a cross-country comparison framework to compare key indicators among the selected countries. This framework was adapted based on the findings of the secondary research and included a multi-layered and multidimensional perspective on reducing the burden of suicide.

B. Research

- A central component of this research program was to raise awareness around the gaps in care and unmet needs for people with suicidal ideation and severe depression, with a regional focus in Latin America and five key countries. In-depth research into the domains offered a holistic picture of the foundations and policy levers to drive better and earlier care, and an analysis of the indicators of mental health policies and suicide outcomes across countries.

C. Scoring of indicators

- Indicators were mainly assessed based on trends obtained through extensive secondary research, with justifications provided.
- For qualitative indicators that may be subjective and non-comparable by country, a 3-point scoring measurement provided additional degrees of reliability and comparability.
- Each indicator was given a “high”, “mid” or “low” impact score based on Economist Impact analysis, that is translated into a 3-point scoring system (2) high, (1) mid, (0) low.

According to the research conducted, each of the focus countries was benchmarked to better understand their abilities to address suicide.

Table 8: Assessment for addressing the burden of suicide

Domain	Indicator	Scoring/Units	Rationale	Argentina	Brazil	Colombia	Mexico	Panama
1. Burden of suicide	1.1 Age-standardised suicide mortality rate, % change between 1990-2019, both sexes	% change	To assess current rates of suicide ^{s1}	21.50%	-21.70%	13.30%	58.50%	-2.40%
	1.2 Age-standardised suicide DALY rate, % change between 1990-2019, both sexes	% change	To understand burden of suicide ^{s1}	42.10%	-18.40%	16.10%	70.20%	-2.60%
	1.3 Trend Rates of suicide deaths between 1990-2019	Increase / Decrease	To understand country-wide trends ^{s1}	Increase	Decrease	Increase	Increase	Decrease
	1.4 Hospitalization rates (due to attempted suicide or deliberate self-harm)	per 100,000	To understand burden on hospitals	No data	No data	No data	No data	No data
2. National and regional suicide policies	2.1 National mental health law	1 - Yes 2 - No	To assess government willingness to prioritise mental health	1 ^{s2}	1 ^{s3}	1 ^{s4}	0 ^{s5}	0 ^{s6}
	2.2 National suicide prevention programme	2 - National programme 1 - Regional programmes 0 - No programmes	To assess willingness to address suicide	0 ^{s2}	2 ^{s3}	2 ^{s4}	2 ^{s5}	0 ^{s6}
	2.3 Country-wide mental health awareness programme	2 - National programme 1 - Regional programmes 0 - No programmes	To assess willingness to promote mental health at the national level	0 ^{s2}	2 ^{s3}	2 ^{s4}	0 ^{s5}	0 ^{s6}
	2.4 National and or regional anti-stigma promotion programme	2 - National programme 1 - Regional programmes 0 - No programmes	To assess willingness to reduce mental health stigma at the national and/or regional levels	0 ^{s2}	2 ^{s3}	2 ^{s4}	0 ^{s5}	0 ^{s6}

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Domain	Indicator	Scoring/Units	Rationale	Argentina	Brazil	Colombia	Mexico	Panama
2. National and regional suicide policies	2.5 School-based mental health promotion programme	2 - National programme 1 - Regional programmes 0 - No programmes	To assess willingness to help prevent mental illness and educate early	2 ^{s2}	2 ^{s3}	2 ^{s4}	2 ^{s5}	2 ^{s6}
3. Mental health financing	3.1 Government total expenditure on mental health as a % of total government health expenditure (2020)	%	To assess the government spending on mental health	No data ^{s2}	1.6% ^{s3}	1.8% ^{s4}	1.8% ^{s5}	3.0% ^{s6}
	3.2 Allocated resources to invest in health professionals and to meet mental health needs	1 - Sufficient 0 - Insufficient	To assess willingness to finance mental health workforce	No data ^{s2}	No data ^{s3}	No data ^{s4}	No data ^{s5}	No data ^{s6}
	3.3 Mental health services are financially covered for patients (including, talk therapy, medication, etc)	2 - All services covered (talk therapy, medication, psychiatry) 1 - Some services covered 0 - Mental health is not covered	To understand efficacy of insurance coverage for mental health	1 ^{s2}	1 ^{s3}	1 ^{s4}	1 ^{s5}	1 ^{s6}
4. Care needs	4.1 Separate department/ services for mental health care in general hospital (Bed allocation to mental health in general hospital)	2 - Sufficient allocation nationally (>60 psychiatric beds per 100,000) 1 - Sufficient allocation in some hospitals (30-60 psychiatric beds per 100,000) 0 - Insufficient allocation (<30 psychiatric beds per 100,000) ^{s7,s8}	To understand if general hospitals are prepared to treat mental health patients ^{s7}	1 ^{s2}	2 ^{s3}	0 ^{s4}	0 ^{s5}	0 ^{s6}

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Domain	Indicator	Scoring/Units	Rationale	Argentina	Brazil	Colombia	Mexico	Panama
4. Care needs	4.2 Specialised and multidisciplinary team available for patient care in both inpatient and outpatient settings - Specialised refers to a doctor with mental health expertise (eg psychiatrist) - Multidisciplinary team refers to care available for patients who have health needs alongside mental health needs	2 - Available in all settings 1 - Available in some settings 0 - Not available	To assess the type of speciality care provided (psychologist, psychiatrist)	0 ^{s2}	2 ^{s3}	1 ^{s4}	2 ^{s5}	2 ^{s6}
	4.3 Teletherapy available and reimbursed	2 - Available & reimbursed 1 - Available & not reimbursed 0 - Not available	To verify the availability of care that a person could have access to	1 ^{s10,s11}	2 ^{s3}	2 ^{s4}	No data ^{s5}	No data ^{s6}
	4.4 Emergency helplines available	2 - Available nationally 1 - Available in some regions 0 - Not available	To verify the availability of care that a person could have access to	2 ^{s12}	2 ^{s3}	2 ^{s4}	2 ^{s5}	2 ^{s6}
	4.5 Follow-up care available after attempted suicide	2 - Available nationally 1 - Available in some regions 0 - Not available	To determine follow-up care needs	0 ^{s2}	0 ^{s3}	0 ^{s4}	0 ^{s5}	2 ^{s6}
5. Surveillance	5.1 Monitoring/ surveillance system in place that monitors deliberate self-harm	2 - Yes, nationally 1 - Only in some regions 0 - Nothing in place	To assess the use of IT systems to monitor indicators, and to support management, accountability, and provide evidence for decision making	2 ^{s13}	2 ^{s14}	2 ^{s15}	2 ^{s16}	2 ^{s17}
	5.2 Does the country collect self-reported use of mental health services or disorders	2 - Yes, nationally 1 - Only in some regions 0 - Not collected	To assess the use of national surveys in understanding service use and self-reported burden	0 ^{s18}	2 ^{s19}	2 ^{s20}	2 ^{s21}	2 ^{s22}

Domain	Indicator	Scoring/Units	Rationale	Argentina	Brazil	Colombia	Mexico	Panama
6. Workforce	6.1 Psychiatrists	per 100,000 ^{s9}	To assess specialist capacity to detect and treat mental health disorders	14.52	3.69	2.5	1.56	5.84
	6.2 Mental health nurses	per 100,000 ^{s9}	To assess capacity to detect and treat mental health disorders	Not reported	0.13	147.17	4.86	3.81
	6.3 Psychologists	per 100,000 ^{s9}	To assess specialist capacity to detect and treat mental health disorders	286.33	13.68	128.32	5.85	5.20
	6.4 Social workers	per 100,000 ^{s9}	To assess capacity for follow-up contact for individuals with mental health disorders	4.95	7.57	Not reported	1.36	Not reported
	6.5 Other specialised mental health workers (such as Occupational Therapists)	per 100,000 ^{s9}	To assess capacity for services across the care continuum	16.66	139.23	14.88	1.05	0.24
	6.6 Mental health education training programs available for HCPs in the form of continuing medical education	Yes/No	To understand the quality of care that is provided	No ^{s2}	Yes ^{s23,s24}	No ^{s25-s27}	No ^{s28,s29}	Yes ^{s30}

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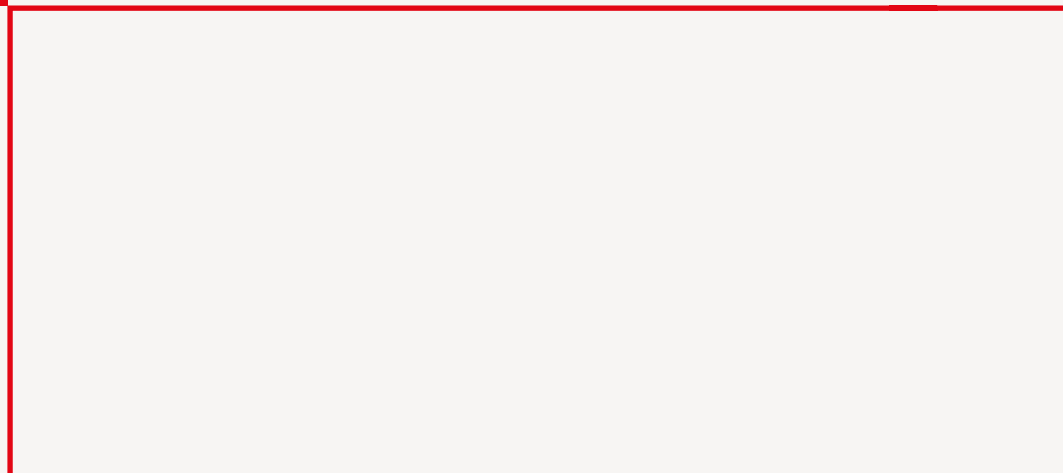
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