PROJECT HAYAT

(hayat = 'life' in Malay)

NATIONAL SUICIDE PREVENTION STRATEGY WHITE PAPER

Singapore 18 September 2024



SG Mental Health Matters

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Version Details

Date	Version	Remarks
10 September 2024	1.0	White Paper publication
18 September 2024	2.0	Edits made to correct typographical errors and to update footnote on Page 19

Foreword

Suicide prevention is one of the most pressing public health challenges facing Singapore today. Each life lost to suicide is a profound tragedy, impacting families, friends and communities in ways that are both searing and lasting.

All three of us have been personally affected by suicide in different ways, as well as being involved with suicide prevention efforts at many levels. We are also members of the community group, SG Mental Health Matters, that seeks to inform and educate the public on mental wellbeing and mental healthcare policies. As a follow up to the 2020 adjournment motion *Working Together Towards A Zero-Suicide Singapore* by then-Nominated Member of Parliament Anthea Ong, we formed Project Hayat ('life' in Malay) by bringing together a Working Group of diverse stakeholders for a collective and participatory research effort to develop a white paper on national suicide prevention strategy. We launched Project Hayat on 10 Sep 2023, also World Suicide Prevention Day.

The strategies that the Working Group outlined in this White Paper represent the first output of our collective effort to develop a national framework for coordinated actions to support and add on to current suicide prevention efforts in Singapore, including those outlined in the National Mental Health and Wellbeing Strategy. These evidence-informed recommendations are a foundation upon which we can and must build, with the understanding that the rewards of our work will not be immediate. They are the seeds we plant today that will grow into trees of hope, resilience, and support for our future generations.

"To go fast, go alone. To go far, go together" - an African proverb

To address the 'wicked problem' of suicide, collaboration and cooperation are essential, as they allow us to capture both individual experiences and collective wisdom. No single party can tackle this complex issue alone.

We are immensely grateful to the many individuals and organisations who have contributed their time, effort, and insights to make Project Hayat possible. From members of the Working Group to the participants of the focus group discussions (FGDs) and direct stakeholder interviews, their contributions have been invaluable.

Throughout the FGDs and interviews, we have been moved and humbled by the passion and commitment of individuals both within and outside our Working Group. We heard from people whose lives have been touched by suicide—those who have lost loved ones, and those who themselves have struggled with suicidal thoughts. We also heard from those who work tirelessly on the front lines—healthcare professionals, social workers, crisis responders, educators, and various community leaders—who engage daily with individuals at risk of suicide. Their stories and experiences have strengthened our resolve to ensure that every person in Singapore has access to the support and resources they need.

It is only with their generosity and courage in sharing, with the commitment of the Working Group, that we are able to develop this comprehensive White Paper that reflects the diverse needs and experiences of our community.

Employing a modified Delphi method in building consensus in the Working Group to co-create the recommendations, the strategies outlined in this document are designed to be dynamic and responsive to the needs of our society. We must remain vigilant in continuously improving and adapting our approaches based on the latest research and feedback from the community.

Suicide prevention requires a multi-faceted approach—one that is rooted in love, kindness, and compassion. It is not enough to address the immediate crisis, we must also work to change the societal conditions that contribute to suicidal behavior. This includes fostering a culture where mental health and suicide prevention is openly discussed, where seeking help is seen as a strength rather than a weakness, and where every individual feels valued and supported.

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has." - Margaret Mead

We are delighted to make good our promise to Singapore and Singaporeans to launch this White Paper on 10 September 2024, World Suicide Prevention Day.

Project Hayat is just the beginning. As much as we are excited about the potential for these strategies outlined in this White Paper to effect change, we also recognise that this is a long-term systemic endeavour. The impact of this collective effort may not be fully realised for years to come but we—the Working Group, the research participants and the suicide prevention community at large, are committed to this journey.

Together, we can and must work towards a Singapore where every life is valued, where every individual has the opportunity to thrive, where suicide is no longer seen as the only option.

Anthea Ong, Dr Jared Ng, Dr Rayner Tan

Co-Leads, Project Hayat Working Group SG Mental Health Matters

Project Hayat Working Group

A White Paper for National Suicidal Prevention Strategies Guided by Participatory Action Research

Participatory action research (PAR) is an approach to research that prioritises the value of experiential knowledge for tackling problems that communities are affected by, and for envisioning and implementing alternatives. PAR involves the participation and leadership of communities with lived experience, who produce social change through conducting systematic research to generate new knowledge.

Guided by principles of PAR, Project Hayat has been a community-led effort, led by a Working Group comprising policymakers, suicide experts, researchers, community workers and helping professionals, religious leaders, corporate leaders, representatives from the media, and people whose lives have been impacted by suicide.

Working Group meetings were held once every two months, starting from September 2023 when the initiative was launched. During each meeting, Working Group members provided strategic oversight on the timeline for developing the White Paper, feedback and guidance on the research, and public engagement aspects of the White Paper. These contributions included, but were not limited to:

- Composition of the Project Hayat Working Group
- Overall research design for the White Paper
- Areas of interest for the desk review
- Topics explored for in-depth interviews and focus group discussions
- Selection of case studies for desk review segment of the White Paper
- Selection of participants for White Paper research, including international experts, as well as the communities of participants for the focus group discussions
- Developing statements and questions for the public consultation process
- Consensus-building for the White Paper recommendations
- Feedback and review of the White Paper

• Media engagement strategy for the launch of the White Paper

The Project Hayat Working Group also set up a research subgroup comprising researchers and academics keen on volunteering their expertise in implementing the research underpinning the White Paper. Led by researchers at the Saw Swee Hock School of Public Health, National University of Singapore, the team conducted all in-depth-interviews, focus group discussions, as well as the public consultation sponsored by OPPi.

Table 1 summarises the list of Working Group members.

Table 1. Composition of the Project Hayat Working Group

Name	Designation and Organisation
Anthea Ong	Co-Lead, Project Hayat Founder, SG Mental Health Matters Social Entrepreneur (WorkWell Leaders, Hush TeaBar, A Good Space Co-operative, Welcome in My Backyard) Former Nominated Member of Parliament (2018-2020)
Dr Jared Ng	Co-Lead, Project Hayat Psychiatrist & Medical Director, Connections MindHealth Former Chief, Department of Emergency & Crisis Care, Institute of Mental Health
Dr Rayner Tan	Co-Lead and Research Lead, Project Hayat Assistant Professor, Saw Swee Hock School of Public Health, National University of Singapore Co-Lead, SG Mental Health Matters Chairman, Greenhouse Community Services
Adrian Liew	Founder, OPPi
Andrew Minnitt	CEO, AON Singapore, Indonesia and Malaysia
Dr Andrew Tay	Chief Wellbeing Officer, National University of Singapore
Dr Anne-Claire Stona	Global Mental Health Programme Lead SingHealth Duke-NUS Global Health Institute
Clara Koh	Head of Public Policy, Singapore, Malaysia and International Institutions, Meta

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Clinical Psychologist, Alliance Counselling
Nominated Member of Parliament Chairman, Caring for Life; Vice President, Singapore Anglican Community Services
Researcher, Project Hayat (Research Assistant, National University of Singapore)
Former Executive Director, Resilience Collective
Co-Lead, SG Mental Health Matters (SGMHM)
Researcher, Project Hayat (Research Associate, National University of Singapore)
Assistant Professor, Lee Kuan Yew School of Public Policy, National University of Singapore; Behavioural Scientist
Faculty Member, Singapore Management University Principal Investigator for Suicide Studies 2022 and 2024
Senior Manager, Community Engagement, Hindu Endowments Board (designate for Hindu Endowments Board)
Co-Founder, Please Stay Movement (PSM) and Child Bereavement Support Singapore (CBSS)

Invited Observers to Working Group:					
LINEV MAY LONG	Director-General of Social Welfare, Ministry of Social and Family Development				
Eric Yap	Commissioner, Singapore Civil Defence Force				
Dr Harold Tan	Director, Mental Health Office, Ministry of Health				
Jael Lai	Assistant Manager, Community Health, Agency for Integrated Care (designate for See Yen Theng, Chief of Community Health)				
Dr Nazirudin Mohd Nasir	Mufti of Singapore, Majlis Ugama Islam Singapura (MUIS)				
Nianying Lin	Assistant Director, Mental Health Office, Ministry of Health (designate for Dr Harold Tan, Director, MOH)				
See Yen Theng	Chief of Community Health, Agency for Integrated Care				
T. Raja Segar	Former CEO, Hindu Endowments Board				
Venerable Shi Kwang Phing	President, Singapore Buddhist Federation				
Cardinal William Goh	Archbishop, Roman Catholic Archdiocese of Singapore				

Acknowledgements

We are grateful to the contributions of all Working Group members and Invited Observers, who have made this collective and participatory effort possible.

We want to acknowledge members of the research subgroup comprising researchers and academics who have contributed to the design and implementation of the research accompanying the White Paper.

They include: Adrian Liew; Amirah Ahmad; Dr Anne-Claire Stona; Anthea Ong; Daniel Ho; Dr Edwin Ho; Eleanor Ong; Glen Koh; Han Le Minh; Dr Jared Ng; Dr Karen Pooh; Kuhanesan Naidu; Lok Yee Ling; Pearlyn Neo; Dr Rayner Tan; and Rosie Ching.

We would like to thank the following organisations for their support in responding to our requests for help and/or organising our Working Group meetings and the community focus group discussions. They include: Agency for Integrated Care; AON Singapore; bp Singapore; Dialogue Centre Singapore; H.O.M.E (Humanitarian Organisation in Migration Economics); Hush TeaBar; Oogachaga; PleaseStay Movement; Samaritans of Singapore Limited; SG Mental Health Matters; The Greenhouse Community Services Limited; and TWC2 (Transient Workers Count Too).

Funding support for the White Paper research was provided by the NUS Start-Up Grant and The Courage Lab, Saw Swee Hock School of Public Health (SSHSPH), NUS. We would also like to thank Professor Teo Yik Ying, Dean of SSHSPH, and Wendy Tan, Mindy Chew, Evan Yee, and Elle Jin Ning from the SSHSPH External Relations Office for their unwavering support.

We thank all participants who have taken part in the research accompanying our White Paper, as well as individuals and organisations who have helped us reach out to relevant stakeholders and participants to complete our research. Finally, we apologise if we have missed anyone out, but we are grateful to every single person who has been instrumental to this collective endeavour.

Summary of Key Terms¹

Non-Suicidal Self Injury (NSSI)

Refers to the intentional self-inflicted destruction of body tissue without suicidal intention and for purposes not socially sanctioned (Cipriano et al., 2017; Nock, 2010). Common examples of NSSI include self-cutting, self-hitting, burning, and self-scratching, among others.

It is important to emphasise that NSSI is not driven by an intention to end one's life. Although suicidal intent can be difficult to assess in cases of ambivalence or concealment, differentiation is an important factor for determining appropriate treatment and intervention.

Suicide

For the purposes of this White Paper, suicide refers to the act of intentionally ending one's own life (Nock et al., 2008), including clear evidence of suicidal intent and self-harm. This is also in line with the Attorney General's Chambers of Singapore classification of suicide.

Suicide Behaviour

Refers to the range of non-fatal behaviours that include thinking about suicide (or ideation), planning for suicide, and attempting suicide.

Suicide Attempt

Refers to the suicide behaviour of engaging in self-directed, potentially injurious behaviour in which there is at least some intent to die (Klonsky et al., 2016; Nock et al., 2008).

For the purposes of this White Paper, suicide attempts will include both impulsive and non-impulsive attempts. While not distinguished in this paper, it should be noted that not

¹ The International Association for Suicide Prevention has also published language guidelines when discussing suicide. More details can be found at https://www.iasp.info/languageguidelines/.

all suicides are planned and that impulsiveness has been found to be a potential factor in the spectrum of suicide ideation, to suicide planning, to suicide attempt (Klonsky et al., 2016; Lim et al., 2016).

Suicidal Ideation

Refers to having thoughts of engaging in behaviour that is intended to end one's life (Nock et al., 2008). Suicide ideation exists on a spectrum of intensity, from general desire without any active intention, plan, or action, to more active ideation that involves planning and determined intent to act on the plan (Harmer et al., 2024).

Suicide Stigma

Refers to the negative attitude and perception towards persons who have died by suicide, or towards persons who have attempted suicide, often being perceived as "weak", "reckless", or "selfish" (Carpiniello & Pinna, 2017) This stigma sometimes also extends to survivors of suicide loss which can manifest as feelings of shame, guilt, blame, and social awkwardness (Pitman et al., 2018).

Survivor of Suicide Loss

Refers to people who are bereaved by the death of a loved one by suicide. This could include family members, friends, relationship partners, among others.²

Planned Suicide

Refers to the suicide behaviour of formulating a specific set of steps through which one intends to die (Nock et al., 2008). This could include detailed elements such as method, place, and preparatory actions (Millner et al., 2017).

² It is also of note that while the greatest impact of suicide may be felt by those closest to deceased, feelings of grief and loss may also be felt by larger social circles who are also exposed to suicide (Cerel et al., 2019).

Introduction

Every life lost to suicide is one loss too many. This White Paper aims to establish a baseline understanding of the current landscape of suicide and suicide prevention in Singapore. It makes the case for suicide prevention as both a global and local imperative by discussing notable trends and factors that influence suicide rates both locally and abroad. The White Paper also includes a comprehensive set of research done on the topic including case studies of other countries that have implemented official national suicide prevention strategies, interviews with relevant local and internationals stakeholders involved in country-wide suicide prevention efforts, as well as public consultation surveys and focus group discussions with Singaporeans across demographic groups and identified vulnerable populations.

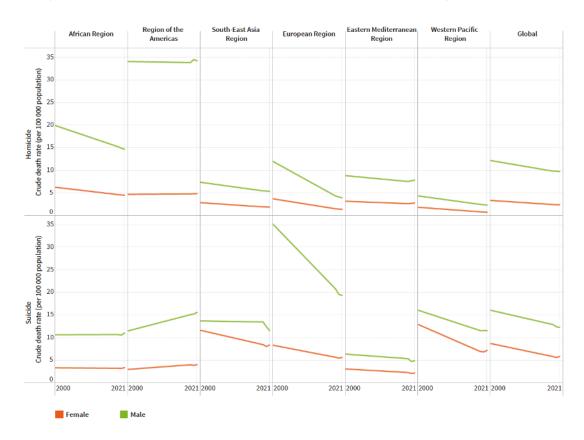
The findings of this White Paper also inform a set of recommendations offered by the Project Hayat Working Group—the SAVE LIVES framework—which will be able to inform the development of a comprehensive national suicide prevention strategy for Singapore.

Suicide Prevention: A Global Imperative

In 2015, the United Nations General Assembly set several Sustainable Development Goals (SDGs) of which Goal 3: Ensure healthy lives and promote well-being for all at all ages had a target (3.4 of SDGs) that reads "By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being" (*Suicide in the SDGs*, 2021). Suicide rates are explicitly named as an indicator (3.4.2) for the SDGs.

According to a World Health Statistics 2024 report by the World Health Organization (WHO), an estimated 717,000 people died by suicide globally in 2021 (World Health Organization, 2024). **Figure 1** summarises global and regional trends in mortality due to suicide and homicide.

Figure 1. Global and regional trends in the mortality rates due to suicide and homicide, 2000-2021. Lifted from *World Health Statistics 2024*, WHO



There has been significant progress in decreasing global suicide rates from 12.4 deaths per 100,000 in 2000 to 9.1 deaths per 100,000 in 2021. Despite this, as indicated in the figure above, the rates of suicide deaths for men are still more than double that of women.

While suicide occurs throughout the lifespan, globally suicide is now the third leading cause of death among young persons aged 15-29 years old (*Suicide*, 2024), up from being the fourth leading cause of death for the age group in 2019. A separate report by the WHO also suggests current suicide prevention efforts are still insufficient and calls for a global acceleration in prevention efforts to reach the 2030 target goals (World Health Organization, 2021b).

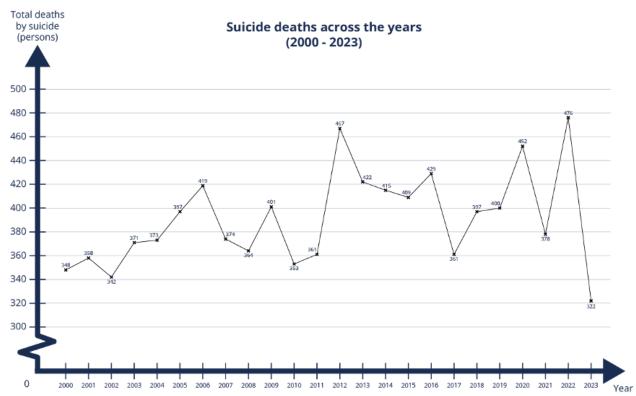
Further, it is estimated that of the number of suicide deaths globally, as many as 60% occur in Asia (Chen et al., 2012) and approximately one in four deaths occur in the WHO Western Pacific Region (World Health Organization, 2021b), which Singapore is a part of. These statistics serve as a strong impetus for continued and enhanced efforts for suicide prevention not just in Singapore, but for the Asian region as well.

The Singapore Imperative for Suicide Prevention

Suicide Statistics in Singapore

Samaritans of Singapore (SOS) provided the Project Hayat Working Group with the following statistics on suicide in Singapore to understand the current location situation as well as identify any trends over time. **Figure 2** summarises the number of suicide deaths in Singapore from 2000-2023.

Figure 2. Suicide deaths across the years in Singapore, 2000-2023. Graphic provided courtesy of Samaritans of Singapore



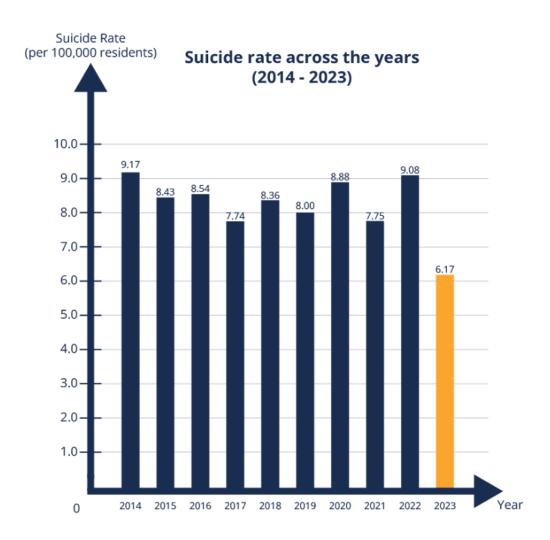
In Singapore, suicide remains the leading cause of death for persons aged 10-29 years old (Shafeeq, 2024). In fact, suicide constituted 38.7% of all deaths in this age group in 2022. Singapore also saw 476 suicide deaths that year, its highest recorded number since 2000 (Samaritans of Singapore, 2023). Suicide deaths among the elderly aged 70-79 also saw the highest increase of 60% compared to the previous year, indicating that youth and older adults are key age groups of concern for suicide in Singapore.

A year later, in 2023, Singapore saw its lowest recorded number of suicide deaths of 322.³ However, Singapore cannot afford to be complacent about its efforts to further prevent suicide. Suicide remains the leading cause of death for persons aged 10-29 years old for a fifth consecutive year, constituting approximately 30% of all deaths within this age group in 2023 (Samaritans of Singapore, 2024). For every suicide death, there would be many more non-fatal suicide attempts: the Singapore Civil Defence Force (SCDF) responded to an annual average of over 500 attempted suicides between 2018 and 2022 (Ministry of Health, 2023), suggesting a broader issue may persist even if suicide death rates are decreased. **Figure 3** summarises the trend in suicide rate in Singapore from 2014-2023.

The Samaritans of Singapore which runs a 24-hour hotline for individuals in crisis, responded to over 47,000 calls in 2023 - an average of 128 a day - with 21% of these calls having expressed suicide risk. On top of their hotline, SOS' CareText platform was launched in 2022 to offer an alternative format for help-seeking. This platform received over 20,000 texts, with almost 8,000 users with suicide risk (*Annual Reports*, 2024). SOS also had over 300 Active Rescue activations to respond to individuals who were at imminent risk of suicide. This serves to further nuance the understanding of the Singapore landscape for suicide beyond the suicide death rates and illustrate the continued need for strengthening suicide prevention efforts.

³ According to the written answer for the sitting of Parliament on 9 September 2024, these are provisional data, and the finalised figures will be published in the following year's report. See: https://www.moh.gov.sg/news-highlights/details/decrease-in-suicide-rate-and-measures-to-enhance-ment al-health-support-for-vulnerable-groups

Figure 3. Suicide rate across the years in Singapore, 2014-2023. Graphic provided courtesy of Samaritans of Singapore



It should also be noted that deaths in Singapore are only classified as suicide when there is clear evidence of suicidal intent and self-harm. Cases that are unable to determine clear intent tend to be classified as "unnatural death" or "fall from a high place" instead. This means that official statistics as reported here may underestimate the true number of suicide deaths. The Immigration & Checkpoints Authority (ICA), which maintains the birth and death registry in Singapore, reported deaths in 2023 under categories such as "mental and behavioural disorders" (n=13), "falls" (n=121),

"accidental poisoning" (n=36), "accidental drowning" (n=23), and "all other external causes" (n=24) (Immigration & Checkpoints Authority, 2024). These categories might also encompass several suicides where intent and self-harm are not clear from coroner investigations.

Potential underreporting poses concerns for obtaining an accurate picture of suicide in Singapore, as well as accurate and timely identification of specific vulnerable populations for tailored intervention. This highlights a potential need of a broader approach to data collection and analysis of suicide deaths in Singapore.

Demographic Trends

Similar to global trends, males in Singapore are over two times more likely to die by suicide than females (**Table 2**). In 2023, males comprised 68.9% of suicide deaths, which represents a slight increase from 66.6% in the prior year.

Table 2. Suicide deaths in Singapore by sex, 2018-2023

SUICIDE DEATHS						
YEAR/AGE	MALE	FEMALE	TOTAL			
2018	283	114	397			
2019	266	134	400			
2020	320	132	452			
2021	258	120	378			
2022	317	159	476			
2023	222	100	322			

When disaggregated for sex and age, it was found that males in the 20-29 years old age group maintained the highest number of suicide deaths across years from 2018-2022 (**Figure 4a**). This trend was less consistent among females, where the age group with the highest number of suicide deaths fluctuated between the 40-48 years old age group in 2019 and 2020, to 20-29 years old in 2021, to 50-59 years old in 2022 (**Figure 4b**).

Figure 4a. Number of male suicide deaths by age group in Singapore, 2018-2022

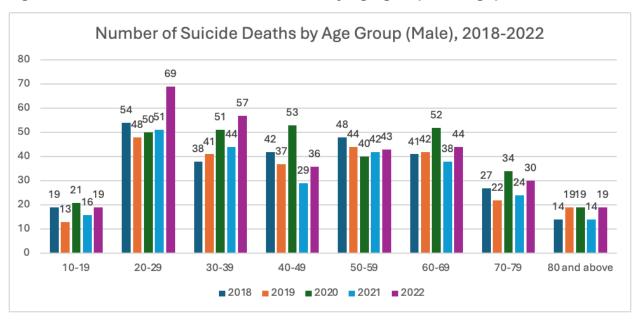
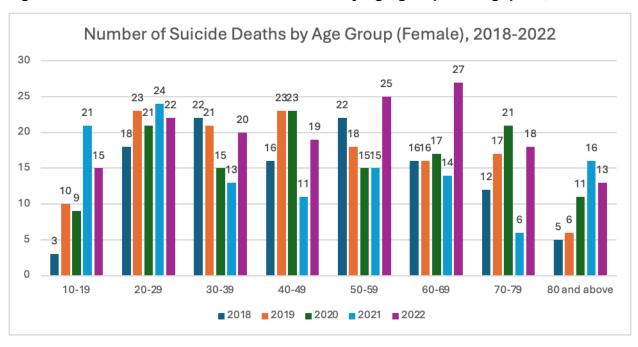


Figure 4b. Number of female suicide deaths by age group in Singapore, 2018-2022



Ethnicity also appears to be a demographic factor for suicide deaths in Singapore. In observing the number of suicide deaths across major ethnic groups and gender (**Table**

3), the data suggests that Indian men were disproportionately dying by suicide relative to Singapore's population. Even though Indian men make up approximately 4% of Singapore's total population, the number of suicides by Indian men make up approximately 17% of Singapore's total number of suicides (Department of Statistics Singapore, 2023).

Ethnic differences were also noted in previous research on risk and protective factors for suicide behaviour in Singapore, which found that Malays and Indians in Singapore tend to have more protective factors for suicide than Chinese persons, including more religious and familial support structures (Mak et al., 2015).

Table 3. Suicide deaths in Singapore by ethnicity and gender, 2018-2023

	Suicide Deaths												
		Chinese			Malay			Indian			Others		Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
2018	208	86	294	10	5	15	50	13	63	15	10	25	397
2019	200	101	301	14	9	23	39	14	53	13	10	23	400
2020	213	107	320	14	5	19	78	11	89	15	9	24	452
2021	190	98	288	6	2	8	54	14	68	8	6	14	378
2022	223	130	353	11	11	22	63	11	74	20	7	27	476
2023	151	73	224	12	4	16	44	16	60	15	7	22	322

Demographic breakdowns such as these allow us to better identify potentially vulnerable populations in Singapore. It also highlights the need for suicide prevention interventions that are sensitive to various socioeconomic, cultural, and religious factors. Further data and research would be needed to fully understand the spectrum of factors and the extent which they influence suicide rates.

Methods of Suicide in Singapore

Between 2000 and 2004, the most common methods of death from suicides in Singapore included jumping, hanging, and poisoning. Jumping was the most prevalent

method, accounting for 72.4% of all completed suicides in that period, followed by 16.6% by hanging, and 5.9% by poisoning (Chia et al., 2011).

In contrast, data on suicide attempts reveals different trends. An analysis of admitted suicide attempters at National University Hospital (NUH) found that most patients had attempted suicide through overdose. It was also observed that Indian individuals were more likely to attempt suicide by overdose than their Chinese and Malay counterparts (Ho et al., 2016). Similarly, patient data from KK Women's and Children's Hospital (KKH) indicated that 74.2% of emergency department admissions for suicide attempts involved drug overdose (Chong et al., 2024). These findings suggest that overdose poisoning is a significant concern for suicide attempts in Singapore. However, it is important to note that this method of attempt is more likely to be represented in hospital emergency departments due to its lower lethality (Cai et al., 2022) and the higher potential for emergency interventions to be effective.

Given that trends in suicide methods may change over time due to shifts in access to means and demographic or geographic factors, it is essential for Singapore to enhance its surveillance of both completed suicides and suicide attempts to effectively identify and respond to emerging trends.

Understanding Factors of Suicide

Further to the trends noticed from data around suicide death is a need to understand underlying factors that influence suicide. One way to conceptualise this process is by exploring stressors, risk factors, and protective factors of suicide. **Table 4** below summarises some of these factors in Singapore across ethnicities (Mak et al., 2015).

Table 4. Proposed risk factors for suicide in Singapore, adapted from Mak et al., 2015

Stressors	Risk Factors	Protective Factors
Work-related issues Family-related issues Relationships Financial problems Medical illnesses	History of psychiatric illnesses Family history of psychiatric illnesses Living alone Alcohol or substance misuse Ongoing interpersonal problems Lack of confidantes Serious physical illnesses Poor coping skills Severe financial problems Unemployment	Faith in a religion Resolution of precipitants Receiving support from dependents Expressions of regret Positive plans for the future Willingness to seek help Good emotional support

Stressors, risk factors, and protective factors are still largely individual factors that underlie suicide. As we do not naturally exist in social isolation, it is also important for suicide prevention efforts to recognise ways in which the individual interacts with their environment.

Social Determinants of Health and Suicide

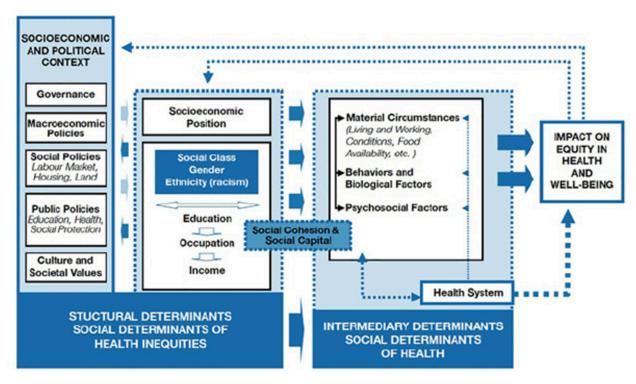
Many factors that influence suicide risk are determined by the conditions in which people are born, grow, work, live, and age; forces and systems that are not necessarily within individual control. These non-medical factors that influence health outcomes are

collectively referred to as social determinants of health (World Health Organization, n.d.).

WHO's Commission on Social Determinants of Health (CSDH) was formed in 2005 to support countries in understanding and addressing social factors leading to ill health and health inequities. Within the commission was a conceptual framework (**Figure 5**) developed to situate the circumstances of daily life and accompanying structural drivers.

Figure 5. Commission on Social Determinants of Health conceptual framework.

Reproduced from Solar & Irwin, 2007



The CSDH conceptual framework highlights how social, economic, and political mechanisms form socioeconomic positions that stratify populations in terms of income, education, occupation, gender, race/ethnicity, among other factors (World Health Organization, 2010). These socioeconomic positions will in turn influence intermediary determinants of health such as living and working conditions, food security, psychosocial

stressors, health behaviours like smoking and drinking. These intermediary determinants in turn have an impact on an individual's health and well-being.

This framework can similarly help us to understand the potential social determinants underlying suicide risk in Singapore and identifying where continued suicide prevention efforts can be focused. For the purposes of this White Paper, four simplified categories have been identified to illustrate how social determinants impact suicide risk: Social factors, demographic factors, psychological factors, health factors.

Social Factors

There are various social factors that can increase suicide risk in individuals, one of which is being a survivor of suicide loss. A study in South Korea found that the risk of fatal suicide attempts was three times higher in survivors of suicide loss than in bereaved families with non-suicide deaths (Jang et al., 2022). Lower socioeconomic position has been associated with an increased suicide risk (Batty et al., 2018). Some studies have suggested a positive correlation of countries with higher Gini coefficient—a measurement of income disparity—and higher suicide rates (Rajkumar, 2023). On the other hand, protective factors against suicide risk include an individual's practice of religion. Such practice has been shown to be a potential protective factor against suicide attempt (Choo et al., 2017), but not necessarily against suicide ideation (Lawrence et al., 2016)

Demographic Factors

Several demographic factors have already been raised in this White Paper including age, sex, and ethnicity. Other demographic factors that contribute to suicide risk would include being part of a minoritised population group, such as lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual (LGBTQIA+) persons, who are reported to have higher suicide risk and ideation (de Lange et al., 2022).

Psychological Factors

A history of trauma and suicide attempts constitutes a potent risk factor for future suicidal behaviour (Liu, 2019). Childhood adversity, such as sexual and physical abuse, also have enduring impacts on the development of suicidal behaviours during adolescence (Bruffaerts et al., 2015). Early-life adversity also has a role in shaping stable emotional, behavioural, and cognitive phenotypes related to stress response systems, contributing to increased long-term suicidal risk trajectories (Turecki et al., 2012). Psychiatric illnesses, such as post-traumatic stress disorder (PTSD) and anxiety disorders, significantly increase the risk of suicide (Bentley et al., 2016), while substance abuse, particularly alcohol and drug misuse, is strongly associated with suicidal behaviour (Yoshimasu et al., 2008).

Health Factors

It has been found that nearly all physical health conditions increased suicide risk (Ahmedani et al., 2017). Additionally, suicide risk is elevated in conditions that have extended durations of chronic pain. Such chronic illness has profound impacts on aspects of daily living including ability to work, sleep quality, stigma, perceived burdensomeness, and financial stress arising from treatment costs (Racine, 2018). There is growing interest and evidence in the relationship between traditional non-communicable diseases and mental health comorbidities (Stein et al., 2019).

Social Determinants of Suicide in Singapore

Applying the lens of CSDH's conceptual framework in Singapore and on the topic of suicide and suicide prevention, two studies done in Singapore provide a good overview of potential determinants that influence suicide risk and perceptions of suicide

The Singapore Mental Health Study

The Singapore Mental Health Study, spearheaded by the Institute of Mental Health (IMH) in collaboration with the Ministry of Health (MOH) and Nanyang Technological University (NTU), was a representative survey of Singapore's population conducted in 2010 and 2016. The survey sought to determine the prevalence of physical disorders,

psychiatric disorders, and suicidality in the population. Several reported key findings from the studies can be mapped to similar categories of social determinant factors.

Social Factors

The surveys found that married persons were more likely to attempt suicide than singles (Koh et al., 2023). Suicide risk and attempts increase further for individuals who are divorced or separated. Conflicts and quarrels are likely significant stressors for this population and may act as precipitants of suicide attempts (Subramaniam et al., 2014). Persons with higher educational qualifications were also reported to be more likely to attempt suicide (Koh et al., 2023).

Demographic Factors

The surveys provided a deeper explanation for higher suicide risk among young adults 18-29 years old than older age groups. Some of the reasons include a lack of emotional stability among younger groups compared to adults and youth lacking capacity to overcome interpersonal crises and may become more despondent as a result. The studies also postulated that older adults may be underreporting the presence of lifetime suicide behaviours from their younger days, which would contribute to the difference in suicide risk across age groups (Kudva et al., 2021).

Psychological Factors

The studies found a relationship between persons with pre-existing mental health conditions, such as Major Depressive Disorder (MDD), Generalised Anxiety Disorder (GAD), and other mood disorders, having higher risk for suicide behaviours (Koh et al., 2023). Emotional neglect, abuse, parental separation, divorce, or death of a parent were also associated with higher risk for suicide planning and attempts (Subramaniam et al., 2014).

The surveys also noted a treatment gap for psychological factors. While 72% of MDD patients who reported suicide planning and attempt have sought professional help, less

than 50% of patients with suicide ideation have sought professional help (Subramaniam et al., 2014).

Health Factors

The surveys found a relationship between the prevalence of Diabetes Mellitus and suicide behaviours. This could be due to the accumulation of Diabetes-related complications and disabilities, occurrence of adverse events, stress, and easy access to potentially lethal means such as overdose of insulin (Kudva et al., 2021). The studies also found that chronic pain was significantly associated with suicide behaviours, which is intensified due to increasing levels of hopelessness and desire to escape from pain (Kudva et al., 2021).

Save.Me Study by Singapore Management University

Community knowledge and beliefs around suicide are also a key social determinant of suicide, as it has far-reaching impact on stigma and help-seeking behaviour, as well as timely delivery of suicide prevention intervention.

Save.Me is a study led by Singapore Management University Principal Lecturer of Statistics and Project Hayat Working Group member Rosie Ching, conducted in partnership with SOS. The first study, "Save.Me" was conducted between January to February 2022 with 62 undergraduates who recruited 2,960 participants and explored knowledge levels of signs of suicide, beliefs propagated about suicide using and analysing results of the Suicide Stigma Index (SSI).

The second run of the study, titled "Save.Me.Too" took place between January to March 2024 with 140 undergraduates and surveyed 5,274 people in Singapore (Ching, 2024). In both iterations of the study, it found that over 60% of people surveyed had some kind of close connection to someone attempting or dying by suicide. However, 8 in 10 persons still believe that there is stigma associated with suicide, though suicide stigma tended to decrease the nearer the connection to suicide a person has.

For every two in three persons who would not support and save someone who is in a crisis or suicidal, more than 70% say it is their fear of making the suicidal person feel worse, their lack of ability to do anything, and their lack of knowledge. Only one in three Singaporeans "will do something to help" someone who shares personal thoughts of suicide. "Offering presence and continual support" is perceived as the most immediate and effective action, followed by "Encourage professional support, e.g. mental health counsellors".

Despite the perceived barriers, 9 in 10 respondents still believe that suicide can be prevented, with over 70% of younger respondents (under 21 years old) believing that suicide can be predicted.

Over 40% of respondents said they would be most likely to talk to a friend about their problems, meanwhile nearly 70% also said they would be more willing to talk to someone if they were able to be anonymous. A detailed list of key findings from Save.Me.Too can be found in **Appendix 1**.

Both the SMHS studies and the Save.Me studies help provide an overall baseline for understanding the current landscape of suicide in Singapore through the lens of social determinants—from its influence on suicide risk to its influence on suicide stigma and support systems in Singapore.

Current Suicide Prevention Efforts in Singapore

Based on the Save.Me studies, public perception of the effectiveness of support for a person facing a crisis and thinking about or affected by suicide is generally quite low. The closer the relationship to suicide death, the less effective respondents found support. Respondents under 21 years old in particular provided lowest support effectiveness ratings across generational groups. Considering such perceptions, it is relevant then to also review current suicide prevention efforts in Singapore.

Risk Assessments in Hospitals

Primary care physicians, who provide general medical care to patients, are widely considered to be one of the key potential gatekeepers in suicide prevention efforts. As individuals who die by suicide are more likely to visit a primary care physician than a psychiatrist (Luoma et al., 2002), it is important that primary care physicians are able to carry out suicide risk assessments should their patients be in distress.

To equip hospital-based practitioners, different medical institutions in Singapore have been using various sets of risk assessment tools and checklists with regards to suicide. For instance, most Accident & Emergency departments in Singapore's public hospitals use the Columbia Suicide Severity Rating Scale (CSSRS), a questionnaire used to assess a patient's suicide risk (**Figure 6**).

Other hospitals such as NUH's Adult A&E, Alexandra Hospital (AH) and Ng Teng Fong General Hospital (NTFGH) use the SAD PERSONS scale (SPS), another assessment tool to determine a patient's suicide risk in a clinical setting. This tool has been suggested for use by primary care physicians in Singapore (Ng et al., 2017). In this scale, risk factors that are amenable to intervention are distinguished from those that are not (**Figure 7**).

Figure 6. Columbia Suicide Severity Rating Scale (CSSRS)

Always ask questions 1 and 2.	Past	Month	
Have you wished you were dead or wished you could go to sleep and not wake up?			
Have you actually had any thoughts about killing yourself?			
If YES to 2, ask questions 3, 4, 5 and 6. If NO to 2, skip to question 6.	2		
Have you been thinking about how you might do this?			
Have you had these thoughts and had some intention of acting on them?		High Risk	
5) Have you started to work out or worked out the details of how to kill yourself? Did you intend to carry out this plan?	00000	igh isk	
Always Ask Question 6	Life- time	Past 3 Months	
6) Have you done anything, started to do anything, or prepared to do anything to end your life? Examples: Took pills, tried to shoot yourself, cut yourself, tried to hang yourself, or collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn't swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn't jump, etc.		High Risk	
If yes, was this within the past 3 months?			

Figure 7. The SAD PERSONS Scale for assessment of suicide risk

Box 1. SAD PERSONS scale for assessment of suicide risk:

- S Sex (male)
- A Age (< 20 or > 44 years)
- **D** Depression
- P Previous suicide attempt
- E Ethanol abuse
- R Rational thinking loss (psychosis)
- S Social support lacking
- O Organised suicide plan
- N No spouse (divorced or separated, widowed or single)
- S Sickness (presence of a chronic or debilitating illness)

Each risk factor that is present is accorded a score of 1 point, for a maximum of 10 points.

Patterson et al(13) recommended:

- · Close monitoring for patients with scores of 3 to 4
- To strongly consider hospitalisation for those with scores of 5 and 6
- Hospitalisation for further assessment for patients with scores of 7–10

Note: Regardless of the score obtained, overall clinical assessment is still paramount and the primary care physician should err on the side of caution.

Box 2. Risk factors for suicide:(10,24)

Amenable to intervention

- · Pervasive hopelessness
- · Alcohol/substance abuse
- Unemployment
- · Recent stressful life event
- Social isolation/poor social support (e.g. divorce, living alone, bereavement)
- · Relationship conflict, discord or loss
- · Barriers to accessing healthcare
- · Access to lethal means
- · Chronic physical illnesses

Non-amenable to intervention

- · Previous episodes of depression
- Past history of other psychiatric disorders, including personality disorders
- · Prior suicide attempts (regret at failure to die)
- · Male gender
- Older age
- · Previous psychiatric hospitalisation
- · Family history of suicide

Another assessment tool, the Collaborative Assessment and Management of Suicidality (CAMS) has been introduced to Singapore recently. It is an evidence-based approach to treat people suffering from serious thoughts of suicide and/or self-harm (CAMS-care, 2024). In the USA, CAMS is used by primary care practitioners to both identify and treat suicidal risk. After the identification of the root causes of a patient's suicidal thoughts, a multi-pronged treatment is proposed, which includes public and community awareness, screenings, suicide risk assessments, non-demand caring contacts, technology platforms for care, psychosocial services, as well as around-the-clock support.

It is important to recognise that suicide screening tools should not be relied upon as the sole method for assessing suicide risk. While the SPS is commonly used, its effectiveness in accurately predicting suicidal behavior remains uncertain (Warden et al., 2014). These tools often overlook key suicide risk factors that can be addressed through intervention, such as persistent hopelessness and access to lethal means. Additionally, they tend to omit consideration of protective factors, which are crucial for guiding intervention and treatment strategies. Therefore, it is more appropriate to view these tools as an initial step in the assessment process, with active suicidal ideation, particularly when accompanied by imminent risk, still necessitating urgent psychiatric referral for further evaluation (Ng et al., 2017).

Multi-Pronged Approach to Suicide Prevention and Intervention in Singapore (2020)

Responding to Parliament's call for a "Zero-Suicide Singapore" in March 2020 by Nominated Member of Parliament Anthea Ong, the Ministry of Health (MOH) outlined its "Multi-Pronged Approach to Suicide Prevention and Intervention in Singapore" on 25th March 2020.

Four key strategies were highlighted in this multi-pronged approach: building mental resilience, encouraging help seeking and early identification, supporting at-risk groups, and providing crisis support.

Building Mental Resilience

The Ministry of Education (MOE) conducts mental wellbeing programmes and workshops for students. Similarly, the Health Promotion Board also conducts similar programmes for students and working adults. Additionally, working adults also benefit from programmes under the Workplace Safety and Health Institute. Senior citizens have access to mental wellbeing programmes under the National Seniors' Health Programme. SOS also runs programmes on identifying suicide warning signs and where to seek help.

Encouraging Help Seeking and Early Identification

MOE has trained teachers and staff to identify students in distress, to monitor their wellbeing as well as to provide support alongside school counsellors. Students who require further support are referred by school counsellors to the Response, Early intervention and Assessment in Community Mental Health (REACH) teams for mental health assessment and intervention. Further, all schools have peer support structures to equip students to look out for another and to encourage peers in distress to seek help from trusted adults.

Youths aged 16-30 years old can tap on the Community Health Assessment Team (CHAT) by IMH which offers easy access to mental health resources and help via different avenues.

The Agency for Integrated Care (AIC) reaches out to seniors at risk. Further, the National Council of Social Service (NCSS) has launched the Beyond the Label Helpbot (Belle) which offers resources for individuals struggling with stress or anxiety.

Supporting at-risk groups

IMH operates a 24-hour mental health hotline and SOS operates a hotline funded by NCSS. In 2017, MOH also established the Inter-Agency Research Workgroup on Youth Suicides to study issues surround youth suicides and to foster greater collaboration among the different agencies.

Providing Crisis Support

IMH operates a Crisis Response Team that fields calls from the Singapore Police Force on cases of attempted self-harm. This team conducts on-site assessment of these individuals and connects them with appropriate intervention and follow-up management. Suicide attempts were decriminalised in Singapore through the Criminal Law Reform Act in 2019 with changes taking effect at the beginning of 2020. This decriminalisation signalled a change in national perspective where suicidal attempts are no longer treated as a crime but are recognised as a cry for help.

National Mental Health and Well-being Strategy

The National Mental Health and Well-being Strategy, released in October 2023, builds upon the foundation laid by the earlier "Multi-Pronged Approach". It outlines a comprehensive plan to improve Singapore's mental health ecosystem and strengthen suicide prevention efforts.

Expanding Mental Healthcare Capacity

The strategy focuses on increasing access to care. This includes expanding bed capacity at the Institute of Mental Health (IMH), growing mental health services in primary care settings within communities, and simplifying the help-seeking process. Additionally, the strategy aims to provide round-the-clock support services, including a crisis response team and centralised case management, for those in immediate need. The strategy also highlighted the crisis support work that SOS has been doing for suicide prevention in this regard.

The strategy highlighted the IMH Crisis Response Team (CRT)—a joint initiative by IMH, Singapore Police Force, and the Ministry of Health—which was piloted in 2021 to equip police officers with assessments to determine appropriate and timely interventions for attempted suicides. The pilot introduced a triaging system to help the police or other first responders ascertain whether individuals with suicide risk should be admitted to IMH or conveyed to other acute public hospitals following such crisis calls. The strategy

highlighted that the Singapore Police Force's Crisis Negotiation Unit plays a role in handling individuals attempting suicide.

IMH sees an average of 650 people aged 10 to 19 years old each year with acute stress reactions and emotional disorders presenting with suicidal behaviour, half of whom do not have mental health conditions. Specifically for these youths at risk of suicide or severe self-harm, there are plans to develop an intermediate facility that has integrated psychosocial support and is non-stigmatising and safe for them to stabilise themselves by 2030. The facility will be supported by a multidisciplinary team of psychiatrists, psychologists, social workers, care staff and nurses. A centralised case management team will also be piloted within IMH, NUH, and KKH to ensure coordination and a smooth handover of post-discharge cases with suicide risk.

Enhancing Capabilities of Service Providers

Recognising the importance of early intervention, the strategy emphasises upskilling frontline personnel. A National Mental Health Competency Training Framework has been developed to train individuals by 2025 to better identify individuals at risk of suicide.

The strategy lays out suicide risk assessment and intervention as a core competency of the training framework. Core competencies include: *knowledge* (understanding risk factors that contribute to an individual's suicidal behaviour, the ways personal and societal attitudes affect views on suicide and interventions, the resources that are available to an individual with suicide risk, and the key elements of an effective suicide safety plan and the actions required to implement it), *skills* (engaging with an individual at risk of suicide in a safe manner, conducting suicide risk assessment and articulate an individual's risk level for suicide, developing a safety plan for an individual with suicide risk, and providing guidance and suicide intervention to an individual with suicide ideation in ways that meet their individual safety needs), and ensuring that individuals have the common *attitudes* expected of practitioners toward individuals with mental health needs or conditions.

Promoting Mental Health

This area addresses mental health awareness and education. Public education campaigns, school curricula incorporating mental health and social-emotional learning, and online safety initiatives are part of the strategy. These include managing or mitigating the impacts of harmful online content, such as those that glorify suicide. Resources for parents and well-being circles within communities will further promote mental well-being across all ages.

Improving Workplace Mental Health

Recognising the impact of the workplace on mental health, the strategy will recognise employers who prioritise employee well-being. It also proposes developing "Workplace Mental Well-being Champions" to organise programmes and initiatives. Training employees as peer supporters will further strengthen the support system within workplaces.

While suicide deaths remain an important indicator to monitor, the strategy focuses on a broader approach to mental health and well-being, aiming to create a more supportive environment for all Singaporeans.

Community Efforts

Singapore's suicide prevention efforts extend beyond government initiatives; a vibrant network of community organisations plays a crucial role. These include the following:

- The <u>Assessment & Shared Care Team (ASCAT) programme</u>, developed by AIC and MOH, provides holistic care, assessment, and treatment within the community. Additionally, the REACH programme offers mental healthcare services, collaborating with schools, social service agencies, and general practitioners to intervene proactively, particularly within school settings.
- Launched in July 2022, <u>Well-Being Circles</u> overseen by the Ministry of Culture, Community and Youth (MCCY) aim to strengthen peer support networks within neighbourhoods.

- <u>SOS</u> provides a 24/7 crisis hotline and training programmes for individuals and organisations.
- Organisations like <u>Caring for Life</u> focus on early identification of suicide risk factors and upstream training within communities.
- The <u>PleaseStay Movement</u>, a non-profit group, advocates for youth suicide prevention and offers bereavement support.

These community efforts complement national strategies, fostering a wider network of support to suicide prevention in Singapore.

Developing a National Suicide Prevention Strategy

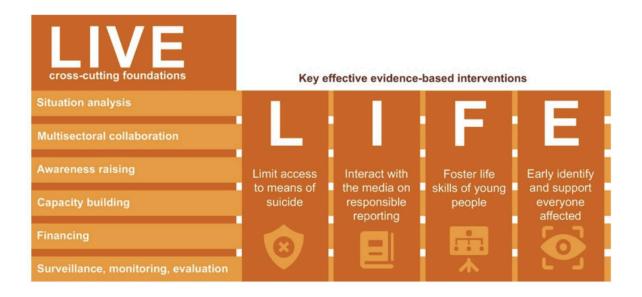
Despite efforts from various communities for suicide prevention, Singapore currently does not have a government-led, comprehensive national strategy for suicide prevention.

A comprehensive national strategy for suicide prevention helps to ensure that the government and other relevant stakeholders are committed to preventing suicide in Singapore, alongside ensuring the coordination and monitoring of such efforts. An investigation into the effect of the implementation of national suicide prevention programs on suicide rates in 21 Organisation for Economic Co-operation and Development (OECD) nations, including New Zealand and Japan, found that suicide rates decreased after the government initiated a nationwide suicide prevention program (Matsubayashi & Ueda, 2011), with the strongest effects in youth below 24 years old and the elderly above 65 years old. In addition, the implementation of national suicide prevention strategies in Norway, Sweden, Finland, and Australia, has led to a major reduction in suicide rates, especially in males above 25 years old (Lewitzka et al., 2019). As of 2024, 38 countries are known to have a national suicide prevention strategy (Suicide, 2024).

WHO LIVE LIFE Initiative for Suicide Prevention

In 2021, WHO released a LIVE LIFE Implementation Guide (World Health Organization, 2021a) to support countries starting suicide prevention efforts or looking to build on existing ones further to develop their own comprehensive national suicide prevention strategy (**Figure 8**). Using the LIVE LIFE guide, we can begin to explore the gaps in Singapore's current suicide prevention efforts and how to develop them too.

Figure 8. Conceptual framework of LIVE LIFE implementation, reproduced from the WHO



The LIVE LIFE implementation guide offers technical support for delivering four key evidence-based interventions and six foundational pillars to prevent suicide. The four interventions, which form the acronym LIFE, include:

Limiting access to the means of suicide

This includes the restriction of access—such as limiting, banning or regulating—to the means of suicide through national legislation and policy, reducing the availability of the means, reducing lethality of the means, and/or increasing availability and effectiveness of antidotes as well as improving clinical management following acute intoxication or injury related to commonly used means of suicide. There has been strong association between limiting means of suicide, such as firearms and toxic gas, and reducing suicide rates (Anestis & Anestis, 2015).

Interacting with media for responsible reporting of suicide

This aims to tackle four key challenges in media reporting of suicide which includes sensational headlines that fail to adhere to responsible reporting guidelines, lack of structural support for responsible reporting, limited collaborations between relevant stakeholders, and difficulties regulating publicly generated content on social media. Ethical and responsible media reporting of suicides, especially celebrity suicides, have a meaningful impact on total suicides in the population (Niederkrotenthaler et al., 2020).

Fostering socio-emotional life skills in young people

Key examples include the facilitation of a safe school environment for youths, provision of gatekeeper training for school staff, strengthening support services to students and staff, and establishment of support for specific at-risk groups. Promotion of life skills and emotion resiliency was found to be highly associated with a reduced suicidal behaviour among adolescents (Jegannathan et al., 2014).

Early identification and support to everyone affected by suicide and self-harm

This encompasses the training of non-specialised healthcare workers as well as relevant training to gatekeepers and stakeholders relevant to early identification and follow-up in the community. Netherland's gatekeeper training program for individuals from education and socioeconomic sectors (e.g., bank employees, insurance doctors, debt counselors), as well as from security and justice, transport, churches and mosques in 2016 demonstrated effectiveness in increasing knowledge and skills for suicide prevention (Terpstra et al., 2018).

The implementation of these interventions is also supported by the following six cross-cutting pillars:

Situation analysis

Involving the collection of relevant data which provides the current background and profile of suicide and suicide prevention.

Multisectoral collaboration

Collaborations between governments and partners facilitate data and knowledge sharing and promote transparency.

Awareness raising and advocacy

Including public campaigns and community events which aim to attract attention and awareness on suicide and support services.

Capacity building

Including suicide prevention in pre-service or continued training of health workers to bolster recipients' knowledge on suicide and prevention.

Financing

Involving effective fund requests to focus on the development and implementation of policies and strategies.

Surveillance, monitoring and evaluation

Collecting data on suicide and self-harm and how they guide interventions

Applying LIVE LIFE Framework in Singapore

Using this framework, we can begin to see aspects where current suicide prevention efforts in Singapore are still insufficient to completely implement the LIVE LIFE interventions (**Table 5**).

Table 5: Applying the WHO LIVE LIFE Framework in Singapore

Limiting access	Interacting with	<u>F</u> ostering	Early identification and
to the means of	media for	socio-emotional life	support to everyone
suicide	responsible	skills in young	affected by suicide and
	reporting of suicide	people	self-harm
Singapore	Singapore	There is a lack of	There is a lack of data
currently lacks	currently lacks	data and evidence in	and evidence in
legislation or	concrete media	Singapore in terms	Singapore in terms of
policy to restrict	reporting	of the extent of	the extent of training of
or reduce the	guidelines to	provision of	non-specialised
availability of	ensure responsible	gatekeeper training	healthcare workers as
means of	and ethical	for school staff,	well as relevant
suicide.	reporting on	strengthening	training to gatekeepers
	suicides.	support services to	and stakeholders
		students and staff,	relevant to early
		and establishment of	identification and
		support for specific	follow-up in the
		at-risk groups.	community.

Thus, this framework sets the impetus for the work of this White Paper—to determine what Singapore would need in its own comprehensive and sustainable national suicide prevention strategy. We keep in mind the unique cultural, socioeconomic, and political challenges faced by different population groups in Singapore, while still learning from how pioneering countries have gone in their suicide prevention journeys. We also remain in close consultation with the public, where the impact of such policy and strategy action will be felt.

Research Methodology

Study Design

An Empirically-Informed White Paper

The White Paper was developed in partnership with the Saw Swee Hock School of Public Health, National University of Singapore, to ensure that the White Paper was guided by a robust empirical research process that meets international public health standards of scientific rigour. Beyond the desk review highlighted in the earlier section of the White Paper, we embarked on three additional primary research projects. The data from these research projects will be used both in the White Paper, as well as in publications for scientific journals. More details on the research methods utilised for each project will be detailed in the respective sections that follow. A summary of the different research approaches and objectives can be found in **Table 6** below.

Table 6. Research approaches and objectives for an empirically-informed White Paper

Research Approach	Objectives
Desk Review of case studies of existing suicide prevention strategies	To review past research detailing the definitions of suicide, factors associated with suicide, as well as case studies in select countries that can provide lessons learnt and best practices for Singapore's suicide prevention strategy
In-Depth Interviews with international experts	To learn from the experiences of stakeholders who have been involved in the development of suicide prevention strategies in other countries and jurisdictions. These interviews explored the challenges faced in developing and implementing such suicide prevention strategies, best practices and lessons learnt to mitigate challenges and meet the objectives of local suicide prevention approaches, and recommendations for Singapore's suicide prevention strategy.

Focus Group Discussions with communities affected by suicide	To listen from communities impacted by suicide in Singapore, and highlight the experiences of individuals in the context of lived experiences with suicide, interactions with existing suicide prevention resources, and gaps in suicide prevention. These communities include people who have attempted suicide, survivors of suicide, people with lived experiences of mental illness, as well as other groups affected by suicide. These groups were identified through expert consensus in the Project Hayat Working Group.
Public Consultation with Singaporeans on suicide prevention	To gather perspectives on suicide prevention from a demographically-representative panel of Singaporeans through partnership with OPPi, an artificial intelligence-powered opinion crowdsourcing tool. The research sought to explore Singaporeans' attitudes on the importance of suicide, their experiences of help-seeking and supporting others for suicide, and their perspectives on how we should approach suicide prevention in Singapore.

A mixed methods approach, utilising both quantitative and qualitative insight, is essential to develop a robust White Paper that can inform policy recommendations and community services planning. Quantitative insights are important to better establish the epidemiology of various public health issues, such as the prevalence or incidence of certain phenomena. Our desk review was done to consolidate prevailing epidemiological data to characterise the scale and extent of suicide in Singapore. We also adopted a quantitative survey format in our public consultation to elicit the Singapore public's perspectives on suicide prevention, given that an understanding of trends around suicide prevention would be important to understand and shape our recommendations. It was also therefore important to work with OPPi to purposely recruit a demographically-representative sample through quota sampling of an online panel. This helps us reduce the impact of any sampling errors while ensuring an efficient sample size to inform this study.

Qualitative insights, on the other hand, are equally important for evidence-based policymaking. Since 2012, the World Health Organization has begun integrating qualitative insight to develop clinical guidelines. Qualitative insights help us better understand the 'why' and 'how' of phenomena, including suicide. Health systems

scholars and experts typically utilise in-depth interviews with expert stakeholders to investigate barriers and facilitators to developing and implementing health policies at a health systems level. We adapted this approach to learn from the experiences of other experts, and to better inform our own suicide prevention strategy. Focus group discussions were also held to gather insight from communities affected by suicide. Focus group discussions are typically used in health research to explore community perspectives on a focused topic. We adopted this research approach to ensure that different communities, identified through our Working Group, have a voice in articulating the issues that impact suicide and suicide prevention in Singapore.

Transformative Mixed Methods Research Paradigm

Public health research can be strengthened by examining how the research process can meaningfully generate insight and recommendations for public health. A theoretical and action framework can keep researchers accountable to the research process, and ensure that empirical data are intentionally and purposefully collected or generated to suit the eventual goals of the research.

A transformative paradigm was chosen to guide this research endeavour. Transformative mixed methods approaches traditionally utilise both quantitative and qualitative data to address issues of social change and inform methodological decisions of research studies in ways that eventually ensure a strong link between the research and advancing social change. Compared to traditional forms of research, a transformative paradigm focuses on participatory mixed methods (i.e. quantitative and qualitative methods) and places an emphasis on the use of research to spur change or action. In the context of this White Paper, the transformative paradigm has informed our research in several ways.

First, acknowledging that there are multiple realities shaped by political, social, cultural, economic, gender, and sexual identities, we ensured that a participatory co-creation process involving diverse partners were adopted to develop the research components, lead implementation of the research, and provide input into the analysis and

interpretation of our data. Second, beyond centering community voices in our research, a transformative paradigm informs our the design of our research questions, with its focus on not only public opinion towards suicide prevention, but centering voices from the ground to elicit potential structural and systemic factors that limit access to suicide prevention and crisis support services.

Overall, this research design and paradigm offers mixed methods insights that lead to policy recommendations. This was further strengthened through a modified Delphi method, through which communities affected by suicide and experts in our Working Group co-created a series of recommendations and a framework through a series of consensus-building surveys.

Desk Review: Case Studies of Existing Suicide Prevention Strategies

Evidence for the Impact of National Suicide Prevention Strategies

National suicide prevention strategies have played a crucial role in reducing suicide. Matsubayashi and Ueda (2011) investigated the effect of national suicide prevention strategies and programmes on suicide rates in 21 OECD nations, and found that suicide rates decreased after the government had initiated a national suicide prevention programme. The study found that this had led to a reduction in suicide rates especially in men, relative to women.

Another study by Lewitzka and colleagues (2019) on how suicide prevention strategies had led to reductions in suicide rates in four countries (Norway, Sweden, Finland, and Australia) compared to control countries, found that these national strategies are effective, with the greatest effect seen among males aged 25 to 64 years.

Furthermore, studies have estimated that investments in suicide prevention have strong returns on investments (ROI) for countries. A study commissioned in England found that at the end of the 10 year time period for their suicide intervention cohort, their model estimated that there was an ROI of GBP39.11 for every GBP1.00 invested in suicide prevention. They also found that 40 years of additional life were gained (McDaid et al., 2017). Most of the ROI was attributable to productivity and intangible costs, on top of gains made in healthcare and crisis response services.

Selection of Case Studies

Countries were selected for the case studies based on consensus from the Working Group, as well as initial desk research. These countries were selected based on geographical, economic, health systems, and cultural similarities to Singapore, and the availability of a suicide prevention strategy or policies.

Australia, England, Indonesia, Japan, and South Korea, were chosen for the case studies in which a systematic search for the respective countries' suicide prevention strategies were undertaken. This included reviewing the respective countries' published documents on suicide, insight from our in-depth interviews with international experts, as well as scientific literature detailing the suicide prevention strategies that each country had undertaken.

Australia

Australia's Fifth National Mental Health and Suicide Prevention Plan in 2019 was the first Australian national mental health strategy that recognised the importance of suicide prevention, and had set a clear direction for coordinated action by governments to more effectively address suicide.

It is in this Fifth National Mental Health and Suicide Prevention Plan, developed by the Department of Health and Aged Care, where Australia's first national suicide prevention strategy in Australia was developed. This three-year, whole-of-population strategy is part of the journey towards zero suicides in Australia. It is the first national suicide prevention strategy in Australia endorsed by every Commonwealth and state and territory Health and Mental Health Minister. Its focus is all suicidal behaviour (ideation, attempts and suicide).

In response to recommendations in the National Suicide Prevention Final Advice and the Productivity Commission Inquiry into mental health, the Federal Government announced the creation of a National Suicide Prevention Office in May 2021. This office is situated within the National Mental Health Commission, and is responsible for (National Suicide Prevention Office, 2024):

- Developing a National Suicide Prevention Strategy.
- Leading the development of a national outcomes framework for suicide prevention, which is informed by lived experience, and applied nationally and down to program & service level.
- Working with all jurisdictions to set priorities for suicide prevention research and knowledge sharing.
- Working with all jurisdictions and stakeholders to lead the development of a National Suicide Prevention Workforce Strategy.

This office has been critical in driving national efforts towards zero suicide through a

whole-of-government approach informed by lived experiences. Australia's National Suicide and Self-harm Monitoring System has also been established as part of the national effort to address suicide and self-harm in Australia. This effort improves the quality, accessibility, and timeliness of data on deaths by suicide and on self-harming and suicidal behaviours. Data from the system charts back to 1907 to present day. In 2022, the suicide rate was 12.3 deaths per 100,000 population—down from a post-2006 high of 13.2 in 2017 and 2019.

The 2020-2023 strategy provides strategic direction for suicide prevention efforts around Australia by setting out 24 areas of focus across four 'priority domains' and three 'priority foundations'. There is consensus from all governments and the suicide prevention sector more broadly that these areas of focus are the highest priority. The areas of focus have been chosen in the context of existing investments in suicide prevention, the opportunities and challenges facing suicide prevention in Australia and the maturity of our current system at the time of drafting the strategy (**Table 7**).

Table 7. National areas of focus, priority domains, and priority foundations for Australia

Priority Domains	Areas of focus
Supporting individuals and communities to seek help and support others	 Endorse well-evaluated population-wide and localised context-specific suicide prevention public education campaigns Where appropriate, support evidence-informed suicide prevention community connector training to better support individuals and communities Support workplaces across Australia to become mentally healthy workplaces
Building a system of care to change the trajectory of people in suicidal distress	 Support and enable improvements in access to quality mental health services Consider the design and integration of government-funded crisis helplines Consider extending existing aftercare services for people who have attempted suicide to include anyone in suicidal distress Consider establishing evidence-informed non-clinical

	 alternatives to emergency departments Consider new models of care in emergency departments that improve the experience for people with suicidal behaviour Explore the effectiveness and best utilisation of digital technology for suicide prevention Support evidence-informed systems to prevent the suicides of people receiving treatment in a public health service
Enabling recovery through post-crisis aftercare and postvention	 Increase the availability of aftercare programs following a suicide attempt Recognise the importance of postvention bereavement services in supporting individuals and families to recover
Community-driven Aboriginal and Torres Strait Islander suicide prevention	 Support a new national Aboriginal and Torres Strait Islander suicide prevention strategy and implementation plan Support culturally safe post-suicide attempt aftercare models Support clinically and culturally appropriate risk assessment tools and resources to support the assessment of risk of suicide in Aboriginal and Torres Strait Islander people
Priority foundations	Areas of focus
Building and supporting a competent, compassionate	Better target workforce development initiatives Support suicide prevention competency throughout
workforce	people's careers

As a whole-of-government effort, the national strategy has also translated into strong commitments by state-level governments to develop their own local suicide prevention strategies to fulfill these action plans (**Table 8**).

Table 8. Existing state-level strategies and frameworks

State	State-Level Suicide Prevention Strategies
Australian Capital Territory	The Australian Capital Territory Mental Health and Suicide Prevention Plan 2019-2024 aims to address the mental health needs of the territory. Its vision is a kind, connected and informed community working together to promote and protect the mental health and wellbeing of all.
New South Wales	Strategic Framework for Suicide Prevention: The whole-of-government framework for a whole-of-community response to suicide prevention (2022-2027). The framework defines a core scope of suicide prevention work as being: Prevention and early intervention, aftercare and support, and post suicide support.
Northern Territory	The Northern Territory Suicide Prevention Strategic Framework Implmentaion Plan (2023-2028), Keeping Everyone Safe, released on 10 September 2023 sets out actions across all sectors and stakeholders in the Northern Territory and guides investment in preventing suicide for the next five years.
Queensland	Every Life: The Queensland Suicide Prevention Plan 2019-2029 (Every life) is Queensland's whole-of-government and whole-of-community plan to reduce suicide and its impacts.
South Australia	In 2021, the Suicide Prevention Act 2021 (the Act) was passed to establish measures to reduce suicide in South Australia. It promotes best practice in suicide prevention, including suicide prevention training and education, identifying priority populations at risk of suicide, and the establishment of a Suicide Prevention Council. Four year goals for 2023-2026 include the reduction suicide related distress and death by suicide in South Australia, distress that may contribute to suicide, and improvements to community understanding and responsiveness to prevent suicide
Tasmania	The third Tasmanian Suicide Prevention Strategy (2023-2027). This third strategy builds on and extends previous work to

	enable a whole-of-community, whole-of-service-system and whole-of-government approach in Tasmania. This strategy was developed following the most extensive consultation process ever undertaken in Tasmania, setting a new focus for coordinated action while building on our current approach. It takes into consideration the new national arrangements for suicide prevention, including the critical role of Primary Health Tasmania.
Victoria	The Victorian suicide prevention framework (2016-2025) has 5 key objectives: • Build resilience - improving individual and community strength and capacity to prevent suicide, leveraging off a new focus on building resilience across the Victorian Government, including in schools, health and emergency services • Support vulnerable people - uniting behind groups who are experiencing higher risks of distress and suicide, including early responses to concerns among dairy farmers, regional communities, Aboriginal communities, emergency services workers, paramedics, police, and lesbian, gay, bisexual, transgender and intersex people • Care for the suicidal person - strengthened approaches to assertive outreach and personal care when a person who has attempted suicide leaves hospital, an emergency department or mental health service • Learn what works best - a commitment to test and evaluate new trial initiatives and share data with local communities • Help local communities prevent suicide - trialling a coordinated approach to suicide prevention in six local government areas across Victoria
Western Australia	The Suicide Prevention Framework 2025 provides the framework for a coordinated approach to address suicide prevention activity in Western Australia from 2021 to 2025 under the four streams of Prevention / Early Intervention, Support / Aftercare, Postvention and Aboriginal people.

Key Performance Indicators

The national suicide prevention strategy had not set out explicit goals for suicide prevention efforts except for a broad goal of working towards zero suicides in Australia.

Key Learnings for Singapore

The Australian national suicide prevention strategy demonstrates how suicide prevention can start of as a key areas of focus existing mental health and wellbeing efforts at the governmental level. This led to a consensus across governments within Australia that a National Suicide Prevention Office was necessary to coordinate national efforts at a whole-of-government level in 2021. This was accompanied by the development of a robust National Suicide and Self-harm Monitoring System to provide a better understanding of suicide and self-harm in Australia by:

- Explaining the nature and extent of suicidal and self-harming behaviours
- Improving the quality and breadth of data available to identify trends, emerging areas of concern and to inform responses
- Highlighting those at increased risk

The high-level commitment to establishing these offices and data monitoring systems provide a strong start to national suicide prevention efforts in Australia, and can be leveraged as key learnings for Singapore's national suicide prevention strategy.

England

England has faced persistently high rates of suicide, particularly among men and vulnerable groups. The 2023-2028 national strategy emerged in response to these trends, intending to create a coordinated national effort, drawing on lessons from previous interventions while focusing on a comprehensive public health approach.

England's first suicide prevention strategy was published in 2002, with a goal of reducing deaths by suicide by 20% by 2010. The strategy sought to be comprehensive, evidence-based, specific and subject to evaluation, and was delivered as one of the core programmes of the National Institute for Mental Health in England (NIMHE). Since England established its first suicide prevention strategy in 2002, it is worth noting that during that time national suicide rates have been the lowest on record (Department of Health and Social Care, 2023).

England's latest suicide prevention strategy for 2023-2028 include a greater focus on priority groups and promotion of a safe online environment (**Table 9**). With a multi-faceted focus on leadership, accountability, data, and high-risk (priority) populations, the strategy calls for collaborative efforts across government, health, and community sectors, highlighting real-world applications and potential outcomes.

1. Leadership and Accoutability: Mandates national leadership by appointing a National Suicide Prevention Lead. This leader is responsible for setting national goals, working with the government, the National Health Service (NHS), and local authorities to ensure alignment. Local authorities must develop and implement regional suicide prevention plans, ensuring accountability. The creation of clear leadership roles leads to better coordination, while local plans tailored to community needs foster consistency. Accountability mechanisms, such as periodic evaluations, ensure these local authorities stay on track with national goals. Regions with higher suicide rates have seen improvements as plans become more tailored to specific risk factors.

- 2. Data-Driven and Evidence-Informed Actions: Emphasizes the development of a robust real-time surveillance system for suicides and self-harm incidents, integrated with the NHS, coroners, and public health data systems. It uses this data to identify patterns, respond to risk groups, and inform policy decisions. Investments are made in research to understand suicide drivers further. Improved data collection has enabled authorities to respond swiftly to suicide spikes and deploy timely interventions. For example, if a particular demographic (e.g. middle-aged men in a certain area) experiences a sudden rise in suicides, local authorities can immediately target resources and support programs there. Enhanced evidence-based research has also guided national policy decisions.
- 3. Targeting High-Risk (Priority) Populations: Prioritises high-risk groups through tailored interventions, such as focused mental health services, employment programs, and targeted outreach. Special attention is given to marginalised groups, including individuals with mental health conditions, LGBTQIA+ individuals, and people with substance abuse disorders. Support is expanded in high-risk environments like prisons, schools, and hospitals. In the case of prisons, the number of suicides has dropped due to targeted mental health interventions and the deployment of additional resources like counselling and peer support groups. Programs designed specifically for men facing job loss and financial stress have also shown a reduction in suicide attempts, demonstrating the success of targeting those with higher vulnerability.
- 4. Collaborative and Cross-Sectoral Approaches: Focuses on collaboration, bringing together local authorities, NHS trusts, educational institutions, and criminal justice agencies to implement joint suicide prevention plans. By integrating mental health services into schools, workplaces, and communities, suicide prevention becomes a cross-sector responsibility. Collaborative approaches have led to notable successes. In one instance, a partnership between a local NHS trust and a university led to the implementation of a

campus-wide mental health program, resulting in a significant reduction in suicide attempts among students. Similarly, joint programs in workplaces, where mental health training and support are provided, have also helped reduce suicides among employees.

- 5. Postvention and Support for the Bereaved: Includes comprehensive postvention support for individuals affected by suicide. This involves counselling services, peer support groups, and targeted mental health interventions. Local authorities are also mandated to offer timely, accessible bereavement services. Postvention services have helped prevent further suicides by providing timely support to families and friends affected by suicide. In one community, where postvention services were enhanced, fewer suicides were reported among the bereaved, and the support system helped alleviate long-term psychological harm.
- 6. Workforce Development and Training: Mandates that frontline professionals receive suicide prevention training, enabling them to identify early signs of distress and provide timely interventions. Teachers, police officers, and healthcare professionals are trained to offer immediate support or refer individuals to specialised services. In one case, teachers trained in suicide prevention identified a student at risk and were able to intervene early, connecting them to counselling services. Police officers who had undergone the training have also been more adept at responding to mental health-related incidents, leading to a decrease in suicides among detainees.

Table 9. Focus areas of England's suicide prevention strategy 2023-2028

Priority Groups	Online Safety, Technology & Media
 Children and young people Middle-aged men People who have self-harmed People in contact with mental health services People in contact with the justice system Autistic people Pregnant women and new mothers 	 To improve online safety and reduce online harms related to suicide and self harm (2022 Online Safety Bill) Working with the Samaritans on an Online excellence programme (e.g. introduction of the Google OneBox, a pop-up alert providing contact details for Shout and the Samaritans) The development of the Hub of Hope by Chasing the Stigma—a mental health database bringing together local, national, peer, community, charity, private and NHS mental health support and services in one place for the first time Apps have also been developed in recent years to support specific groups, such as veterans, including the Samaritans Veterans app funded by the Office for Veterans' Affairs within the Cabinet Office

Overall, the strategy provides a structured and data-driven approach to suicide prevention. Through leadership, evidence-based practices, targeted interventions, and collaboration across sectors, the strategy has led to tangible improvements in reducing suicide rates. By continuing to focus on high-risk groups, reducing access to means, and fostering a culture of mental health awareness, the strategy aims to further reduce suicides across England in the coming years.

Key Performance Indicators

In the current suicide prevention strategy for 2023-2028, broad goals include:

- Reducing the suicide rate over the next 5 years—with initial reductions observed within half this time or sooner
- Improving support for people who have self-harmed
- Improving support for people bereaved by suicide

However, the suicide prevention strategy was also accompanied by an action plan, which set out actions, lead agencies, and delivery dates of more than 100 actions relating to the following areas:

- Improving data and evidence
- Providing tailored and targeted support to priority groups
 - All groups
 - Children and young people
 - Middle-aged men
 - People who have self-harmed
 - People in contact with mental health services
 - People in contact with the criminal justice system
 - Autistic people
 - Pregnant women and new mothers
- Addressing risk factors
 - Physical illness
 - Financial difficulty and economic adversity
 - Gambling
 - Alcohol and drugs misuse
 - Social isolation and loneliness
 - Domestic abuse
- Online safety, media and technology
 - Tackling online harms and harnessing the benefits of technology
 - Responsible portrayal of suicide in the media
- Providing effective and appropriate crisis support
- Tackling means and methods of suicide
 - Tackling means and methods of suicide
 - High-frequency locations
 - Actions to tackle means and methods of suicide
- Providing timely and effective bereavement support
- Making suicide prevention everyone's business

Key Learnings for Singapore

England's suicide prevention strategy offers numerous insights that Singapore can draw upon. By adapting key pillars such as leadership, data collection, targeted interventions

for high-risk groups, and cross-sectoral collaboration, Singapore can refine its suicide prevention efforts. Importantly, the unique societal and cultural contexts of Singapore, including its ethnic diversity, high-density urban living, and strong community bonds, provide opportunities to implement culturally relevant and innovative solutions that address the specific needs of its population.

Through a combination of targeted interventions, enhanced mental health services, and culturally sensitive approaches, Singapore can build on England's model to further reduce suicide rates and improve mental wellbeing across its communities.

Indonesia

While Indonesia does not officially report a national suicide rate, the WHO estimates this to be low at 2.6 per 100,000 population (though the quality of such data has been considered low). A study by Onie and colleagues found that the rate of underreporting is estimated to be 859.10% for suicides (Onie, 2023). A nationwide effort, led by a committee advised by the Ministry of Health and WHO Indonesia, sought to develop a national suicide prevention strategy and kicked off a situational analysis in 2021.

The situational analysis highlighted the risk, protective, and cultural factors that were relevant to suicide prevention, alongside issues of data and registry infrastructure, government legislation, the role of healthcare systems and institutions, research, current efforts, and data needs. It employed a variety of empirical research approaches to inform a national suicide prevention strategy. The situational analysis led to the recommendation of several action plans:

- Development and validation of a suicide registry that collates and investigates police and hospital records.
- Formation of a body responsible for overseeing the implementation and evaluation of these action points and coordinating future efforts as needed, in response to lack of continuity, coordination, and research in suicide prevention activities.
- Religious organizations can take a central role in suicide prevention in Indonesia given its centrality in daily life and cultural perceptions of suicide.
- Suicide prevention training for clinicians and laypersons.
- Integrating lived experience perspectives into all areas of suicide prevention
- Emphasising family and community-based approaches.

The Indonesian Association for Suicide Prevention was established in 2022 following this situational analysis as part of the first national suicide prevention strategy. Developed in 2021 by Indonesia's Ministry of Health and the National Suicide

Prevention Alliance (Asosiasi Pencegahan Bunuh Diri Nasional), the National Strategic Plan for Suicide Prevention (Rencana Strategis Nasional Pencegahan Bunuh Diri) of Indonesia focuses on 5 key components (**Table 10**; Kementerian Kesehatan Republik Indonesia, 2021):

Table 10. Five key components of Indonesia's National Strategic Plan for Suicide Prevention

Key components	Description
Gatekeeper training	Training healthcare professionals, teachers, and community leaders to identify signs of suicide risk.
Mental health promotion	Launch of a national mental health campaign called "Sayangi Dirimu" (Take Care of Yourself).
Community-based mental health services	Expanding access to community-based mental health services particularly in rural areas.
Media guidelines development	Development of guidelines for responsible suicide reporting, alongside the proposal of a new registry that collates and investigates police and hospital records to reduce under-reporting of suicide cases
Research and evaluation	Funding of research on suicide prevention and using information to track progress of the goals of the National Strategic Plan for Suicide Prevention

Signed in 2022 by religious leaders in Indonesia, *The Lombok Declaration* states that "religion has an important role in the prevention, treatment, and recovery of mental health problems ... that neglect and discrimination against people with mental health problems are acts that are not justified by religion and belief." The Lombok Declaration reflects the central role that religion plays in community perceptions of mental health, suicide, as well as stigma and help-seeking behaviours. The Declaration was also designed to be a global declaration, to be implemented first in Indonesia to capitalise on the country's G20 presidency in 2022.

The Lombok Declaration aims to destigmatise mental health as a taboo through religious institutions exerting their authority and powers (Onie et al, 2023). Religions have typically considered suicide as sinful, resulting in a reluctance to openly discuss suicide as well as a lack of empathy and support (Onie et al, 2023). As religion is considered an integral part of the majority of Indonesian population, it is important for these organisations to promote and destigmatise mental health and suicide - that mental health issues are not something that need to be hidden but rather issues that should be addressed, thus seeking social and professional support is recommended.

Key Performance Indicators

The national suicide prevention strategy had not set out explicit goals for suicide prevention efforts, but provided guidance on risk and protective factors for suicide, mental health promotion, prevention and early detection of suicide, and the development of programs and information systems (Kementerian Kesehatan Republik Indonesia, 2021).

Key Learnings for Singapore

Indonesia's Ministry of Health and WHO Indonesia worked with suicide experts and researchers to conduct a robust situational analysis in preparation for the launch of Indonesia's first suicide prevention strategy. This approach, utilising a mixture of qualitative and quantitative research methods, formed a strong foundation for the recommendations and actions plans made in the strategy. A similar approach could be undertaken in Singapore to better inform our recommendations for a whole-of-society effort.

As a fellow Southeast Asia nation, Singapore can learn from Indonesia's suicide prevention journey by looking into the roles of religions as both preventive and enabling factors affecting suicide risk, as well as the potential of tapping into religious institutions to promote the destigmatisation of mental health. The establishment of a new government registry that helps prevent under-reporting of suicide cases can be a consideration for Singapore in her suicide prevention journey as well.

Japan

Despite decreasing numbers of suicide over the past decade, Japan continues to have one of the highest suicide rates among high-income OECD countries, at 17.6 suicides per 100,000 inhabitants in 2023. These suicide rates have historically been linked with the economic situation of the country, such as during the recession in 2009, where suicide numbers peaked.

A movement towards a national suicide prevention strategy in respose to the rising suicide rates in the early 2000s (Ueda et al., 2017) cumulated in the official launch of the Basic Law on Suicide Countermeasures in 2006, where suicide started to be recognised as a societal issue. The law was subsequently amended in 2016 to enhance its effectiveness (Ministry of Health, Labour and Welfare, 2019) Additionally, the General Principles of Suicide Prevention Policy (GPSPP) was released in 2007 to create a comprehensive support system for individuals at risk of suicide and revised every 5 years according to the Plan-Do-Check-Act cycle. This involves policy drafts sent to prefectural governments to be revised and sent back to the Ministry of Health, Labour and Welfare before approval in cabinet. The Ministry of Health, Labour and Welfare (MHLW) oversees the implementation of the suicide prevention polices, with key stakeholders such as local prefectoral governments, Japan Suicide Countermeasures Promotion Center (JSCP), healthcare providers, non-government organisations, and community organisations. Local municipal governments were also mandated to develop and implement their own suicide prevention plans in accordance to the national strategy to fit specific community needs (Kawashima et al., 2020)

As part of the national strategy to promote suicide prevention in the community, the "Emergency Strengthening Fund for Regional Suicide Prevention" was established in the supplementary budget for Financial Year (FY) 2009 and was subsequently supported through the "Regional Suicide Prevention Strengthening Grant" in the supplementary budget for FY2014, and later included in the initial budget from FY2016. In FY2023, a total of 2.98 billion yen was allocated, with focus on projects that promote

the training of gatekeepers who connect individuals in need to appropriate organisations. This includes teachers, healthcare providers, and community workers to provide direct advice and support to persons in need. Other focus points include projects that target high-risk groups, such as those who have previously attempted suicide, as well as young people who have a history of suicide attempts or self-harm.

Key Revisions of the General Principles of Suicide Prevention Policy

The first outline in 2007 recognised suicide as a societal issue that was accompanied by strategies to comprehensively address social issues such as unemployment, bankruptcy, multiple debts, as well as long working hours. In 2012, the outline was reviewed to present a vision of a society where no one is driven to suicide. This begun a shift towards practical suicide prevention measures at the community level as a future challenge, recognising that comprehensive suicide prevention includes promoting measures based on the realities of individual target groups and requires the involvement and collaboration of multiple stakeholders. such as local public entities. non-governmental organisations and private organisations. The third revision process in 2017 included adapting to the ongoing context to target specific high risk groups. For example, there was a recognition that suicide mortality rates of individuals under 20 years of age continued to maintain at high rates - this prompted specific measures to include young people as a key target population of attention, such as the development of mental health support services in schools, enhancement of support and counselling systems for bullied children and victims of child abuse or sex crimes, education on how high-risk youth can request support, as well as and development of suicide prevention programmes for children and adolescents.

Taken together, the number of immediate priority measures expanded from nine in the second outline to twelve in the third outline, with new measures such as strengthening support for practical initiatives at the community level, further promoting suicide measures for children and young people, as well as further promoting measures related to work issues. These measures are illustrated in **Table 11** below.

Table 11. Principles for Suicide Prevention Policy

Clarify the	Innovative suicide research promotion programme
actual situation of the suicide	 (investigative research, verification and utilization of survey findings) Collection, organisation and provision of information on advanced initiatives Survey of children/adolescent suicides Coordination with the cause-of-death investigation system Accumulation, organization and analysis of information related to suicide prevention
Promoting awareness and observation by each individual	 Enlightenment of suicide prevention programme week Implementation of education about suicide prevention among student Enlightenment of mood disorder Dissemination of knowledge about suicide and suicide-related events Enlightenment of importance about SOS
Development of professional for suicide prevention	 Psychiatric education for general physicians Improving the quality of community/occupational health staffs Development of gatekeepers Support for supporters including family members and acquaintances Promotion of education of suicide prevention in university
Promoting mental health	 Promotion of occupational mental health supports Development of mental health support system in community Development of mental health support service in schools Enhancement of mental care for victims of disasters and support their life reconstruction
Enhancement of psychiatric care system	 Enhancement of measures for high-risk individuals with mental illnesses other than depression Enhancement of measures for high-risk individuals with mental illnesses, including depression, schizophrenia, several dependencies Development of human resources responsible for mental health medical welfare services
Preventing suicide through social cooperation	 Enhancement of consultation system in community Enhancement of consultation system for overloaded debts Enhancement of counselling system for unemployed people Enhanced support for caregivers Disseminate WHO guideline to the mass media Preventing suicide in bullied children

	 Enhancement of for telephone counselling service for bullying children Preventing threats of suicide in Internet Responding to suicide notice using Internet Enhancement of support systems for victims of child abuse and sex crime Enhancement of support system for economic hardship Enhancement of consultation services using internet and SNS Development of diverse consultations and strengthening outreach Disseminate information sharing necessary for cooperation among related organisations Promoting of places for stay contributing to suicide prevention Enhancement of support for expectant and nursing mothers Enhancement of support for LGBT
Preventing repeated suicidal behaviours in suicide attempters	 Enhancement of comprehensive support systems for suicidal attempters via collaboration among medical and community Development of regional medical centre for prevention repeated suicide attempt behaviours Development of safety places Development of supporting systems in schools and workplaces
Enhancement of support for bereaved families of suicide victims	 Supporting self-help groups for bereaved families of suicide victims Development of brochure for bereaved families of suicide victim Enhancement of support for bereaved children of suicide victim Improving the quality of governmental staffs contact with bereaved families Enhancement of provision of information for comprehensive support bereaved families of suicide victims Development of supporting systems for bereaved families of suicide victims in schools and workplaces
Enhancement of cooperation with private organisations	 Development of human resource for suicide prevention Establishment of regional cooperation system Support for telephone counselling service of private organisations Support for pioneering/trial efforts by private organisations
Development	Enhancement of suicide prevention of suicide among

of suicide programmes for children/adole scent*	 bullying children Enhancement of support for students Education how to request supports Enhancement of support system for children Enhancement of support system for adolescents Enhancement of support young generation based on their specific features Support for acquaintances
Enhancement of prevention of suicide caused by employment-re lated stress*	 Enhancement of long working hours promotion of mental health in workplace Harassment prevention measures
Enhancement of regional suicide prevention programmes*	 Development of regional suicidal profile and political package for regional suicide prevention programmes Development of guidelines for regional suicide prevention programmes Enhancement of regional suicide prevention centres Promoting the establishment of dedicated departments and professional staff for suicide prevention programmes in regional governments

Key Performance Indicators

During the first iteration of the GPSPP, the goal set was to reduce the suicide mortality rate of 2005 by more than 20% by 2016. Since then, this policy has undergone two more iterations in 2012 and 2017 respectively. The current iteration of GPSPP sought to achieve a reduction in annual suicide rate by 30% by 2026 compared to 2015 levels, with a larger vision of achieving a "society where no one is driven to suicide". Other indicators would include measuring outcomes relating to the number of training sessions conducted for community service providers, public awareness campaign reach, as well as implementation of gatekeeper training programmes.

Key Learnings for Singapore

Since its implementation in 2007, there was a reduction of 30.6% of suicide mortality rate in 2016 compared to 2005, achieving a reduction that exceeded the initial target of more than 20%. The annual number of suicides has also continuously decreased since

2010, reaching levels not seen the sharp increase in 1998. Despite this, suicide remains a serious situation in Japan, with annual number of suicides exceeding 20,000. Additionally, there was also an increase in suicides during COVID among vulnerable populations, especially among youths (Nomura et al., 2021). Other concerns included limited information on effectiveness of local programs, with few providing comprehensive evaluations of initiatives. This may hamper attempts to assess the overall impact of national strategy (Kawashima et al., 2020). Stigma surrounding mental health and suicide was also highlighted as barriers to help-seeking behaviour (Yoshimasu et al., 2021)

For Singapore, the practice of continuous adaptation in response to emerging challenges, looking into specific community needs and tailoring engagement and strategy accordingly, as well as collaboration between government bodies, non-governmental organisations and community groups as a way to enhance reach and effectiveness are key lessons that can be taken away from Japan's suicide prevention policy.

South Korea

South Korea has identified suicide to be a major concern, being the OECD country with the highest suicide rate. The suicide rate in South Korea had remained low up until the 1997 Asian financial crisis, hovering at 10 per 100,000 over a decade after official statistics were initiated in 1985. After 1997, the suicide rate in Korea surpassed 20 per 100,000 population, reaching 30 per 100,000 population in 2004. The suicide rate of South Korea in 2018 was 26.6 per 100,000 population.

The first national suicide prevention plan was launched in 2004, which involved a five-year plan to address suicide, and was subsequently renewed every five years. The establishment of this plan also led to a dedicated programme budget for suicide prevention work (Lee et al., 2018). South Korea first enacted the 'Act on the Prevention of Suicide and the Creation of Culture of Respect for Life' in March 2011. This act sought to protect the lives of people and foster a culture of respect for life by defining necessary matters regarding national responsibility and prevention policies for suicide. This included the opening of a Korea Suicide Prevention Center and the Korea Psychological Autopst Center in 2011 and 2014, respectively (Na et al., 2020).

As part of the fourth suicide prevention plan, a Suicide Prevention Policy Department was separately established within the Bureau of Health Policy in the Ministry of Health & Welfare in February 2018. Most recently, the Ministry of Health and Welfare launched a five-year plan for suicide prevention in 2023, which currently serves as the Fifth Master Plan for Prevention of Suicide that covered plans for the years 2023-2027.

Under this plan, there are five major strategies, 15 agendas, and 92 implementations tasks that must be implemented by South Korea's suicide prevention and mental health welfare centers under the direction of the Health Ministry. These efforts hope to reduce suicide rates by 30% by 2027.

The five major strategies under the Fifth Master Plan for Prevention of Suicide, along with the 15 agendas accompanying them are as follows (**Table 12**).

Table 12. Five major strategies of South Korea's Fifth Master Plan for Prevention of Suicide and accompanying agenda items

Major Strategy	Agenda Items
Strengthening life safety networks	 Having locally-tailored suicide prevention interventions Spreading a culture of respect for life Expanding and reorganising the national mental health screening system
Mitigating suicide risk factors	 Strengthening treatment and management Strengthening the management of risk factors for suicide Strengthening crisis response systems
Improving follow-up management after suicide attempts	 Strengthening postvention support for suicide attempters Strengthening postvention care for bereaved families Establishment of a postvention response system
Implementing client-friendly plans of suicide prevention	 Targeting and strengthening response to individuals in economic crises Targeting and strengthening response to individuals in mental health crises Tailoring responses to individuals based on their life stage and living arrangements

Enhancing the infrastructure
to deliver a suicide
prevention policy

- Establishing a suicide prevention policy basis
- Reorganising policy promotion governance
- Strengthening suicide prevention infrastructure

Key Features of the Fifth Master Plan

The Fifth Master Plan aims to implement pan-governmental efforts to curb suicide in South Korea, through collaborations with regional governments within the country. Several key features include (Lee, 2023):

- Suicide prevention programs will be tailored to regional differences. For example, the government will operate the program specialised for young people in new towns with many young people and operate a program specialised for seniors in rural areas where many older people live.
- Online monitoring of harmful keywords or phrases related to self-harm or suicide throughout the day, with a dedicated unit to report to police, carry out rescue operations and call for police help to investigate if needed.
- Hiring more staff for suicide hotline "1393" to improve response rates from 60% in 2022 to 90% by 2027. To expand its reach to counselling over social media.
- Strengthening follow-up care for people who have attempted suicide. The Korea Suicide Prevention Center will coordinate such efforts so that they can receive counseling and treatment support. Their medical expenses will be fully funded by the government starting from 2023.
- Mental health examinations will be conducted during the two-year mandatory national health examination, with a shortening of the timeframe from the current 10-year cycle to a two-year cycle.

South Korea's Gatekeeper Training Programme

Known as Suicide CARE, South Korea's Gatekeeper Training Programme was launched in 2011 and part of the social support provided to the country (Park et al, 2020). Being the only gatekeeper training programme in the world that is

government-standardised and continually updated, the programme is currently on its second edition with a total of 1.2 million individuals having completed this training.

The acronym CARE stands for the four key components of the training programme that teaches gatekeepers with skills:

- 1. **C**areful Observation: observe linguistic signals, behavioural signals and situational signals
- 2. Active Listening: listen for thoughts about suicide, reasons for thinking about suicide and to know how to react when faced with such situations.
- 3. **R**isk Evaluation: check for suicide risk, help the person in distress in a safe manner, to understand depression and to help piece together a sense of hope for the person in distress.
- 4. Expert Referral: know when to refer the individual in need to professional help and to finish the conversation on a "good ending".

Key Performance Indicators

The Fifth Master Plan for Prevention of Suicide sought to achieve three broad policy goals:

- To reduce suicide rates by 30% by the end of 2027: from 26 per 100,000 population in 2021 to 18.2 per 100,000 population in 2027.
- To strengthen regionally-tailored suicide prevention policies and create a life-respective and safe village concept across 17 cities and provinces by 2027.
- To improve postvention care for groups at greatest risk of suicide; specifically to provide interventions for suicide attempters and bereaved family members (from 6% coverage in 2021 to 40% coverage in 2027).

Key Learnings for Singapore

Since the implementation of South Korea's suicide prevention strategies, South Korea's suicide rates have steadily declined up until 2017 (20.7 per 100,000 population).

Compared to 2011, South Korea's suicide rate in 2021 reflected a 23% decrease. In addition, WHO has recognised South Korea's suicide prevention efforts as a model for other countries. In 2017, the WHO awarded South Korea the WHO Award for Excellence in Suicide Prevention, according to WHO's SAFE (Suicide Awareness for Everyone) framework.

For Singapore, the inclusion of a robust gatekeeper training programme, as well as a stronger focus on underprivileged groups of population, such as people from a lower socioeconomic backgrounds, the elderly, and the unemployed, can be some of the lessons learnt from South Korea's suicide prevention strategies. A strong gatekeeper training program also aligns closely with Singapore National Mental Health and Wellbeing strategy in its goal to equip individuals with skills to determine a person's risk level for suicide and to develop a safety plan.

In-Depth Interviews with International Experts

Methodology

This study utilised in-depth interviews aimed to investigate the perspectives of stakeholders from cities or countries who have implemented a national suicide prevention strategy. We sought to identify relevant countries from which stakeholders could be recruited through our Working Group. These selected countries included settings that had similar characteristics to Singapore, such as being high-income countries with developed health systems (Australia, England, New Zealand, United States of America), countries with cultural and religious similarities within the region (e.g. Indonesia, South Korea, Thailand), and countries that were similar to Singapore with regards to its trajectory of industrialisation (e.g. South Korea). We also recruited participants from Singapore, including suicide experts who have been working in policy, communities, and healthcare settings. Participants in this study were involved in the development of the respective countries' or jurisdictions' suicide prevention strategies.

Participants were therefore purposely sampled through a process of 'information power', in which participants were selected based on the power of the information that they would have in informing our study and achieving our research objectives. Sampling through 'information power' does not intend to achieve thematic or theoretical saturation. Within this approach, participants were recruited through snowball sampling based on the contacts of existing Working Group members, as well as through direct approach at academic conferences relating to suicide prevention.

Interviews explored the experiences of stakeholders in developing their respective countries' or jurisdictions' suicide prevention strategies, efforts to monitor and evaluate suicide prevention efforts, past challenges in implementing such efforts, identifying priority groups for suicide prevention, as well as the role of specific interventions for suicide prevention. Details may be found in **Appendix 2**. Each interview took place over the teleconferencing software Zoom, and lasted on average an hour. Participants did not

receive any reimbursement for their participation in this study. All interviews were audio-recorded and were transcribed verbatim. The use of expanded field notes and the analysis of secondary field notes data were conducted to generate themes within a predefined framework (Halcomb & Davidson, 2006; Hill, Tawiah-Agyemang, and Kirkwood, 2022). This predefined framework adhered to the categories of the interview guide, which then allowed us to inductively develop sub-themes within each category as reported in this study.

Participant Characteristics

The series of stakeholder interviews featured 13 representatives from Australia, England, Indonesia, New Zealand, South Korea, Thailand, Singapore, and the United States of America (USA). The participants included representatives from national suicide prevention offices, policymakers, leads of the respective national suicide prevention strategies, leads of local national suicide prevention associations, and the leads of non-governmental organisations that have formed alliances for suicide prevention. The representatives came from cities or countries who have either implemented a national suicide prevention strategy, or at the cusps of implementing their own national suicide prevention strategy. The names and appointments of the participants have been omitted to ensure that participants in this study remain anonymous.

Ethics Approval

Ethics approval for this study was obtained prior to initiating the research study. Ethics approval was granted by the National University of Singapore Saw Swee Hock School of Public Health Department Ethics Review Committee (Reference Number: SSHSPH-250). A copy of the ethics approval letter may be found in **Appendix 3**.

Findings

Policy and Governance Structure for Suicide Prevention

The importance of inter-agency collaborations in strengthening suicide prevention efforts

Experts interviewed highlighted how suicide prevention efforts cut across multiple sectors of government in areas of policies, research, and implementing interventions.

One example would be in the context of developing data collection frameworks for suicide prevention. To address the issue of the lack of real-time suicide data from coroners, New Zealand developed a comprehensive coronial data-sharing system between the Ministry of Justice and the Ministry of Health to track suicides. Under this system, data on suspected suicides provided by the Chief Coroner can be used for timely analysis, in tandem with other sources of healthcare data.

In addition, ensuring that efforts do not just involve cross-sector collaboration within the government, but also across communities should be a hallmark of suicide prevention strategies and efforts. An Australian representative highlighted the importance of fostering collaboration with numerous non-government organisations in Australia, especially with those targeting Australia's vulnerable populations such as Aboriginal and Torres Strait Islander people, LGBTQIA+ individuals, and rural communities. By involving key organisations in the design of the suicide prevention strategy, Australia hopes to ensure that the strategy is relevant to different regions and communities, ultimately reducing the rates of suicide and providing comprehensive support to those in distress.

When developing interventions for specific priority populations, it also becomes evident that cross-sector collaborations must be made. For South Korea, a particularly vulnerable population group are military personnel, which has seen a high incidence of suicides due to the demanding nature of military life. As such, a collaboration between

the Korea Ministry of Health and Ministry of Defense was established to develop targeted prevention strategies for this group of population.

In the context of Singapore, one representative highlighted a community group's focus on upstream prevention with evidence-based training and community development programmes, and how the organisation collaborates with various government agencies and statutory boards to broaden their impact and create more community safe spaces. These collaborations will in turn help enhance their services and develop a more comprehensive safety net within the community.

The importance of focusing on suicide prevention as a separate endeavour from mental health

Another topic that was highlighted in a number of interviews was the importance of focusing on suicide prevention separately from mental health. In our interviews, we learnt that while suicide prevention efforts are often couched within broader mental health strategies, national suicide prevention efforts should be viewed as a separate endeavor altogether given that many upstream determinants of suicide may not be related to mental health, and that many people who attempt suicide or die by suicide may not have any prior mental illness.

For instance, New Zealand initially developed a national youth suicide prevention strategy in the 1990s as a response to a spike in their youth suicide rates. However, a New Zealand representative argued that an all-ages strategy would have been more effective in the long-run and that the then-strategy had lacked ongoing evaluation and assessment. Given the importance of these broad, structural capacities in effectively addressing suicide, a National Suicide Prevention Office was established under the Ministry of Health to coordinate efforts nationwide. The representative further underscored the importance of suicide prevention as a separate endeavour from mental health, as well as the need for interagency collaboration across government sectors, emphasising that suicide prevention is a shared responsibility.

An Australian representative also highlighted the importance of the development of a whole-of-government suicide prevention strategy that is separate from mental health. The representative noted how the country's approach to suicide prevention has evolved over the past 20 years, shifting from a mental health-centric perspective to a broader understanding that encompasses multiple factors contributing to suicidal behavior.

A representative from the USA also shared how a national suicide prevention strategy should be taken as a separate endeavour from mental health and well-being strategies. Nevertheless, the representative highlighted that this national suicide prevention strategy could only be sustained through support and resources from government institutions and bodies that focused on improving the mental health and well-being of the nation. This illustrated some practical considerations for suicide prevention efforts, in which suicide prevention programmes could still rely on and partner closely with mental health and well-being promotion efforts, but still retain a focus on suicide prevention beyond the context of mental health and illness.

For Singapore, experts argued for the importance of distinguishing between mental health and suicide prevention, as suicides do not always stem from mental health issues. One expert argued that despite the crucial links between mental health and suicide prevention, a national suicide prevention strategy would be essential to address the growing numbers of suicides and to provide a comprehensive approach that includes prevention, intervention, and postvention. As such, for Singapore's suicide prevention efforts, it was emphasised that there is a need for a nationwide, coordinated effort involving all stakeholders, including government agencies, to create a holistic strategy that addresses suicide at all levels.

Key focus areas of suicide prevention

Identification of social determinants of suicide

One of the common themes found across all the interviews was the social and upstream determinants of suicide, as well as the importance of addressing both mental health and broader social determinants in suicide prevention strategies.

In Thailand, an expert shared on the challenges posed by the "saving face" culture prevalent in many Asian societies, including Thailand, which often prevents individuals from sharing their struggles openly, leading to isolation and increased risk of suicide. This illustrated how cultures can further intensify the stigma associated with mental health and suicide, especially within various Asian societies. Similarly, in the context of Indonesia, the expert highlighted the role of religion and religious leaders in perpetuating the taboo against mental health and suicide, and how this further perpetuated the stigma against mental health and suicide and prevented many individuals from seeking help.

Additionally, representatives from Australia highlighted the role of financial hardships and the lack of financial stability as key factors in leading to a higher rate of suicide. They also raised the difficulties in identifying and supporting vulnerable groups disproportionately impacted by suicide, such as men and culturally diverse communities.

Sharing a similar sentiment, another expert from Australia also acknowledged the influence of social determinants like employment, income, substance use, and discrimination, in suicide. The expert also highlighted the need to understand the nuances of suicidal behaviour across different demographic groups, as factors vary widely among various population groups, namely construction workers, victims of domestic violence, youth offenders, men, women, First Nations peoples, and gender-diverse individuals. Among marginalised groups such as the LGBTQIA+ community and First Nations people, discrimination, inequalities, and social attitudes contribute to heightened suicide risk. Hence, addressing these issues requires coordinated efforts to reduce inequalities and discrimination, and the representative emphasised the importance of government involvement in fostering social change.

Our expert from the USA emphasised the importance of addressing both mental health and broader social determinants. The expert further elaborated that while mental health is crucial, effective suicide prevention requires a comprehensive public health approach that includes recognising social factors and systemic issues. They stated that the USA strategy includes not just clinical interventions but also upstream prevention efforts to address risk factors early. Additionally, there is a focus on understanding how different populations, such as racial minorities and LGBTQIA+ individuals, experience and manage risk. As such, tailoring interventions to these diverse needs and ensuring research reflects this diversity is essential for effective prevention strategies in the USA.

Effective means restriction

Some of the experts interviewed also brought up the role of means restriction in suicide prevention, with a few suggestions to look into some international examples which show how the most effective strategies for reducing suicides involve means restriction, such as building barriers or restricting access to lethal methods.

For instance, an Australian participant drew on the example of *Suicide Safe*—an initiative carried out in Australia which involves restrictions of access to areas prone to a higher rate of suicide, such as rail networks. In addition, the initiative also involves the offer of immediate help-seeking, with some locations having infrared beams in place to alert when someone enters an unsafe area. The expert also suggested looking into some other case studies from countries like Sri Lanka, India and China, and how these countries have managed to reduce their suicide rates significantly by giving attention to access to pesticides or charcoal.

One expert from Singapore suggested that means restriction, such as limiting access to high places, is a broad method that does not differentiate between demographic groups. Despite its effectiveness in preventing suicides universally, the expert raised some concerns about whether such means restrictions are sufficiently targeted for vulnerable or priority groups, such as the mentally ill, LGBTQIA+ individuals, or those of lower socioeconomic status. As such, another expert suggested a focus on both immediate means restriction and long-term educational and support efforts in a national suicide prevention strategy, with a shift in perspective towards viewing suicide prevention as

supplementing a broader mental health improvement efforts, but not operate solely within the framework of mental health and well-being.

Identifying priority populations and inclusion of lived experiences for suicide prevention

Beyond identifying the upstream and social determinants of suicide, participants also recognised that suicide prevention efforts should be intensified in specific priority or vulnerable populations.

Experts whom we interviewed from Australia highlighted the importance of identifying key vulnerable populations, such as Aboriginal and Torres Strait Islander peoples (in the case of Australia), LGBTQIA+ individuals, and the rural communities, to tailor interventions specifically and effectively. In South Korea, several vulnerable groups have been prioritised in suicide prevention efforts. Youth is a key focus, with dedicated programmes in schools and military settings to address the pressures faced by students and conscripts. Additionally, college students and out-of-school youth are also identified as at-risk populations, with efforts made to provide support through counselling and gatekeeping programmes.

Another significant vulnerable group in South Korea is immigrants, particularly foreign workers who face challenges such as loneliness and harsh working conditions. Hence addressing their mental health needs is crucial, through ongoing efforts to develop support systems for this population. This expert highlighted research on North Korean defectors and their struggles with mental health and societal integration, which eventually led to targeted programmes to ease their transition and address trauma. The expert suggested that a focus on foreign workers may prove to be of great relevance to Singapore, as both countries share a similarly high number of foreign workers forming part of the nations' populations.

In Singapore, experts have highlighted concerning trends in suicide rates, particularly among young adults and the elderly, identifying them as priority groups for intervention.

Another expert emphasised the critical need for comprehensive data to shape effective prevention strategies and identify at-risk populations. This must be balanced with the need for confidentiality, while still enabling a deeper understanding of the suicide landscape. For example, if data reveals higher rates of suicide attempts in 'elite' schools compared to 'neighbourhood' schools, it would indicate the need for evidence-based, targeted interventions tailored to the specific pressures faced by these students. Such nuanced data is essential for developing strategies that address the unique challenges faced by different demographic groups.

In addition, the inclusion of lived experiences in suicide prevention strategies was also highlighted by a number of experts across many countries. Experts from Australia stressed on the importance of high-level government support and the inclusion of lived experience in shaping effective suicide prevention policies. Similarly, an expert from the USA also pinpointed the importance of the inclusion of lived experiences in suicide prevention strategies. For example, the USA approach includes listening sessions and surveys to incorporate diverse perspectives, particularly from those with direct experience of suicide. This participatory element is woven into the strategic framework, alongside a focus on health equity. Thus, ensuring ongoing engagement from individuals with lived experience and incorporating their insights into research and clinical practices will prove to be crucial for effective and compassionate suicide prevention efforts.

Challenges in implementation of strategies

The role of media and reporting in suicide prevention

The important role of media reporting on mental health and suicide was also a topic of discussion in most of the interviews.

For instance, experts whom we interviewed from Australia brought attention to *EveryMind*, a non-profit organisation which spearheaded a project that aimed to ensure ethical media reporting on suicide in Australia, as well as encouraging the use of safe language in the media with respect to the discussions of mental health and suicide. As

one of the pioneers in developing guidelines for responsible reporting of suicides in the media over 20 years ago, Australia has made sure to continue revising these guidelines to play a crucial role in how mainstream media in Australia handles suicide reporting. The guidelines emphasise avoiding sensationalism, not glamorising suicide, and withholding specific details about methods. Additionally, media outlets are encouraged to provide contact information for crisis support services like *Lifeline Australia* whenever they report on suicide-related news. This approach helps raise awareness about mental health resources and reinforces the message that suicide can be prevented.

In terms of social media, the *Mindframe* guidelines have been communicated to major platforms like Facebook, X, and Instagram. However, the global nature of social media presents challenges, as content from other countries without similar guidelines can be difficult to control. *Mindframe* actively works with the Australian branches of these platforms to promote responsible content management, especially in cases where clusters of suicide discussions appear. Although social media platforms often argue that they are not publishers of content, *Mindframe* has made some progress in getting them to take responsibility, including alerting authorities when there is concern about a user's well-being.

However, in New Zealand, the original comprehensive media guidelines have been diluted, leading to issues with the current media landscape that often seeks sensational stories for clickbait. The lack of an ability to prosecute media outlets for breaches in reporting guidelines exacerbates the problem. Moreover, an expert raised an interesting point in that there is a risk that raising "too much" awareness about suicide can lead to its normalisation, particularly among young people, who may see it as a common response to crises. This normalisation shifts the risk profile from those with mental illness to individuals without, emphasising the need for careful and responsible discussions about suicide in media and public forums.

Experts who we interviewed from the Asia region generally reflected on the underdevelopment or narrow implementation of media guidelines for the reporting of

suicide. For instance, in South Korea, current guidelines on ethical media reporting primarily address traditional media outlets. However, social media poses unique challenges, including the spread of harmful information and methods, which South Korea is actively working to regulate and address through legal and monitoring measures. Similarly, in Thailand, despite having previously played a significant role, traditional media and its impact have diminished as social media has taken over. According to our Thai expert, while traditional media's portrayal of suicides has become more responsible, social media remains a double-edged sword - it offers a platform for raising awareness but also allows for the spread of harmful content. As such, community groups in Thailand engage with social media companies such as X and Facebook to provide feedback and improve safety measures, while also leveraging social media to promote community groups' services to the public and connect with those in need.

The role of data in informing suicide prevention efforts

Experts highlighted that the focus on data and evidence-based approaches in suicide prevention is crucial, especially in countries like Singapore, where robust data on suicide-related outcomes and upstream factors is lacking. For instance, an expert from Singapore suggested that in Singapore, jumping from heights and hanging are the most common methods of suicide, but reporting and recording these incidents can be complicated. In addition, families of the deceased may try to have suicides ruled as accidents instead, impacting data accuracy.

An expert from Australia stated that the Australian government has made significant investments in data collection and coordination, particularly through the Australian Institute of Health and Welfare, to better understand and address suicide. This initiative aims to improve the portrayal of trends and data to inform government and community actions, with data collected not solely focused on suicides but also on suicidal behaviors, which allows for a more comprehensive picture. Such efforts include data collection from hospitals, mental health services, and ambulance services, providing insights into the demographic and situational factors involved in suicide attempts, which

will in turns help immensely with planning, measuring outcomes, and educating the public on suicide prevention efforts.

Likewise, another expert from Australia also pinpointed significant efforts to improve suicide data collection in Australia led by organisations like *Suicide Prevention Australia*, who have advocated for more accurate and timely data, resulting in the creation of a national suicide monitoring system by the *Australian Institute of Health and Welfare*. This system benefits from standardised data collection across states, which helps providing a clearer picture of suicide trends and subgroups. Many states have also developed their own registries, contributing to a more comprehensive national database. As such, these advancements highlight the importance of collaboration between government bodies, healthcare systems, and advocacy groups to enhance understanding and prevention of suicide.

However, some challenges in data collection were highlighted, including the lack of access to real-time and detailed data to better inform suicide prevention efforts. For example, an expert from South Korea highlighted the challenges of integrating data from various sources to monitor suicide trends effectively, as South Korea utilises a national surveillance system that combines data from statistical agencies, medical centers, and educational institutions. This system helps track and respond to changes in suicide rates and methods, but also requires consistent monitoring and update in real-time. In addition, an expert from New Zealand highlighted the lack of immediate real-time data from the coroners due to the lengthy time required for coronial inquiries, and how this may affect the accuracy of suicide numbers.

It is important to note that data collection cannot be viewed in isolation. It must be complemented by an understanding of the underlying social, economic, and psychological factors contributing to suicide. In the context of Singapore, one expert emphasised the need for more granular data, such as postal code-level information, to uncover patterns and better target interventions. For instance, identifying suicide hotspots through postal code analysis could inform strategies such as installing

barricades or increasing surveillance in high-risk areas. Yet, these efforts must be coupled with community engagement, mental health support, and broader societal initiatives to address the root causes driving these trends.

Voices From The Ground: Focus Group Discussions (FGDs)

Methodology

The aim of the focus group discussions (FGDs) was to elicit insights from diverse stakeholders to identify needs and gaps in order to formulate an effective national suicide prevention strategy for Singapore. Focus group participants tend to be organised in groups that share a common characteristic or identity, so as to promote interactions that reflect shared experiences of a given phenomenon under investigation. In the context of suicide prevention, a total of 15 groups were identified by the Working Group, comprising communities impacted by suicide and experts. The consensus on the choice of these groups were also informed by our desk review, which was presented to Working Group members. These groups were therefore chosen to reflect perspectives from a wide range of stakeholders who may have valuable insight on the topic of suicide prevention. The chosen groups are summarised in **Table 13**.

Table 13. Communities recruited for the focus group discussions

Community Groups

- First responders (police, civil defence force, paramedic, combat medic)
- Medical professionals providing care in the community
- Medical professionals providing hospital-based care
- Helping professionals (counsellors, therapists, social workers, volunteers from social service agencies, psychologists, hospice care workers, youth workers etc.)
- Educators (teachers tuition teacher, principal, part of a school board)
- Religious leaders (pastor, imam, spiritual director etc.)
- Media industry professionals (reporter, writer, social media influencer etc.)
- Employers and workplace leaders (anyone who holds a position of leadership in a company, regardless of number of employees).
- Youth advocates (between 21-35 years old)

Vulnerable Groups

- Suicide attempt survivors
- Had a loved one pass away from suicide

- Have an underlying mental health condition with a formal diagnosis (e.g. depression, anxiety)
- LGBTQIA+ people
- Migrant workers*
- Elderly people living alone (between 65-85 years old)*

Notes: *These focus groups are still being arranged as of the publication of the White Paper.

Participants were recruited using a broad approach through word-of-mouth from the study team and also through publicity recruitment posters published on social media (**Appendix 4**). Each focus group included no more than eight participants.

The FGDs for community groups took place over the teleconferencing software Zoom and the discussions were audio recorded. All participants were given the option to turn off their webcams and change their name to a pseudonym to safeguard their anonymity. Additional mitigating measures include having the research team set ground rules prior to the start of the focus group discussion, reminding participants that the FGD should be kept confidential and not to record or share the discussion content. Participants were provided with support hotlines from a list in the Participant Information Sheet in the event that they needed additional support following the FGD.

The FGDs for vulnerable groups were conducted in-person in collaboration with community groups. These in-person FGDs were also attended by someone who was clinically-trained in providing psychological support for individuals who may feel distressed during the discussion.

The FGDs were conducted in English and lasted between 90 and 120 minutes. Participants were reimbursed with \$50 cash via PayNow at the end of the FGD. Audio recordings of the interviews will be discarded after transcription has been completed by a member of the research team. Topics in the FGDs covered perceptions of suicide, awareness and attitudes towards existing programmes and efforts to prevent suicide, gaps in existing approaches to suicide prevention, and recommendations for suicide

prevention in Singapore. A copy of the FGD topic guide may be found in **Appendix 5**. The use of expanded field notes and the analysis of secondary field notes data were conducted to generate themes within a predefined framework (Halcomb & Davidson, 2006; Hill, Tawiah-Agyemang, and Kirkwood, 2022). This predefined framework adhered to the categories of the interview guide, which then allowed us to inductively develop sub-themes within each category. Verbatim quotes from participants were used to illustrate sub-themes reported in this study.

Ethics Approval

Ethics approval for this study was obtained prior to initiating the research study. Ethics approval was granted by the National University of Singapore Institutional Review Board (Reference Number: NUS-IRB-2024-188). A copy of the ethics approval letter may be found in **Appendix 6**.

Participant Characteristics

We recruited a total of 14 groups of participants (n=73), with each group comprising up to eight participants. While we recruited 13 different communities of participants, we held an extra FGD for people who have lost their loved ones to suicide, to ensure that more voices of survivors of suicide are reflected.

Findings

Understanding of Suicide

Participants who took part in the focus group discussions were diverse, and therefore had differing views on the nature of suicide. Participants called suicide "human self-destruction" (Survivor of suicide), a "permanent end to a temporary problem" (Community care worker), and that it was perceived to be "the better option" (Employer).

Participants were mindful that suicide does not exist as a siloed phenomenon: one had to look at the suicidal person holistically, starting from childhood, to examine how thought processes evolve to lead to their suicide. A therapist who helps the elderly said, "the starting point matters as much as the ending point." This need to understand processes was echoed by participants who had lived experiences of attempting suicide, with one participant mentioning that "I wasn't suicidal because I was mentally ill," and another responding that "suicide is a reflection of social health".

A handful of participants discussed how they were taken by surprise when someone they knew attempted suicide because their loved ones were good at evading detection. One said that some who attempt suicide may not have diagnosed mental health conditions, or those who do may not display visible signs. Two bereaved parents shared that their children appeared to be getting better—one stayed in his job for longer, another had made an appointment with a mental health professional—when they attempted suicide. Another parent lamented, "not if I had known earlier, but if I had known better," underscoring the necessity of suicide and mental health literacy.

For survivors of suicide loss, many reasoned that their loved ones did so out of unendurable psychological pain. One parent reflected that her child "never wanted to end his life, he wanted to end his pain." She shared that it was only after her gut-wrenching experience of vomiting from food poisoning had she empathised with the extent of her child's psychological pain. Likewise, another participant recounted that acquiring COVID, where she could not eat nor sleep, made her have suicidal thoughts,

reflecting how psychological pain is hard for others to empathise with until they go through a physical analogue. Other bereaved parents recounted their children's apologetic last words, revealing that these children did not make the decision to die lightly; the guilt of leaving others behind was ultimately exceeded by their unendurable psychological pain:

"My son's last words were, 'I'm so sorry I let everyone down.' He didn't see hope that he was coming out [of] his condition, he just didn't see a way out." (Survivor of suicide)

"My son's last words were, 'I'm sorry mom.' I think he knows that he will be hurting all of us but he saw no way out. I think he felt the guilt of leaving all of us behind but he could not manage it any other way." (Survivor of suicide)

Contentions in Interpreting Suicide

In discussions around whether suicide was brave or cowardly, considerate or selfish, opinions were mixed. Some participants espoused moralising statements such as suicide is "wrong," "selfish," a result of a "weak mind," while others countered these beliefs, explaining that negative or stigmatising attitudes do not help but make it harder for people to get help. A first responder raised that "some say it's not a courageous thing, but it takes a lot of courage to attempt suicide," indicating the contentiousness of interpretations of suicide. A Buddhist practitioner pointed out that the religious rationalisation of "it's karma, just try to do good deeds to overcome it" may be an inappropriate response to someone in distress.

Differentiated Risks for Suicide

Some participants pointed out that anyone is susceptible to highly distressing episodic events—such as post-natal depression, a health diagnosis, and job loss—which renders anyone susceptible to suicidal ideation. Other participants identified that environmental stressors—such as Singapore's stressful environment and the reluctance in being vulnerable—put us at risk of poor mental health.

While virtually all of us are susceptible to episodic stressful life events and environmental stressors, participants also identified the processes that contribute to higher risk in some groups. High risk groups broadly fall into several categories: youth and neurodiverse populations, groups vulnerable to stigma, caregivers, and the elderly. Additionally, participants were mindful that comorbid mental health conditions, which sometimes are transmitted intergenerationally in the family, put some at higher suicide risk.

Youth and neurodiverse populations

Many participants identified that adverse childhood experiences that the teenager may not have been equipped to process, the transition into adolescence, relational conflict, the pressure of academic and extracurricular success, make youth at risk. Additional risk exists for those who are neurodiverse or queer. Poignantly, a parent who lost her child with autism spectrum disorder (ASD) pointed out that he could not make sense of why his peers did not like to hang around him:

"I don't think he can understand why he cannot seem to get along as well with other children as maybe his classmates can, so I think there's also the feeling of rejection.... I always thought that if he had managed to live to COVID, perhaps he would still be alive, because we are all just in our safe little space, he doesn't have to go out and socialise. I always wish that he had that two extra years, [it] just didn't happen." (Survivor of suicide)

Groups vulnerable to stigma

Groups vulnerable to stigma such as LGBTQIA+ people face additional stressors that can compound risks for suicide. A participant who had previously attempted suicide reflected on his experience as a transgender man, who had experienced periods of homelessness, joblessness, and poor quality of care when accessing both mental health and crisis support services for suicide. Likewise, a participant in the helping profession group reflected on the barriers to care and additional stigma and

discrimination that groups such LGBTQIA+ people face, which compound issues such as suicide:

"There isn't sufficient support given to young people with neurodiversity in schools. LGBTQ community can feel like they have no one to turn to." (Helping professional)

Caregivers

A community care worker observed that there is a large group of caregivers who are isolated and would not reach out for help, and they can only be picked up opportunistically through their encounters with people who can identify them. Caregiving can be so emotionally demanding that one participant revealed that their caregiving for a loved one with depression led to their own depression, much like a spreading cancer. Another survivor of suicide loss observed that his loved one, who took care of two parents with Alzheimer's disease for eighteen years till they passed, remained a shell of a person even after her caregiving duties were finally over. There was consensus across FGDs that caregivers were a vulnerable group:

"People who are, like my dad, taking care of a special needs child, especially when they're older.... They will be thinking about who is going to be taking care of them [when their child with special needs grows older]. If the system does not come in to reinforce support, then very often [suicide] will be the answer. [For caregivers], there needs to be a lot more interventions for them." (Survivor of suicide)

Elderly and older adults

A medical social worker explained that the elderly face particular challenges such as pain, health problems, and terminal illness, which causes them to feel hopeless. This hopelessness is exacerbated by weakening social connections and financial stability. Another religious leader who works with the elderly pointed out that feeling lonely is critical:

"Seniors are worried they become a burden to the family. Usually the thoughts of suicide are always related to loneliness, worry about finances and their health. That has been, as far as I know, the main reasons for them to even have the thoughts of suicide. Feeling very lonely is one of the very critical points, and concern that they don't want to burden their family." (Religious leader)

Perspectives on Existing Programmes and Efforts

This section outlines the array of programmes that participants know of, and what they think of them.

National hotline and other strategies

Most participants were able to name the Samaritans of Singapore, the national suicide prevention hotline, as a resource. One participant said, "I think this is the only official organisation that deals with suicide in Singapore," reflecting the narrow understanding of the function of suicide prevention programmes as solely crisis response. Some participants shared that they did not personally know anyone who has called the hotline, or that the hotline would not be their favoured contact in a crisis because they desired connecting with someone more familiar. Another participant wished for more clarity on the role of the hotline respondent, and wanted more assurance in the hotline's quality of care in terms of volume of calls received and how long the respondent could stay on the call with them.

Participants noted other strategies on the national level such as mainstream media's list of helplines at the end of all stories about mental health or suicide. Additionally, participants thought that the decriminalisation of suicide was helpful in reducing stigma and increasing help-seeking, such as allowing some to feel less reserved in mobilising the police to help search for a missing loved one who is at risk of suicide. However, knowledge of the decriminalisation of suicide was not uniform—some participants who had lived experiences of suicide were unsure whether suicide had been decriminalised. Finally, participants noted that the disclosure of mental health history is no longer compulsory when it comes to employment.

Peer support across educational stages

Across educational stages, participants observed that peer support structures exist. A bereaved parent found that suicide is not as taboo as before: schools have started to conduct mental wellness talks to students and parents. Participants reported that in class, there are peer support leaders who look out for others and get teachers or counsellors involved if needed. At the university level, there are peer support groups across faculties and student residences. However, participants in the educators group noted that capacity-building and support structures for suicide prevention seemed the most accessible in higher levels of education, especially at the university level.

Gaps in Suicide Prevention

Suicide-specific gaps

Participants highlighted three suicide-specific gaps. First, access to suicide prevention services is hampered by lack of access to appropriate support structures and stigma. For example, educators observed that students tend to be in crisis outside of working hours, and thus educators were unable to provide support to these students or consult with a counsellor on how to support these students. Furthermore, people may be less likely to access suicide prevention support services out of fear that such instances may appear on their records:

"Generally help is needed outside of curriculum time, outside of school time. Situation is difficult at home, a lot of stressors are outside of school and so that's the time when people really need help. In terms of making people aware of those resources, like SOS [Samaritans of Singapore], a hotline you can call if you're feeling depressed or suicidal. I don't think it is fair to place the emphasis on educators to be a suicide hotline." (Educator)

"A lot of young people don't want [their visits to a mental health professional] to be on [their medical record]. If you go to private it is not on [your medical record] you can hide from your employer.... Based on the patients that I have talked to, I always ask them, 'why do you not seek help, there are actually a lot of facilities?'

They will tell you, 'I don't have money to see a private psychologist or psychiatrist and I don't want to go to IMH because everybody will think that I'm crazy, my friends will think that I'm crazy." (First responder)

Two, suicide is not talked about in a way that can better address it. A bereaved parent found the secretive manner in which her child's school discussed her child's death to be a lost opportunity for collective learning. She wished that instead of conveying it in an euphemistic manner, "he is sick," everyone could have learned the truth and been actively counselled because they would eventually find out and have to grieve in isolation and without support. Another participant shared how their relative died of suicide and family members were rather guarded in talking about it.

Three, the quality of care that people received when they had attempted suicide could be improved. Participants who have attempted suicide or sought help for suicidal thoughts shared a range of experiences that included traumatic encounters with first responders and institutions that focused on keeping people alive. For example, one participant with lived experience of suicide and mental health challenges shared that a traumatic experience with law enforcement during a crisis intervention had negatively impacted her long-term wellbeing.

Participants reflected on how the system focuses on preventing death but not sustaining life. For those with suicide ideation and had visited public mental health clinics, one participant felt that there was a lack of long-term follow ups, or a touchpoint coordinating services together to provide aftercare support.

Community and hospital-based care professionals pointed out that while it is a good idea to have risk assessment tools, the way it is implemented—through audits that create a culture of fear that drives workers to stick rigidly to protocol, for example—detracts the patient from feeling like they are cared for. A hospital psychologist shared that hospital staff undergo mandatory risk assessment training to screen and triage patients. However:

"It can be so disconnecting. You go into a medical setting, you're distressed, and someone's stressed about going through a checklist.... I think if the clinician that's administering is very skilled and very calm, and is very comfortable with carrying risk then maybe they can do it in a more conversational way. But if they're anxious about it because they're not very trained, then it becomes not very ideal." (Hospital-based care professional)

Broader mental health gaps

Given the close relation between suicide and mental health, most participants invariably discussed mental health gaps: the strict definition of success, the biomedical model of treatment that overlooks psychosocial wellbeing, and the inaccessibility of mental health care.

Many participants bemoaned that the strict definition of success pressurises one to perform with no space to falter. An educator pointed out that teachers are reluctant to seek help because they fear being seen as unfit for their roles. Others, across ages, echo this fear of "a record" in reasoning why they do not want to seek help, especially from the Institute of Mental Health. Likewise, the lack of certainty of whether contacting Samaritans of Singapore preserves their anonymity—since the CareText service is carried out over WhatsApp—also deters students who do not want to be identified as having used such a service, reflecting the need to maintain a veneer of good performance, even in the face of distress. An educator also observed among parents the fear of "a record" in their refusal to send their children to a counsellor:

"When we're talking about mental health and suicide prevention it is often the worst cases that are highlighted in the media because they are the big cases. But it then makes it seem to parents that if you get your child assessed for some conditions that could lead to suicide they're going to be stigmatised—they're not going to have as many opportunities either academically or professionally in the future.... it can even come down to legislative things like if you want to apply for a scholarship and you have a mental health diagnosis that would preclude you

from being able to because you're seen as a risk. The same as getting insurance. You're a risk. Someone is putting a potential investment into you and there is a risk that they won't get their money back." (Educator)

Some participants also reflected how the biomedical model of responding to mental health crises, such as psychiatrists rushing to prescribe pharmacological solutions, overlooked addressing one's psychosocial needs. A bereaved parent shared that had she known the difference between a psychiatrist and a psychologist, she would have sent her child for counselling first. Some parents whose children were given antidepressants before their deaths stressed the importance of responsible dispensing of antidepressants to the youth, and for psychiatrists to warn parents to keep a keen eye on any side effects.

Bereaved parents expressed a strong wish for their children to have a place that was peaceful to retreat to. Several participants shared their experience of finding the Institute of Mental Health an unconducive place to recover because it houses patients with mental health conditions of varying levels of severity in the same space, some of whom can be loud and aggressive towards fellow patients:

"We recognise that the Institute of Mental Health is one resource, but I have been told [by my friends and family who have been through it] that it's not a place to recover. If you are feeling bad going there it makes you feel worse.... Overseas mental health institutions are like a 'sanctuary'.... I would say there are services and facilities available for mental healthcare in Singapore but very behind." (Helping professional)

"There is only one mental health institution and nobody really wants to go there because of the stigma.... We need to have a drop down facility so youths especially are more willing to head there and get help themselves.... Some may have OCD, anxiety, eating disorders, but all of these add up into something even more severe and it turns to suicide because they see no end to their problem.

We need to increase not just policy but also facilities and aid to subsidise such as insurance coverage." (First responder)

In terms of the costliness of seeking professional mental health care, participants raised that private psychologists and psychiatrists were too expensive, especially when a distressed person would need long term care. Going upstream, they pointed out that a contributing reason to long wait times to see a professional is because training to become a mental health professional is time-consuming and selective.

Public Consultation by OPPi

Methodology

A total of 506 respondents, representative of age, gender and ethnicity, were recruited via an online panel to take part in this study. The benefits of using an online panel is that all responses are SingPass-verified, and duplicate entries were not allowed from participants. The population parameters were based on published figures from the Singapore Department of Statistics as of September 2023. A comparison of the target and achieved proportions in reference to these population parameters may be found in **Table 14**. Based on Singapore's population of about 5.9 million people, a sample size of 506 provides a 3% margin of error at 95% confidence.

Table 14. Target and achieved proportions in reference to Singapore's populations parameters (September 2023 census)

Age Group	Target %	Achieved %		
21 - 30 years old	15.9%	13.4% (-2.4%)		
31 - 40 years old	18.8%	18.0% (-0.8%)		
41 - 50 years old	18.5%	18.2% (-0.3%)		
51 years old and above	46.8%	50.4% (+3.6%)		
Gender	Target %	Achieved %		
Male	49.0%	49.4% (+0.4%)		
Female	49.0%	50.6% (+1.6%)		
Ethnicity	Target %	Achieved %		
Chinese	75.7%	76.1% (+0.4%)		
Malay	12.4%	12.6% (+0.2%)		
Indian	8.6%	9.1% (+0.5%)		
Others	3.4%	2.2% (-1.2%)		

All respondents gave their consent to participate after reading the required Participant Information Sheet. Respondents first read through the Participant Information Sheet and then were directed to OPPi's platform. Participants provided their basic demographic information for screening purposes, and thereafter voted on key opinion statements. OPPI and the statistical processing software IBM SPSS Statistics v29 were used to analyse the data.

Questions from this survey were co-created with the Working Group. The opinion statements were developed through a series of consultations with our volunteer research subgroup, and then with the Working Group. The eventual opinion statementst were selected based on their potential contributions to Singapore's suicide data landscape. Specifically, the opinion statements focused largely on participants' perceptions on the importance of a national suicide strategy, their perceived self-efficacy in accessing suicide support services or rendering support to others, as well as their opinions on the role of the media and other professionals in addressing suicide. A copy of the questionnaire may be found in **Appendix 7**.

Ethics Approval

Ethics approval for this study was obtained prior to initiating the research study. Ethics approval was granted by the National University of Singapore Saw Swee Hock School of Public Health Department Ethics Review Committee (Reference Number: SSHSPH-273). A copy of the ethics approval letter may be found in **Appendix 8**.

Findings

Perspectives on Suicide Prevention

506 respondents in this study articulated a total of 4,584 opinions in this study. The first set of statements relate to participants' views on suicide prevention in Singapore, including their perceptions on its importance as a national issue, and whether enough is being done to address it. **Table 15** summarises the responses to these statements.

Table 15. Responses to statements relating to perspectives on suicide prevention

Statement	Agree	Undecided	Disagree
Every life lost to suicide is one too many.	89.1%	7.7%	3.2%
Suicide is an issue of national importance.	83.8%	12.1%	4.2%
Suicide should be an important aspect of our national mental health and wellbeing strategy.	91.3%	1.8%	6.9%
We are doing enough to prevent suicide in Singapore.	24.7%	44.5%	20.8%

"Every life lost to suicide is one too many."

Most participants agreed with the statement and reflected on the preciousness of life, as well as the impact that the loss of lives would have on loved ones. However, some participants reflected on how this idea should be contextualised or nuanced in contexts such as end-of-life care or other special situations:

"Every life has meaning in this world. For someone to choose the easy way out means that society has failed to provide for the person the things that he/she needs to survive and continue living."

"It is debatable as one should look at the reasons. If a person is suffering from a terminal illness and there is no avenue to end the pain, I am not saying suicide is justifiable but it a mean to an end. Gov should really look at assisted suicide for the terminal ill sufferers."

"Nothing much can be done. It is their decision. They control their own mind."

"Suicide is an issue of national importance."

Respondents highlighted the importance of addressing suicide as a significant national concern that affects society at large. The government plays a crucial role in addressing suicide through education, support, and preventive measures. A suicide is often viewed as a sign of deeper societal issues that can have a detrimental impact on the nation's reputation and overall well-being. Every life lost to suicide is seen as a deep tragedy, a squandering of precious human potential and a reflection of a society's own failing of providing the necessary support:

"Life is sacred. No one should take their own life. Families will be affected, and society is made up of families."

"A person takes their life when they feel they have nowhere else to go. This is a societal issue. With a country as small as Singapore, 'society' basically means national. If these people feel like they have nowhere to turn to, that's a national issue."

"Suicide should be an important aspect of our national mental health and wellbeing strategy."

Respondents emphasised that mental health should be given the same priority as physical health, necessitating proactive government interventions to assist those at risk. Stress, societal pressures, and other underlying concerns all contribute to an increase in suicide rates, emphasising the importance of comprehensive preventative methods. Early intervention, education, and providing access to mental health resources for those in need are all important components of effective suicide prevention:

"Mental health should be treated like physical health. With suicide being the end result of certain types of mental health issues, it should be an important aspect."

"Suicide can be a major topic of evaluation for mental wellbeing. It is considered as one of the major factors towards mental health."

"Singapore is a high stress society which could lead to high suicide rate if not addressed properly."

"We are doing enough to prevent suicide in Singapore."

Many respondents felt that there was insufficient awareness and education on the topic, with a lack of visible campaigns, media coverage, and proactive measures. Some believed that while there were resources and hotlines available, they were not adequately publicised or utilised due to social stigma. Others acknowledged the efforts made by the government and various organisations but felt that more can be done, especially in schools and workplaces. There was also a concern about the perceived rising suicide rates and the need for more comprehensive mental health support:

"More can be done. There are not enough talks and seminars on mental health and suicides. Schools should also have more of these talks."

"Although there are avenues available, people are reluctant to seek help because of the stigma attached. Thus, creating awareness and providing thoughtful care is important."

"While the healthcare professionals are undeniably doing something, there is no all round support from the various agencies, for example government bodies, employers and employees etc."

Our Parts to Play in Suicide Prevention

The next set of statements explored participants' perspectives relating to their perspectives on the role of societal stakeholders and the public in addressing suicide in Singapore. These statements included participants' perspectives on media reporting of suicide, suicide prevention efforts in schools and workplaces, and the ability to talk

about suicide to prevent suicide. **Table 16** summarises the responses to these statements.

Table 16. Responses to statements relating to the role of societal stakeholders and the public in suicide prevention

Statement	Agree	Undecided	Disagree
Media outlets should report on suicide carefully.	88.3%	9.1%	2.6%
More suicide prevention work needs to be done in schools.	86.6%	11.1%	2.4%
More suicide prevention work needs to be done in workplaces.	79.4%	15.8%	4.7%
We must talk more about suicide as part of our efforts to prevent suicide.	83.0%	14.2%	2.8%

"Media outlets should report on suicide carefully."

The majority of respondents felt that media outlets should exercise extreme caution while reporting about suicide. Many comments emphasised the possible detrimental impact of sensationalising suicide situations and irresponsible reporting, which could result in copycat events and/or further grief for the families concerned. Respondents felt that truthful, polite, and non-sensationalist reporting is essential.

Respondents also stressed the necessity of preserving the deceased's privacy and dignity, as well as that of their families. Furthermore, there is a request for the media to focus on increasing awareness and providing information on available support services rather than simply reporting on events:

"Media reporting should be transparent and accurate and not to sensationalise the reporting."

"Media outlets should report on suicide carefully with mindfulness, understanding, compassion, kindness and professionalism. Suicide reports must be respectful and kind to the dead and their families."

"More suicide prevention work needs to be done in schools." And "More suicide prevention work needs to be done in workplaces."

While generally high in agreement that suicide prevention work should be done in schools and workplaces, participants reflected a higher level of agreement for suicide prevention work to be done in schools. This likely stems from the perceived impact of early intervention. Comments offered by the respondents suggested that schools offer a unique opportunity to reach young, impressionable minds during crucial developmental stages. By implementing prevention programmes in educational settings, respondents felt that students can be equipped with essential coping strategies and mental health awareness that they will carry throughout life. This early foundation not only addresses immediate vulnerabilities but provide the necessary psychological tools to prepare for the stressors in the workplaces:

"Youths who face a lot of stress deserve to have help and support as early in life to prevent accumulative depression."

"Students need to be assured that it is ok to reach for help if they are unable to cope with parental pressures or schoolwork or relationship issues etc... And receive all the professional help they need."

"The workplace can be a great source of stress hence it is important for the company management to be more alert to signs of being overworked."

"We must talk more about suicide as part of our efforts to prevent suicide."

A majority of respondents recognise the importance of open conversations about suicide in order to increase awareness and offer assistance to those who require it. They understand the importance of discussing suicide openly to reduce the stigma

surrounding it and encourage people to seek support. However, there are some respondents who advise that these discussions should be approached with sensitivity to prevent any unintended negative outcomes. Proper education and training is essential to ensure that conversations are effective and supportive:

"An uncomfortable topic but essential so that individuals could assist those that come to them assistance and affected individuals can approach others knowing that they are not judged."

"The intent is good, but may have negative effects if not done properly."

Attitudes Towards Help-Seeking for Suicide

The next set of statements explored participants' perspectives relating to their attitudes towards help-seeking for suicide. These statements included their knowledge and willingness to access support services when needed, and their beliefs on the quality of suicide support services. **Table 17** summarises the responses to these statements.

Table 17. Responses to statements relating to attitudes towards help-seeking for suicide

Statement	Agree	Undecided	Disagree
I am willing to access support services for suicide in Singapore when needed.	74.3%	20.4%	5.3%
I know how to access support services for suicide in Singapore.	52.0%	26.9%	21.1%
I believe that the quality of suicide support services in Singapore is satisfactory.	38.3%	49.0%	12.6%

"I am willing to access support services for suicide in Singapore when needed."

Although the majority of the respondents are willing and prepared to access support services, they expressed hesitation at the same time. They were unsure about the effectiveness and accessibility of these services. Some were also less willing to rely on a 'stranger' for support. A significant number of respondents highlighted the need for

more awareness and training to recognise suicidal tendencies and provide appropriate support. Concerns about stigma, trust in the services, and the potential impact on personal and professional life were also prevalent:

"I would rather not air my suicidal thoughts and keep them to myself. That is why it's important to train more to be able to recognise such signs."

"I am not sure. If I myself am having those thoughts, the last thing I want to do is for some stranger to try and understand what I am going through."

"Unsure on the effectiveness of these and whether it will affect job searching which is already a stressful thing for me to do in the first place."

"I know how to access support services for suicide in Singapore."

One of the reasons why respondents hesitated on accessing support services was due to the low awareness. Many indicated that while they are aware that such services exist, they do not know the specific contact details or how to effectively reach out. Some respondents mentioned that they would resort to searching online or contacting general hotlines like SOS. This highlighted a clear gap in respondents' knowledge about the support services and how they can access these services, especially during an emergency. A few respondents noted that information is available through media and social workers, but it is not sufficiently publicised or easy to remember in times of crisis:

"Sincerely and truthfully, I do not have the information on what support services are available to prevent suicide."

"Only some knowledge but when it comes, not sure how to go about it."

"While I agree that the government makes extremely good efforts in reiterating the various helplines, there must be added efforts to help victims and their family members to accept the issue/ problem before they can reach out for assistance."

"I believe that the quality of suicide support services in Singapore is satisfactory."

An additional factor contributing to the reluctance to seek assistance could be a lack of awareness about available resources. Many comments indicated that they had not personally used these services or were unaware of their existence. There were also concerns about the adequacy and effectiveness of the support provided, with some respondents suggesting that more could be done to improve these services. A few comments highlighted the presence of various support channels and helplines, but there was a general consensus that awareness and accessibility of these support services could be enhanced:

"There is very little info from the government on this matter."

"Not so sure about the outreach so far as there's not enough media coverage on this."

"I am unable to give an opinion on this specific question as I do not personally know anyone who has used these particular services nor do I have any personal experience with it."

"Yes I fully agree that there are various helplines but Singapore is facing a shortage of well trained social professionals largely because it's a demanding and stressful job which does not remunerate them well."

Supporting Others Who May Be at Risk of Suicide

The next set of statements explored participants' perspectives relating to whether they knew how to tell if someone is showing signs of suicide risk, or help someone who is thinking about suicide. **Table 18** summarises the responses to these statements.

Table 18. Responses to statements relating to supporting others

Statement	Agree	Undecided	Disagree
I know how to help someone who is thinking about suicide.	33.8%	41.1%	25.1%
I know how to tell if someone is showing signs of suicide risk.	36.4%	41.3%	22.3%

"I know how to help someone who is thinking about suicide." And "I know how to tell if someone is showing signs of suicide risk."

The majority of respondents expressed uncertainty and a lack of confidence in their ability to help someone who is thinking about suicide or in identifying signs of suicide risk. A significant number of comments indicated that while the respondents were willing to listen and provide support, they felt inadequately equipped to offer the necessary help. There was also a recurring theme of fear of saying the wrong thing and potentially worsening the situation. Some respondents mentioned the availability of helplines and professional services but noted a lack of knowledge on how to access these resources:

"On one hand I feel that I am able to talk things through with the person. On the other hand I feel that my knowledge on recommending proper help is lacking."

"I know to call counsellors but I dare not do anything else because I know the wrong words may trigger adverse reactions."

"I have read quite a bit on suicide and how people would feel or act when they have these thoughts. However, a part of me still feels like it isn't enough."

SAVE LIVES Framework

Modified Delphi Method

A modified Delphi Process is a systematic and structured process that allows a group of experts to attain consensus on a particular topic. We first developed an initial set of recommendations based on the evidence generated from the research, including our in-depth interviews with experts, focus group discussions with communities impacted by suicide, and our public consultation on suicide prevention. These statements were then presented to Delphi panel members (our Working Group members) who then participated in two rounds of review.

Panel members were presented with the recommendations and responded on a five-point Likert scale (Strongly Disagree to Strongly Agree) on whether they agreed with the recommendations. Members were also asked to provide comments on each recommendation and suggestions on how they could be improved. A supermajority consensus was pre-specified, which meant that only statements with agreement rates of 80% or higher were included in the final consensus statement. Statements that were below the supermajority threshold were revised according to the feedback received, and subsequently shared with panel members again for comments.

The final list of recommendations reflect consensus by the supermajority, and were then grouped into the constructs of the SAVE LIVES Framework.

The SAVE LIVES Framework and Recommendations

Drawing on the evidence-based recommendations made by the Working Group, a framework to SAVE LIVES was developed. **Figure 9** summarises the framework to SAVE LIVES in Singapore.

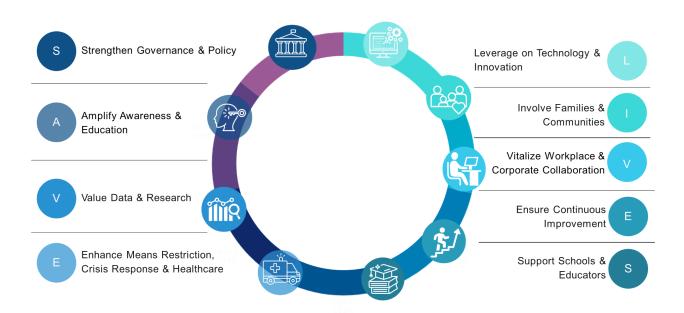


Figure 9. A framework to SAVE LIVES in Singapore

Strengthen Governance and Policy

Establishing a national office dedicated to the prevention of suicide in Singapore

Experience from international stakeholders and experts from Australia, England, Indonesia, New Zealand, South Korea, Thailand, and the USA, as well as evidence from our desk review, show that an effective suicide prevention strategy and response must be led by a dedicated multi-ministry or multi-agency entity that is empowered to coordinate the availability of data, monitoring and evaluation, and interventions across multiple sectors in the government and community. Based on our desk review and interviews, such an office would typically receive a dedicated budget to strengthen a nation or jurisdiction's response to suicide. A national suicide prevention office could be set up under the Ministry of Health in Singapore, that is separate from the National

Mental Health Office, to effectively coordinate suicide prevention efforts with a dedicated budget.

Evidence drawn from				
Desk review	X	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultation	Х	

Coordinating efforts among varying media channels and content creators to put in practice prevailing media reporting guidelines

Our research indicates that while local and international guidelines for responsible media reporting exist, such guidelines have not been adopted in a standardised manner across local media companies and newsrooms. Therefore, practices may differ across editors or newsrooms. Furthermore, such guidelines may not be adhered to in smaller media outlets or media channels and among independent content creators. Guidelines for content curation relating to suicide for social media outlets should also be considered. Coordinated efforts to promote responsible reporting of suicide across all media outlets and content creators are strongly recommended to avoid situations where copycat suicides (Werther's Effect) may result from any reporting that is not aligned with evidence-based guidelines. Such guidelines can be enforced or regulated by Ministry of Digital Development and Information or a National Suicide Prevention Office in Singapore.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	X	
Focus group discussions	X	Public consultation		

"Nothing about us without us": Involving communities of people at-risk of suicide and those with lived experience of suicide in all aspects of policymaking and implementation of suicide prevention policies

A key feature of suicide prevention efforts across the world is to ensure that people who have been affected by suicide are involved in all aspects of suicide prevention including policymaking, implementation, research and advocacy. Involving individuals who belong to communities at greater risk of suicide, survivors of suicide, and those who have lived experiences of suicide is essential in bridging gaps in suicide prevention. A National Suicide Prevention Office would be essential in coordinating and integrating lived experience as part of a national suicide prevention strategy.

Evidence drawn from			
Desk review	Х	In-depth interviews with international experts	Х
Focus group discussions	Х	Public consultation	

Amplify Awareness and Education

Launching national public awareness campaigns on suicide prevention

Launching nationwide public awareness campaigns focused specifically on suicide prevention is essential to educate the public about recognising the warning signs of suicidal behaviour, encouraging help-seeking, and reducing the stigma surrounding suicide. Building on Singapore's successful "Beyond the Label" campaign, which tackled mental health stigma, this new effort should concentrate on suicide prevention, using a range of media channels to disseminate vital information. Inspiration can be drawn from international campaigns like the UK's "Time to Change" and the US's "Seize the Awkward," both of which have effectively engaged the public on suicide prevention through personal stories, educational content, and accessible resources.

The campaign should leverage television, radio, social media, and print to ensure widespread reach, while also utilising mobile apps and interactive digital platforms to provide immediate access to support. Partnering with community organisations,

schools, workplaces, and religious institutions can extend its reach and target at-risk groups more effectively. Clear and direct messaging about recognising suicidal ideation, knowing how to offer support, and understanding where to find help should be central to the campaign.

Emphasising early intervention is key, encouraging individuals to recognise distress in themselves and others before a crisis develops. Consistent, compassionate messaging will help break down the barriers of stigma that often prevent individuals from seeking help, fostering an environment where conversations about suicide and mental health are normalised. Ultimately, this campaign would serve as a critical component of a national suicide prevention strategy, empowering the public to play an active role in saving lives and supporting those in need.

Evidence drawn from			
Desk review	Х	In-depth interviews with international experts	Х
Focus group discussions	Х	Public consultation	Х

Integrating mental health and suicide prevention education into school curricula

Implementing comprehensive mental health and suicide prevention education in schools can play a crucial role in equipping students with the knowledge and skills needed to navigate emotional challenges and prevent crises. By teaching students to recognise signs of distress in themselves and their peers, schools can empower them to seek help early, reducing the risk of escalation. Key topics should include resilience, stress management, coping strategies, and suicide prevention awareness, fostering a proactive approach to mental well-being. This education can also reduce the stigma associated with mental health issues and suicide, encouraging open conversations and cultivating a culture of support and empathy among students. Moreover, having a team of adequately trained school counsellors to lead these efforts can ensure that suicide prevention strategies are effectively integrated into the curriculum, alleviating the burden on educators while creating a safer and more supportive learning environment.

Evidence drawn from			
Desk review	X	In-depth interviews with international experts	Х
Focus group discussions	X	Public consultation	X

Ensuring population-wide knowledge of suicide-related helplines and resources, and ensuring that a sufficient proportion of the population is trained in suicide risk assessment and intervention

Our interviews, focus group discussions, and public consultations revealed a widespread recognition of suicide as a critical national issue. However, many individuals expressed uncertainty about how to contribute to prevention efforts or how to assist those at risk of suicide or in crisis. This highlights the urgent need for increased awareness and education about available suicide-related helplines and mental health resources. Ensuring that the general public knows where and how to access these critical services is essential for fostering a proactive community response to suicide prevention.

Moreover, a targeted approach is needed to equip key individuals, such as educators, caregivers, counselors, healthcare providers, and community workers, with the necessary skills for suicide risk assessment and intervention. This training would empower them to identify warning signs, intervene effectively in moments of crisis, and guide at-risk individuals towards appropriate professional support. Establishing a widespread training initiative could significantly expand the population's capacity to respond to suicide risk and foster a more resilient, connected community where individuals feel supported and understood. Together, these efforts can build a safety net of informed individuals capable of intervening and preventing suicide at both the individual and community level.

Evidence drawn from				
Desk review	X	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultation	Х	

Value Data and Research

Establishing a suicide data monitoring and evaluation framework to monitor progress of interventions and the state of suicide prevention

A comprehensive and well-coordinated suicide data monitoring framework is essential for effectively tracking the progress of interventions and enhancing suicide prevention efforts. Our research indicates that reliable suicide data must be governed by a central, interagency entity that can harmonise data collection across multiple ministries, healthcare institutions, and relevant organisations. This approach is crucial to ensure accurate estimates of suicide rates, attempts, and self-harm incidents, enabling targeted interventions.

Following the decriminalisation of suicide, there is an urgent need for renewed efforts to standardise the definitions and classifications of suicide-related deaths, causes, and attempts. Clearer and more transparent data are necessary for monitoring trends and understanding the full scope of the issue. Establishing a National Suicide Prevention Office, tasked with overseeing the development of a robust suicide and self-harm monitoring system, will significantly enhance our ability to track progress, identify emerging trends, and implement evidence-based interventions tailored to the needs of Singapore's population. Such a framework is vital not only for monitoring the effectiveness of current suicide prevention strategies but also for informing future policies aimed at reducing suicide rates and promoting mental health.

Evidence drawn from				
Desk review	X	In-depth interviews with international experts	Х	
Focus group discussions		Public consultation		

Investing in research on the upstream determinants of suicide among those vulnerable to suicide, and to conduct further research to determine additional priority groups in Singapore

While it is important to address the downstream factors of suicide (e.g. through means restriction), our research points us to a strong link between upstream factors and social determinants (e.g. mental health challenges, stigma and discrimination) that heighten risks of suicide among vulnerable groups, and those who are experiencing loneliness or hopelessness in their lives. International experts and local discussions with research participants point us towards the plight of youth and elderly suicides as a key focus, while also highlighting that we need more data on priority populations that are at greater risk of mental health challenges, self injury, or suicide (e.g. migrant workers, people with lived experiences of mental health challenges, healthcare workers, LGBTQIA+ individuals etc.). Further research is needed to identify priority groups and develop evidence-based interventions that are tailored for these respective communities.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultation		

Enhance Means Restriction, Crisis Response and Healthcare Reviewing means restriction approaches based on available suicide data in Singapore

Countries with established suicide prevention strategies have consistently implemented evidence-based means restriction approaches to limit access to common methods of

suicide. In Singapore, it is crucial to adopt similar strategies by collaborating with stakeholders across various sectors to ensure that effective means restriction measures are put in place. This can involve interventions such as installing signage with crisis helpline information in high-risk areas, deploying infrared beams to detect unauthorised access to high-rise buildings, and strengthening community-based surveillance, such as neighbourhood watches.

Additionally, in today's digital age, means restrictions should extend to online platforms. Efforts must be made to prevent access to content that glorifies suicide or provides detailed instructions on how to carry it out. Singapore can take proactive steps to regulate the availability of harmful materials, such as medications, poisons, ropes, or charcoal, online. By implementing these multi-faceted interventions, which target both physical and digital environments, Singapore can reduce the risk of suicide and create safer spaces for individuals at risk.

Evidence drawn from			
Desk review	Х	In-depth interviews with international experts	Х
Focus group discussions		Public consultation	

Enhancing training for healthcare professionals and community workers for suicide prevention

Specialised training for healthcare professionals and community workers is crucial for improving the early identification and management of suicidal behaviours and mental health crises. This training should include comprehensive suicide risk assessment techniques to identify warning signs, crisis intervention strategies to provide timely support, and postvention care to assist individuals and communities affected by suicide. Equipping healthcare professionals and community workers with these essential skills ensures they can offer holistic, compassionate care that addresses both the immediate crisis and the long-term needs of those at risk.

Additionally, continuous education and interdisciplinary collaboration among healthcare teams, social workers, counsellors, and community organisations is essential for maintaining best practices in suicide prevention. By enhancing their ability to recognise risk factors, de-escalate crises, and provide tailored support, these professionals can make a significant impact on suicide prevention efforts, leading to improved mental health outcomes within the wider community.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultations	Х	

Enhancing mental health and suicide crisis support training for law enforcement

Equipping police officers with specialised training to manage mental health crises and support individuals at risk of suicide is crucial for ensuring public safety and providing effective assistance. This training should cover de-escalation techniques, mental health first aid, and collaboration with mental health professionals to ensure that officers respond appropriately in such situations. Additionally, the training should emphasise the development of soft skills, including active listening, empathy, and clear communication, to enhance officers' capacity to handle mental health crises with sensitivity and care. By fostering these skills, law enforcement officers can better manage mental health incidents, contributing to a safer and more supportive community.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultations	Х	

Investing greater resources in suicide prevention for institutions and communities involved in crisis care and support

Participants in our focus groups have identified significant gaps in accessing quality crisis care and support for individuals at risk of suicide. To address these gaps, there must be increased investment in both the capacity and capabilities of institutions, such as the Institute of Mental Health's Department of Emergency & Crisis Care, and community organisations like the Samaritans of Singapore. This investment should focus on enhancing the ability to provide accessible, affordable, and high-quality crisis care, while also ensuring that services are tailored to meet the age-specific needs of different populations. Children and young people, in particular, have unique requirements in crisis situations, necessitating age-differentiated approaches to intervention and support. Moreover, it is vital that all care is delivered in a non-stigmatising and non-traumatising environment, fostering a sense of safety and dignity for those seeking help.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	X	
Focus group discussions	Х	Public consultations		

Psychoeducation for youth and caregivers on treatment options

While psychiatric medications, including antidepressants, can play an important role in the treatment of mental health conditions in youth under 18, it is essential to provide a range of therapeutic options. Psychoeducation for both youth and their caregivers is critical to ensure they understand that medication is not the only solution. Counselling, psychotherapy, and other non-pharmacological treatments should be available and accessible as part of a comprehensive care plan. These therapeutic interventions, when integrated with strong support systems, offer valuable alternatives or complements to medication, helping to promote long-term well-being and recovery. Ensuring access to these resources is key to fostering a more holistic approach to mental health care for young people.

Evidence drawn from			
Desk review	X	In-depth interviews with international experts	
Focus group discussions	Х	Public consultations	

Leverage on Technology and Innovation

Working closely with social media platforms and companies to ensure that content moderation and suicide prevention efforts are in line with best practices

Our research has highlighted that social media's accessibility is a double-edged sword when it comes to suicide prevention. While these platforms can expose individuals to harmful content that may increase suicide risk, they also present opportunities to raise awareness, provide education, and offer support. Social media companies can play a pivotal role by moderating harmful content, promoting suicide prevention helplines, and making mental health resources readily available. The government should collaborate with these platforms to ensure that content moderation aligns with best practices, and that access to websites or content that promote or abet suicide is restricted or banned. Such partnerships are essential to creating a safer online environment that supports suicide prevention efforts.

Evidence drawn from			
Desk review	Х	In-depth interviews with international experts	Х
Focus group discussions	Х	Public consultations	Х

Implementing and Evaluating Technology-Based Interventions

Harnessing technology to develop innovative suicide prevention tools offers a unique opportunity to provide timely and accessible support to individuals at risk. In Singapore, where evidence indicates that a significant proportion of suicide deaths occur by jumping from heights, international experts have highlighted the effectiveness of technological innovations such as installing infrared beams that trigger alarms when an

individual enters a high-risk area. Such preventive measures can serve as a critical line of defence, enabling rapid intervention and potentially saving lives.

In addition to physical safety measures, digital tools such as mobile apps designed for mental health support can provide users with access to valuable resources, coping strategies, and crisis intervention services at any time. These apps can offer features such as guided mindfulness exercises, mood tracking, and instant connections to helplines, ensuring that help is always within reach. Furthermore, online counselling services remove barriers such as geographical limitations and the stigma often associated with seeking face-to-face therapy, making professional mental health support more accessible and convenient for users.

Another promising area involves the use of artificial intelligence (AI) in suicide prevention. Al-driven algorithms can analyse patterns in behaviour, language, and online activity to identify individuals who may be at heightened risk of suicide. By leveraging these insights, proactive, just-in-time interventions can be deployed to connect at-risk individuals with appropriate support before a crisis escalates.

To ensure the success of these technology-based interventions, ongoing evaluation is essential. Regular assessments of their effectiveness, accessibility, and user engagement should be conducted, ensuring that these tools are both evidence-based and tailored to the evolving needs of users. Additionally, privacy and ethical considerations must be at the forefront when using AI and digital tools, safeguarding individuals' data while providing critical support.

Technology alone cannot replace traditional methods, but it can significantly complement and enhance existing suicide prevention strategies. By integrating digital solutions into a broader, multi-faceted approach, we can increase the reach of mental health services, break down barriers to access, and ultimately strengthen suicide prevention efforts across a wider population.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	X	
Focus group discussions	X	Public consultations	·	

Involve Families and Communities

Strengthening family support initiatives to manage mental health and suicide prevention

Supporting families in understanding and managing mental health challenges is crucial for creating a nurturing environment that reduces stress and promotes well-being. Family-focused programs should be developed to equip families with the knowledge and skills to recognise early signs of distress, facilitate open and supportive communication, and offer practical strategies to assist loved ones facing mental health struggles. Providing accessible family education initiatives, along with counselling services tailored to specific family dynamics, can enhance the capacity of families to respond to mental health crises and prevent escalation. Strengthening these initiatives ensures that families play an active and informed role in suicide prevention and mental health care.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultations	Х	

Strengthening collaboration with religious and community leaders

Engaging religious and community leaders in suicide prevention efforts is a powerful way to extend the reach and impact of these initiatives. As trusted figures within their communities, these leaders hold significant influence and are often seen as sources of support and guidance, making them well-positioned to promote mental health awareness and reduce the stigma surrounding suicide. By actively involving them in

education, outreach, and early intervention efforts, they can play a key role in identifying individuals at risk and providing timely support.

Religious and community leaders can also advocate for greater access to mental health resources within their respective communities, helping to bridge the gap between formal healthcare services and community-based support. Their involvement ensures that suicide prevention strategies are culturally sensitive and tailored to the unique needs and beliefs of the communities they serve. This is particularly important in reaching individuals who may be hesitant to engage with traditional mental health services due to cultural or religious barriers.

Moreover, these leaders can foster an environment of compassion, understanding, and acceptance—key elements in creating a supportive community that encourages open discussions about mental health and suicide. By promoting dialogue and awareness, they can help normalise conversations around these sensitive topics, making it easier for individuals in distress to seek help without fear of judgement or alienation.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	X	
Focus group discussions	Х	Public consultations		

Strengthening continuity of care and care transitions for survivors of suicide and suicide attempters

International experts emphasise that postvention support is a critical element of suicide prevention strategies. Strengthening the continuity of care for suicide survivors and those who have attempted suicide is essential to reduce the risk of future attempts. This requires coordinated efforts across healthcare systems, community services, and support networks. Establishing seamless transitions from crisis intervention to ongoing care, including counselling, peer support, and community-based services, can significantly improve recovery outcomes. Additionally, providing long-term, accessible

support for families, friends, and communities affected by suicide is vital in fostering resilience and preventing further harm. Strengthening these care pathways ensures that survivors receive the comprehensive and sustained support they need during their recovery journey.

Evidence drawn from			
Desk review	Х	In-depth interviews with international experts	Х
Focus group discussions	Х	Public consultations	

Vitalise Workplace and Corporate Collaboration

Promoting suicide awareness, prevention, postvention, and mental health support in the workplace

Encouraging employers to develop and implement programmes in the workplace on suicide awareness, prevention, postvention, and education is crucial for fostering a healthy and supportive work environment. These programmes can be done in collaboration with community partners and should include: regular mental health screenings and access to mental health services to identify suicide risks early, mental health initiatives like stress management workshops to equip employees with coping strategies. Additionally, integrating crisis intervention protocols ensures that immediate support is available during critical situations, mitigating potential harm. Creating a supportive workplace culture not only reduces stigma but also promotes early intervention, preventing minor issues from escalating into more serious problems. Employers who prioritise mental health can improve employee well-being, productivity, and job satisfaction leading to a more resilient and effective workforce. It is essential for these programmes to be customised according to the specific needs and challenges of different industries and sectors ensuring that the interventions are relevant and effective for all employees.

Evidence drawn from			
Desk review	X	In-depth interviews with international experts	Х
Focus group discussions	Х	Public consultations	Х

Collaborating with corporate stakeholders to ensure that human resource and insurance policies help bridge the gap in access to suicide prevention and mental health-related resources

Collaborating with corporations is essential to address the barriers individuals face in accessing suicide prevention and mental health services. By working with corporate stakeholders, businesses can review and enhance their human resource policies, employee assistance programs, and insurance plans to ensure comprehensive mental health support. This includes providing coverage for mental health treatment, counseling, and crisis intervention, as well as incorporating policies that support survivors of suicide through postvention services. Such collaboration can foster workplace environments that prioritise mental well-being, reduce stigma, and facilitate timely access to resources for those in need. Ensuring that corporate policies align with mental health initiatives will bridge critical gaps and enhance support for employees and their families.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	Х	
Focus group discussions	Х	Public consultations		

Ensure Continuous Improvement

Regularly reviewing our suicide prevention strategy to continuously refine and improve interventions and foster ongoing collaboration and feedback

A defining feature of successful national suicide prevention strategies is the commitment to regular review and renewal, typically every three to five years. International experts emphasise that this cyclical approach enables countries and jurisdictions to take stock of the latest research, assess the effectiveness of past interventions, and identify emerging trends and challenges. By doing so, national strategies remain dynamic and adaptable, ensuring that interventions are both evidence-based and responsive to the shifting needs of the population.

Regular reviews also allow for the identification of new focal areas that may require enhanced attention in subsequent periods, such as emerging at-risk groups or novel methods of suicide that may not have been previously prominent. This iterative process ensures that suicide prevention efforts are continually evolving and improving, rather than becoming stagnant. Furthermore, it supports purposeful budgeting and resource allocation, allowing for a more targeted and efficient use of funds to address the most pressing needs of the community at any given time.

Collaboration is key to the success of this process. Regular reviews should be an inclusive effort, involving not only government agencies but also community groups, corporate partners, healthcare providers, and individuals with lived experience of suicide. This collective feedback fosters a culture of shared responsibility and collaboration, ensuring that diverse perspectives are incorporated into the strategy. By engaging these stakeholders, we can ensure that suicide prevention initiatives are holistic, community-driven, and better aligned with the realities faced by those most in need of support.

Evidence drawn from				
Desk review	Х	In-depth interviews with international experts	X	
Focus group discussions		Public consultations		

Support Schools and Educators

Establishing suicide prevention protocols in schools for suicide prevention, crisis response, and postvention support

Participants in our research studies, including youth and educators, have expressed concern that school staff, counsellors, and teachers are often inadequately equipped to provide psychological support or conduct suicide risk assessments for students in need. Many educators lack the necessary training to identify warning signs, manage crises, or intervene effectively in suicide-related situations, leaving a critical gap in the support network for vulnerable students.

The Ministry of Education, in collaboration with a National Suicide Prevention Office, could play a pivotal role in addressing these gaps. By developing and implementing clear protocols and comprehensive training programmes, schools can ensure that educators, school counsellors, and students are better prepared to respond to suicide risks. This would involve equipping school staff with the tools to recognise early signs of distress, intervene appropriately, and provide ongoing support to students facing mental health challenges. Furthermore, postvention care—supporting students, staff, and the wider school community in the aftermath of a suicide—should be integrated into school protocols to help those affected by suicide to process their grief in a healthy, supportive environment.

Ensuring that these protocols are age-appropriate and sensitive to the unique needs of children and adolescents is vital. Schools should foster a safe and open environment that encourages help-seeking behaviours and reduces the stigma surrounding mental health discussions. By building the capacity of educators and counsellors, and providing them with the resources to intervene in suicide-related crises, schools can become key partners in national suicide prevention efforts.

Evidence drawn from			
Desk review	X	In-depth interviews with international experts	Х
Focus group discussions	Х	Public consultations	Х

Ensuring that educational institutions in Singapore have sufficient support systems and personnel in place to provide suicide risk assessment and intervention to students, and have policies that encourage help-seeking behavior without any fear of reprisal or loss of opportunity

One significant factor contributing to student suicide in Singapore, as highlighted by research participants, is the narrow definition of success and the intense pressure to meet academic expectations. This pressure is often compounded by insufficient support systems and a lack of trained personnel within educational institutions to provide timely suicide risk assessment and intervention. Even in schools where such services are available, many students hesitate to seek help due to concerns that doing so may negatively affect their future opportunities, such as eligibility for scholarships or employment prospects.

To address these issues, it is critical to enhance the capacity of schools to provide comprehensive mental health support, including training staff to identify at-risk students and intervene effectively. Policies should also be implemented to encourage help-seeking behaviour by assuring students that accessing mental health services will not result in any form of reprisal or harm to their future opportunities. This will foster a culture of openness and ensure that students receive the support they need without fear of stigma or negative consequences.

Evidence drawn from			
Desk review	Х	In-depth interviews with international experts	X
Focus group discussions	X	Public consultations	X

Beyond The White Paper: Next Steps

Our collective effort to prevent suicide in Singapore does not end here with this White Paper. The next steps for a National Suicide Prevention Strategy in Singapore include:

Launch of the White Paper

The launch of the White Paper for a National Suicide Prevention Strategy in Singapore marks the first step that we will take as a collective effort in preventing suicide in Singapore. The launch event for the White Paper will bring together a community of individuals impacted by suicide, as well as societal partners who wish to contribute to the prevention of suicide in Singapore.

Public consultation by OPPi

While an initial, population-representative sample was recruited for the first phase of our public consultation to inform this White Paper, the public consultation remains open, with a goal of reaching up to 5000 Singaporeans. Our participatory White Paper endeavours to reflect a diversity of views and experiences of Singaporeans.

Presentation to the Government, Members of Parliament, and Community Leaders Following the launch of this White Paper, the Project Hayat Working Group, comprising members and observers within communities impacted by suicide, educational settings, workplaces, religious institutions, government bodies, and academic institutions, will ensure that findings of this White Paper are presented to a wide range of societal stakeholders.

Scientific Publications

The research subgroup of Project Hayat, under the strategic guidance of the Working Group, will be publishing the findings of our empirical research in scientific journals. This will ensure that our findings and lessons learnt are shared with the wider scientific community, and that our collective work on developing a National Suicide Prevention Strategy will help inform and contribute to the efforts of other countries and jurisdictions.

Expanding on Regional Efforts to Prevent Suicide

We will leverage relationships with regional partners like the ASEAN mental health office, Mental Health Innovation Network, the International Association for Suicide Prevention, as well as other regional networks to share and learn about best practices in establishing suicide prevention strategies and policies, and implementing them.

Open Source Resources and Datasets

We hope that the White Paper and its accompanying research will inspire other researchers and implementers to expand on the research and interventions relating to suicide. An effort will be undertaken to consolidate research and publications that reflect successes in suicide prevention in Singapore, so that our collective efforts are documented and utilised to inform evidence-based practices.

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Appendix

Appendix 1 - Detailed Findings from Save.Me.Too Study

Profiles of Singaporeans in relation to suicide

- Profile 1: I have immediate family who attempted or died by suicide: 272 (160 in 2022)
- Profile 2: I have relatives who attempted or died by suicide: 426 (256 in 2022)
- Profile 3: I have friends who attempted or died by suicide: 1837 (1092 in 2022)
- Profile 4: I have unrelated colleagues/ex-colleagues or casual acquaintances who attempted or died by suicide: 702 (338 in 2022)
- Profile 5: I know nobody or person attempting or dying by suicide: 2037 (1114 in 2022)

Other key findings in 2024 include:

- The more remote the connection to suicide a person has, the more stigmatic his or her perceptions of suicide
- A very significant majority of 63.67% of people believe that talking about suicide may give someone the idea, which remains the most outstanding prevailing myth about suicide I Singapore. Across all degrees of connection to suicide, every single one has more than 6 in 10 believing this myth.
- People with friends and immediate family connected to suicide still form the highest proportions who believe that talking about suicide may give someone the idea, at 66 percent.
- There is a rise in the numbers believing that most suicides happen suddenly without warning and that a person dying by suicide was one who was unwilling to seek help.
- Together with the majority who believe that raising the subject of suicide could cause a person to think about it, 8 in 10 think that when someone does talk about suicide, that person could take his life. This may be highly significant in society's resistance towards the conversation surrounding suicide, as resistant then as it is today.
- Almost 6 in 10 of people with no connection to suicide believe suicide can be predicted. This is the profile with the highest such percentage, higher than that of all other profiles with connections to suicide. But this has fallen by almost 15 percent from 2022.
- The older an individual, the more he does not believe suicide can be predicted.
 More than 70% of the below-21s believe suicide can be predicted but this steadily drops to the lowest figure of 43.33% for those in their 80's.
- The greater the years of education, the greater the belief that suicide can be predicted as well, from about 4 in 10 for those with no to primary-level education, rising to almost 3 in 4 for those with a postgraduate degree.
- Age and education are the two most significant variables in affecting perceptions of suicide predictability, followed by Religion, Gender.
- A whopping 90.29% believe that suicide can be prevented, a borderline significant dip from 91.86% in 2022. The closer the connection to suicide, the

- lower the figure but it is still very high at 86.85%, rising as high as 90% even for those with no connections to suicide who believe in suicide preventability.
- Age is again a very significant factor in suicide preventability, just as in suicide predictability. The older an individual, the more he does not believe suicide can be prevented. But a very high average of 92 percent of Gen Z and millennials believe suicide can be prevented, falling slightly to 88.34% for Gen X, and then steeply to 62.82% for those aged 70 or older. Education plays the second most significant role in suicide prevention. The more the years of education, the greater the percentage who believe that suicide can be prevented. Those with primary-level education have the lowest figure at 69.47%, rising steeply to more than 90% for everyone with at least pre-university or polytechnic education.
- Dwellers of HDB 3-room flats or smaller have the lowest proportion of 84.46% who believe suicide can be prevented, which rises steadily the larger the dwelling, to the highest figure for landed property dwellers at 91.27%.
- Only one in three would do something to help someone who is suicidal. For every
 two in three persons who would not support and save someone who is in a crisis
 or suicidal, 70.53% cite their fear of making the suicidal person feel worse, their
 lack of ability to do anything, and their lack of knowledge. These have shown no
 shift from that in 2022.
- "Offering presence and continual support" is the top most immediate and effective action for nearly 4 in 10, followed by second-placed "Encourage professional support, e.g. mental health counsellors" at a third of them.
 Together they form almost 3 in 4 of Singaporeans' responses to someone in a crisis. Only 0.70% would "dismiss and change the subject" with someone who shares personal thoughts of suicide.
- 1 in 2 think the effectiveness of support in Singapore for a person facing a crisis and thinking about or affected by suicide is "Not effective at all" to "Lower than average". This lowrating stretches across all profiles connected to suicide. Of note is the profile immediately connected to suicide with the highest proportion of almost 3 in 5 rating the effectiveness as lower than average. The closer the association to suicide, the more ineffective they think the support is. Women rate support effectiveness significantly worse than men do.
- Of concern are the Gen Z where 54.34% of them give the lowest support effectiveness ratings than all other age groups which hover around the 50 percent mark.
- Overall, Singaporeans rate suicide prevention efforts from ineffective to a little effective. Millennials rate these efforts as the least effective amongst all age groups, followed by Gen Z.
- When asked if Singapore needs a suicide prevention strategy, the answer was "Strongly", the Gen Z leading the pack with almost 95 percent of them agreeing, of whom 74.58 percent flagging the need as "strong" and "total". This pattern is imitated by the Millennials, with 93.48 percent agreeing, of whom 75.60 percent flagging the need as "strong" and "total".

Appendix 2 - In-Depth Interview with International Experts Guide

International stakeholder perspectives on implementing a national suicide prevention strategy

Introduction/Motivation

- Can you briefly introduce yourself, and your role in formulating the suicide prevention strategies for [insert city/country]?
- What motivated you to embark on this role?
 - Explore past work in mental health, suicide prevention etc.

Suicide Prevention Strategy

- Strategy formulation and execution
- Can you briefly introduce us about [city/country]'s suicide prevention strategies?
 - How was it developed (e.g., evidence-based, politically-driven)?
 - What are the components or elements to it was it informed by a pre-existing framework?
 - O Did you draw on learnings from other countries?
- What were the reasons that [city/country] decided to embark and establish official suicide prevention strategies?
 - Any political, social, historical contexts that led to this initiative?
- If possible, how have financial resources been allocated towards the implementation of the suicide prevention strategy?
- What are some of the unique points/pillars in the prevention strategies that differentiate it from that of other countries?
- Does the [country]'s suicide prevention strategy integrated with other public health initiatives or strategies within the country. e.g. substance use, manpower, homelessness?

Strategy impact measurement and evaluation

- What are some of the challenges that you have encountered?
 - o In developing the strategy?
 - o In stakeholder engagement (community, government, industry etc.)?
 - o In publishing or disseminating it?
 - o In implementing it or rolling it out?
 - o In sustaining the strategy?
- Are there specific sensitivities that you needed to navigate in developing or implementing this strategy?
 - o Cultural competencies?
 - o Political considerations?
 - Health systems considerations?
- How do you think the strategy has impacted suicide in your [city/country]?
 - What metrics or indicators were used to measure success?

 Are there any longitudinal studies or follow-up evaluations to assess the long-term impact of the strategy?

Data sources on suicide

- Is data on suicide an important aspect of your suicide prevention strategy?
- What are some sources of data on suicide in [city/country]? Do you have access to such data?
 - o If yes, what are these sources of data?
 - If no, how did you go about getting data, or get around that? E.g.
 Innovative ways of engaging stakeholders for data, data modelling etc.
- Were there specific stakeholders you engaged to collect or mine more data?

Target groups and vulnerable populations

- Does your suicide prevention strategy address specific or target groups? Who are they?
- How were these groups identified?
- How has this informed or impacted stakeholder engagement?
- Were there any difficulties in articulating these vulnerable groups?
 - Political sensitivities
 - Health equity and pre-existing structural issues?

Interventions

- Did your suicide prevention strategy focus on interventions to address suicide? What are they?
 - Built environment? What initiatives are in place for training and capacity building among their professionals and community members?
 - Mental healthcare system (e.g., pharmacotherapy, talking therapies) How is competency in suicide prevention maintained among healthcare providers, educators, and frontline workers?
 - Social support and community empowerment? any notable collaborations or partnerships with the public/private sector that have been instrumental in the strategy's development or implementation?
 - Social media?
 - Research and advocacy? What is the role of campaigns in facilitating suicide prevention advocacy in [country]?
 - Media reporting around suicide? E.g. Regarding media reporting of suicide, what has [insert country] done to ensure compliance with WHO guidelines? What is unique about the state of media and demographic of [country]?
 - How has the [city/country] leveraged technology and innovation in their suicide prevention strategy?

Link to Mental Health and Wellbeing

- Is suicide viewed as a mental health and wellbeing issue in [city/country]?
- What are some of the stigmas against mental health advocacy in [city/country]?

•	Does [city/country] have a mental health or wellbeing strategy? How has the suicide prevention strategy supplemented or complemented that?		

Appendix 3 - Ethics Approval Document for In-Depth Interviews with International Experts

Saw Swee Hock School of Public Health

Research Office



REF: SSHSPH-250

1 April 2024

Dr Rayner Tan Kay Jin Assistant Professor Saw Swee Hock School of Public Health

Dear Dr Tan,

APPROVAL OF RESEARCH THAT QUALIFIES FOR EXEMPTION FROM NUS INSTITUTIONAL REVIEW BOARD (NUS-IRB) REVIEW

Protocol Title: International stakeholder perspectives on implementing a national suicide prevention strategy

We are pleased to inform you that the Saw Swee Hock School of Public Health Departmental Ethics Review Committee (SSHSPH-DERC) has reviewed and approved the ethical aspects of your above-mentioned research based on your declaration and the Application Form submitted

We note that your research only involves human participants as stated in the following category:

2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behaviour, unless: (i) information obtained is recorded in such a manner that research participants can be identified, directly or through identifiers linked to the research participants; and (ii) any disclosure of the research participants' responses outside the research could reasonably place the research participants at risk of criminal or civil liability or be damaging to the research participants' financial standing, employability, or reputation.

The exemption shall remain valid until such time the research is completed, unless the research is terminated earlier for any reason whatsoever.

The SSHSPH-DERC has reviewed the following documents for the purpose of granting the exemption from NUS-IRB review:

Documents

- 1. DERC Application Form (Faculty)
- 2. Participant Information Sheet
- 3. Recruitment Email
- 4. Interview Topic Guide

Document Date

Version 1, 26 March 2024 Version 1, 26 March 2024 Version 1, 26 March 2024 Version 1, 23 February 2024

12 Science Drive 2, Singapore 117549 Tel: (65) 856 999 49 Website: www.nus.edu.sg Company Registration No: 200604346E

Appendix 4 - Recruitment Flyer for Focus Group Discussions

LEND YOUR VOICE TO SINGAPORE'S

SUICIDE PREVENTION STRATEGY

WHAT?

Join an **anonymous online focus group discussion research study** to identify the needs and gaps in order to help provide insights towards creating a national suicide prevention strategy for Singapore. Topics discussed includes your understanding of suicide, existing efforts for suicide prevention in Singapore, gaps in suicide prevention and your suggestions for opportunities for change. The discussion take maximum 75 minutes, with 4-8 persons per group and will be audio recorded.

There is no direct benefit to participating in this research. However, you will be reimbursed **\$50 via PayNow** for your participation and time.

WHO CAN JOIN?

We hope to hear from you if you are:

- 1*) A suicide attempt survivor
- 2*) Had a loved one pass away from suicide
- 3) A first responder (police, SCDF, paramedic, combat medic)
- 4) A medical professional providing care in the community
- 5) A medical professional (hospital-based care)
- **6) Part of the helping profession** (counsellors, therapists, social workers, volunteers from social service agencies, psychologists, hospice care worker, youth worker etc.)
- 7) An educator (teachers tuition teacher, principal, part of a school board)
- 8) A religious leader (pastor, imam, spiritual director etc.)
- 9) Part of the media industry (reporter, writer, social media influencer etc.)
- 10) A legal representative (who had come across suicide in your cases)
- 11) An employer/workplace leader (anyone who holds a position of leadership in a company, regardless of number of employees)
- 12*) A migrant worker (hold a "Work Permit for Migrant Worker" pass)
- 13*) Identify as LGBTQ+
- 14*) Have an underlying mental health condition with a formal diagnosis (e.g. depression, anxiety)
- 15*) An elderly person living alone (between 65-85 years old)
- 16) Active in a youth organization (between 21-35 years old)
- 17) General Public Someone who wishes to contribute to this issue

* Participants from these groups will be recruited from partner organizations

You should also be:

- A Singapore Citizen / PR / or possess a Work Permit / Skills Pass / Employment Pass
- Between 21 85 years old
- Have a bank account and mobile number linked to PayNow
- · Able to speak English
- Willing to be audio recorded
- Familiar with online video-conferencing software (e.g. Zoom)
- Not experiencing active suicide ideation

HOW TO JOIN?

email

indicate your interest

Project Title: Voices from the Ground - Focus Group Discussions (FGDs) Towards Formulating a National Suicide Prevention Strategy | NUS-IRB Reference Code: NUS-IRB-2024-188 | Contact Person:



Appendix 5 - Focus Group Discussion Guide

Project Title: Voices from the Ground - Focus Group Discussions (FGDs) Towards

Formulating a National Suicide Prevention Strategy **NUS-IRB Reference Code:** NUS-IRB-2024-188

Focus Group Discussion (FGD) Guide

Introduction to Focus Group Discussion

Thank you for taking the time to participate in this focus group discussion. We are carrying out a research study that aims to gather insights towards formulating an effective national suicide prevention strategy for Singapore. The discussions will center around understanding participants' perceptions of risk and protective factors, barriers to help-seeking, recommendations for suicide prevention policies and programmes, and media guidelines. Gaps between actual needs and available services will also be discussed. You sharing in this conversation today may help contribute to our efforts to reduce the incidents of suicide in Singapore and to provide critical inputs for developing a national suicide prevention strategy encompassing universal, selective and indicated prevention approaches across sectors, so please share as openly as you may be comfortable with. There is no right or wrong answer. Please share freely whatever that comes to your mind. Should you potentially feel distressed or uncomfortable at any time during the focus group discussion, please do let the facilitator know. You would also be able to skip any questions that you are not comfortable answering.

This focus group discussion will only be audio recorded, and please be assured that your identity will be kept anonymous. As mentioned earlier when the research team member contacted you to obtain your informed consent, you are not obliged to turn your cameras on for the duration of this session. If your cameras are on, you have the option to switch them off now and change your name to a pseudonym if you would like. You could also choose to keep your camera on if you like.

We would also like to remind everyone to maintain respect for each other during the duration of the FGD. Please do not interrupt when someone else is speaking. Everything discussed in the FGD should also be kept confidential and you are reminded to not record or share the contents discussed in this session with anyone else.

Before we proceed, does anyone have any questions for me?

Round of Introductions

If not, maybe we could start with a quick round of introductions -

- 1. You could start by sharing how you would like us to address you in this focus group, and also
- 2. What led you to join this discussion

Understanding of Suicide

QUESTIONS	SUB-QUESTIONS / EXTRA PROMPTS
1. For our first question, maybe we could start by sharing what is our understanding of suicide?	 In your opinion, how would you define suicide? / If someone asks you to explain what suicide is, what would you say? Do you think suicide is wrong? / Do you think people have a right to end their lives by suicide? / Are people who die by suicide responsible for their actions?
2. Why do you think people do it?	 What causes suicide attempts? Do you think anyone can be at risk of suicide? Or would you say that specific groups of people are more at risk? Do you think mental health has a role to play in suicide attempts? Do you think suicide is usually planned or is it more impulsive? For survivors: Trigger warning – we are now going to ask about your past personal experience with suicide. If you experience any discomfort, you are free to skip this question. What was going through your mind when you attempted suicide? / What was happening in your life when you attempted suicide? (thoughts, actions, feelings, physical and psychological changes etc.) For survivors: What was the final straw that led you to attempt suicide? For bereaved persons: Trigger warning – we are now going to ask about your past personal experience with suicide. If you experience any discomfort, you are free to skip this question. Do you know what prompted your loved one to attempt suicide? For bereaved persons: How did you know it was suicide?

Existing Efforts

- 3. From your experience / based on what you know, what is already being done to reduce the incidents of suicide in Singapore?
- Any programmes / frameworks / community groups / help resources that you know of?
- Do you know that suicide is now decriminalised? How do you think we can do better with collecting and publicising suicide data?
- For policy makers: How do you think current government policies and laws affect suicide prevention efforts?
- For those in the helping profession + medical professionals: According to your professional training, what are the factors that cause/lead to suicide attempts?
- For those in the helping professions: Based on your experience, what is the most common help resource that a person turns to before a suicide attempt?
- For medical professionals: What currently happens when you encounter a high risk suicide case?
- For first responders: When you first encounter a death suspected to be by suicide, what are the procedures involved? Are families the first to be informed? How is it done?
- For media personnels: How does the media currently report suicide? Are there any guidelines?
- For media personnels + representatives of online platforms + youths: What role does technology/social media play in suicide prevention? What about possible contributions to suicide risk?

Gaps

- 4. From your experience, what do you think are some gaps / areas that are lacking when it comes to suicide prevention in Singapore?
- Do you think Singaporeans are well-informed about what suicide is?
- Some people have suggested that the more we talk about suicide in society, the more the rates of suicide will increase. Do you agree?
- How can we reduce the amount of misinformation around suicide?
- Do you think culture, religion or societal views on suicide influence an individual's willingness to seek help?
- For media personnels: Do you think the Singapore media under reports on suicide due to fear of copycat suicide phenomenon?

Opportunities for Change

5. From your experience, what can reduce the incidents of suicide?

- Ask about personal experience, from their field of work, but also from a systemic point of view
- What do you think would help someone in despair to continue living?
- What do you think can be done to raise awareness in suicide prevention?
- What are some existing programmes / frameworks that can be improved or built upon?
- What kind of educational programmes or awareness campaigns do you think would be effective in preventing suicide?
- What do you think you can do personally in suicide prevention?
- How do you think we can address the stigma surrounding mental health and suicide to improve prevention efforts?
- For survivors: Trigger warning we are now going to ask about your past personal experience with suicide. If you experience any discomfort, you are free to skip this question. Could you share your thoughts on what you believe might help someone pause or seek help, instead of continuing with the suicide act, once they have started to act on those thoughts?
- For survivors: From your experience of not continuing with the suicide attempt, what were the reasons for living / what helped to keep you going?
- For policy makers + media personnel: Do you think it's helpful for us to talk about suicides more openly when they happen? How do you think we should report about suicides and attempts?

6. What do you think the ideal outcome for suicide prevention in Singapore should be?

- How do we get people to care about this issue?
- Do you think stakeholders are motivated? If not, how can we get people involved?
- For policy makers: Do you think Singapore needs to have a national suicide prevention strategy that is separate from the national mental health & wellbeing strategy?
- For those in the helping profession + medical professionals: How can we ensure that individuals who have received immediate crisis intervention receive continued long-term support?

Conclusion and Debriefing

Thank you for taking the time to participate in this focus group discussion today. We are grateful for your valuable insights in helping to shape a National Suicide Prevention strategy for Singapore.

I would like to check if everyone is doing okay? If you are experiencing any distress or discomfort from the focus group today, I would like to direct your attention to some hotline numbers that you can call on Page 4 of the participant information sheet that you received earlier. They are all free of charge and a trained counsellor will be happy to talk with you at any time. If you found out about this focus group discussion through an organisation that you have been in contact with, you could also refer back to trained counsellors or your existing support group from that organisation to help talk through what you have experienced today as well, or to receive additional support.

In the next few days, a member of the research team will be contacting you for the \$50 reimbursement towards your PayNow account to thank you for your time and participation today.

Thank you once again, and goodbye! Please feel free to leave the meeting now.

Appendix 6 - Ethics Approval Document for Focus Group Discussions

Office of the Deputy President (Research and Technology)
Institutional Review Board



NUS-IRB Reference Code: NUS-IRB-2024-188

7 June 2024

Dr Rayner Kay Jin Tan Assistant Professor Saw Swee Hock School of Public Health National University of Singapore

Dear Dr Tan,

NUS INSTITUTIONAL REVIEW BOARD (NUS-IRB) APPROVAL

Protocol Title: Voices from the Ground - Focus Group Discussions (FGDs) Towards Formulating a National Suicide Prevention Strategy

Principal Investigator: Dr Rayner Kay Jin Tan Co-Investigator: Ms Neo Hui Min, Pearlyn

Source of Funding: NUS Start-Up Grant

We refer to your application for ethics review.

We are pleased to inform you that the NUS Institutional Review Board (NUS-IRB) has approved the above-mentioned research to be carried out in accordance to the details provided in your IRB application.

The approval shall remain valid until its expiry on **30 June 2025**, unless NUS-IRB has provided its written approval for an extension of the research, or unless the research is terminated earlier for any reason whatsoever.

The following documents have been reviewed and approved by the NUS-IRB: -

Documents:

- 1. FGD Guide
- 2. Email Invitation
- 3. Recruitment Poster
- 4. Participant Information Sheet & Consent Form
- 5. Investigators' Curricula Vitae

1

Appendix 7 - Survey Questionnaire for Public Consultation

Public Consultation on Suicide Prevention in Singapore

Basic Personal Information

[Note: All text shown in square brackets will not be shown to participants]

Orde	Question	Question Option	
<u>r</u> 1	Which ago group do you	Below 21 years old [Ineligible – to be directed to	
1	Which age group do you belong to?	an end-of-survey page]	
		21 - 30 years old	
		31 - 40 years old	
		41 - 50 years old	
		51 and above	
2	What is your current	Singapore Citizen or Permanent Resident	
_	residence status in Singapore?	orngapore onizen or remainent resident	
		Non-Singapore Citizen or Permanent Resident	
		[Ineligible – to be directed to an end-of-survey	
	NA/legat in a constant of	page]	
3	What is your gender	Male	
		Female	
		Another gender	
4	What is your race (as	Chinese	
	reflected in NRIC)?	Malay	
		Indian	
		Others	
5	What is your religion?	Buddhism	
		Christianity	
		Islam	
		Taoism	
		Hinduism	
		Atheism	
		Prefer not to say	
		Others (please specify)	
6	Do you currently have any	Yes	
	medical condition(s) that affect(s) you in your everyday life? By affecting your life, we mean limiting your usual activities in any way.		
		No	
		Prefer not to say	

7	In your opinion, who	Police
	should be the first responders to suicide (e.g., both suicide attempts and deaths by suicide)?	Healthcare professionals (e.g., hospital staff,
		medical social workers, clinical psychologists)
		Community workers (e.g., non-hospital-based
		staff, case workers, para-counsellors)
		Interdisciplinary team (e.g., collaborations
		between police, healthcare professionals,
		community workers etc.)
		Others (please specify)
8	The following should be the ones leading discussions on suicide in Singapore:	Government
		Media
		Healthcare professionals and Community
		Workers
		Schools
		Families
		People with lived experience of suicide
		Workplaces
		Others (please specify)

Statements for Polling
Please select the response (agree, undecided, or disagree) that best represents your opinion on the given statement.

Order	Responses	Statement
1	Agree, Undecided, Disagree	We are doing enough to prevent suicide in Singapore.
2	Agree, Undecided, Disagree	Suicide is an issue of national importance.
3	Agree, Undecided, Disagree	Suicide should be an important aspect of our national mental health and wellbeing strategy.
4	Agree, Undecided, Disagree	<u>I know how to</u> access support services for suicide in Singapore.
5	Agree, Undecided, Disagree	<i>I am willing</i> to access support services for suicide in Singapore when needed.
6	Agree, Undecided, Disagree	I believe that the quality of suicide support services in Singapore is satisfactory.
7	Agree, Undecided, Disagree	Media outlets should report on suicide carefully.
8	Agree, Undecided, Disagree	More suicide prevention work needs to be done in schools.
9	Agree, Undecided, Disagree	More suicide prevention work needs to be done in workplaces.
10	Agree, Undecided, Disagree	Every life lost to suicide is one too many.

11	Agree, Undecided, Disagree	We must talk more about suicide as part of our efforts to prevent suicide.
12	Agree, Undecided, Disagree	I know how to help someone who is thinking about suicide.
13	Agree, Undecided, Disagree	I know how to tell if someone is showing signs of suicide risk.

Open-Ended Question

What should we focus on when discussing suicide in Singapore?			

Resources for Suicide Prevention

In the case where you may potentially feel distressed (e.g. when recalling or discussing upsetting events such as experiences with suicide) during the survey, you could call the following list of hotlines to speak to someone about the issue get the help that you might need.

Samaritans of Singapore (SOS)	1-767	24 Hours everyday
SOS CareText	9151 1761 (WhatsApp)	24 Hours everyday
Singapore Association for Mental Health (SAMH)	1800 283 7019	Mon-Fri 9am-6pm
Hear4U	6978 2728 (WhatsApp)	Mon-Fri 10am-5pm

Appendix 8 - Ethics Approval Document for Public Consultation

Saw Swee Hock School of Public Health

Research Office



REF: SSHSPH-273 (PA 1)

17 July 2024

Dr Rayner Tan Kay Jin Assistant Professor Saw Swee Hock School of Public Health

Dear Dr Tan,

APPROVAL OF RESEARCH THAT QUALIFIES FOR EXEMPTION FROM NUS INSTITUTIONAL REVIEW BOARD (NUS-IRB) REVIEW

Protocol Title: Public Consultation on Suicide Prevention in Singapore

We refer to your request for protocol amendment dated 2 July 2024.

We are pleased to inform you that the Saw Swee Hock School of Public Health Departmental Ethics Review Committee (SSHSPH-DERC) has reviewed and approved the following amended document.

<u>Documents</u>		Document Date	
1.	DERC Application Form	Version 2, 10 Jul 2024	
2.	Participant Information Sheet	Version 2, 10 Jul 2024	
3.	SSHSPH 273 Survey	Version 2, 10 Jul 2024	
4.	SSHSPH DERC Protocol Amendment	Version 1, 02 Jul 2024	

Please note that

- The Principal Investigator should inform the SSHSPH-DERC within two working days if any significant deviations from the information submitted in this application arise. The Protocol Non-Compliance/Deviation Form can be downloaded from this website: http://www.nus.edu.sg/research/irb/forms/sber-forms.
- The Principal Investigator should apply for SSHSPH-DERC approval if he/she decides to include any other human participants in his/her research at a later point in time.
- 3. The Principal Investigator is responsible to inform the SSHSPH-DERC should he/she tender resignation from NUS and notify us of any changes to the study status, e.g. change in Principal Investigator or study termination. Otherwise, the SSHSPH-DERC approval will lapse 3 months from the date of your official departure from NUS.

Thank you.