Suicide Prevention in Sri Lanka:

Recommendations for Action

Policy Document

Sri Lanka Medical Association (SLMA)

Expert Committee on Suicide Prevention

December 2019

Suicide Prevention in Sri Lanka:

Recommendations for Action

Editorial Board

Senior Professor Samudra T. Kathriarachchi

Professor Thilini Rajapakse

Dr. Lakmi Seneviratne

Dr. Ruwan Ferdinando

Dr. Sajeeva Ranaweera

Dr. Anula Wijesundere

Suicide Prevention in Sri Lanka:

Recommendations for Action

Published by the Sri Lanka Medical Association

December 2019

ISBN: 978 955 9386 45 2

Printed in Colombo, Sri Lanka

Printed by Ananda Press

Committee members of the SLMA Expert Committee on Suicide Prevention in Sri Lanka 2019

Senior Prof. Samudra T. Kathriarachchi - Chairperson

Dr. Anula Wijesundere - President SLMA 2019

Dr. Lakmi Seneviratne - Secretary

Dr. Ruwan Ferdinando - Convener

Prof. Thilini Rajapakse

Dr. Sudath Samaraweera

Dr. Sajeeva Ranaweera

Dr. Madhava Gunasekera

Dr. Jayamal De Silva

Dr. Prabath Wickrama

Dr. Kapila Jayaratne

Mr. Thirupathy Suveendran

Ms. Kumudini Hettiarachchi

Chapter Contributors

Introduction

Importance of addressing self-harm and suicide in Sri Lanka

Senior Professor Samudra T. Kathriarachchi

Addressing means of suicide: Pesticides, weedicides and pharmaceutical drugs

Dr. Madhava Gunasekera, Dr. Sajeeva Ranaweera and Mr. Thirupathi Suveendran

Community-based interventions for reducing suicides

Dr. Jayamal De Silva, Dr. Ruwan Ferdinando, Dr. Kapila Jayaratne and Dr. Sudath Samaraweera

Collaborating with media to address the issue of suicides

Dr. Prabath Wickrama and Dr. Lakmi Seneviratne

Minimizing self-harm among adolescents and young people – the way forward

Prof. Thilini Rajapakse

Contents

Foreword

Suicide and self-harm are major public health concerns in Sri Lanka. From historical times, Sri Lanka has been a tolerant culture that accepts some forms of suicide such as altruistic suicide. A permissive attitude towards suicide is also noted as suicides usually arouse sympathy towards the deceased. In the same way, suicide culture is promoted by giving a heroic status to the act of suicide by some media reports. Among the reasons for the increased rate of suicides in the recent past, lack of coping skills among vulnerable individuals and failure of recognition of their distress by their loved ones are seen as prominent causes. Free availability of lethal pesticides and medicinal drugs contribute to high rates of suicides by providing easy access to lethal substances for self-poisoning at times of distress. Among medical causes, undetected and partially treated mental illnesses, as well as alcohol and illicit drug related suicides are significant contributory factors that need urgent attention. Other causes such as poverty, unemployment, migration of caregivers of vulnerable individuals, frustration among youth and loneliness of the elderly are major causes warranting a socio-political discussion.

The national problem of the high suicide rate in Sri Lanka, which has diverse contributory factors, warrants a multi-modal approach to bring about a sustainable solution. Previous attempts to reduce the burden by different stakeholders over the past few decades led to the formation of the Presidential Task Force on Suicide Prevention in 1997, which advocated restricting the import and sale of lethal pesticides. The implementation of this recommendation contributed to a reduction in the suicide rate in the country in the following years. Other significant contributions by multiple stakeholders include teaching self-harm assessment and management in medical schools, a dialogue between media personnel and the medical fraternity on responsible media reporting of suicides, decriminalization of attempted suicide as a response to public appeals and introducing counselling services in schools by the Ministry of Education. While these efforts were successful in bringing down the suicide rate in the country, there has been a substantial increase in the number of survivors of attempted suicides and self-harm, as a result of the less lethal nature of the substances used for self-poisoning and the easy access to medical care in every corner of the country. Increasing self-harm is a major concern at present, as survivors of previous self-harm attempts have an increased risk of committing suicide. Another fact that demands urgent attention by policymakers and service providers is the rising rate of suicides among elderly males.

As a response to the national need of suicide prevention, the Sri Lanka Medical Association (SLMA) in 2019, formed the Expert Committee on Suicide Prevention (initially named the Suicide Prevention Task Force of the SLMA) to identify solutions to this burning issue. The mandate of the Expert Committee included identification of factors that contribute to high suicide and self-harm rates in Sri Lanka, mapping successful programmes and activities that contribute to prevention, developing a policy document on the prevention of suicides and self-harm and providing a framework to address long-term issues of sufferers. Within a year, the Expert Committee completed its report which incorporated a myriad of strengths of different stakeholders to bring about a sustainable solution to the prevailing culture that propagates suicides in Sri Lanka. The Expert Committee carried out important interventions in 2019, with a view to establishing sustainable development in several domains of suicide prevention. Among them were a media conference to promote responsible media reporting; an activity to improve coping skills among young adults in a university; a joint conference with the Ministry of Agriculture and Ministry of Health to discuss means of reducing the availability of some lethal pesticides (carbosulfan and profenofos); and dissemination of knowledge among the public and medical fraternity on preventive strategies and available support services such as helplines. Thus, the Expert Committee has completed its initial mission within a short time. However, to have a sustainable impact on suicide prevention, a coordinated approach as outlined by this report with greater political and social commitment is necessary.

I thank all the members of the Expert Committee and its main collaborators for making this report a reality. A note of gratitude to Professor Michael Eddelston of the United Kingdom for supporting the chapter on pesticide control; Dr Rohan Ratnayake, Acting Director of the Mental Health Directorate, Ministry of Health; Mrs K.S.A.D.H.S. Wickramasinghe of the Ministry of Education; and Mr Sumith Jayakody of the Ministry of Agriculture for their valuable support. A note of appreciation to Dr Gayal Dissanayake and Dr Chathurani Akurana for their support in completing this publication. I appreciate the support of Ms Kumudini Hettiarachchi in editing the book and the World Health Organization for the support extended in publishing it. I also thank Mr D.S. Perera, Mr Vihanga de Silva and the staff of the SLMA and the Sri Lanka Technological Campus for the support extended to the Expert Committee in numerous ways to make this publication a reality. Finally, I thank "Ananda Press" for a job well done in printing.

I hope the actions and measures proposed by the policy document are followed through by all the stakeholders in due course. It is my wish and hope that a National Authority on Suicide Prevention will be formed by the Government, with the wider participation of all stakeholders to make Sri Lanka a privileged nation with a low suicide rate in the world.

Senior Professor Samudra T. Kathriarachchi
Chairperson
Expert Committee on Suicide Prevention
Sri Lanka Medical Association

Preface

It is a pleasure to send this message to the framework document produced by the Expert Committee of the SLMA on 'Prevention of Suicides in Sri Lanka'. When I was inducted as the President of the Sri Lanka Medical Association in January 2019, the theme I introduced for 2019 was "Facing the challenges and forging ahead for better health outcomes". I mentioned 10 challenges we face among which was – 'Reducing the burden of suicides in Sri Lanka'. Thereafter, at a council meeting it was proposed that the SLMA should formulate an Expert Committee to deal with the burden of suicides in Sri Lanka.

I invited Professor Samudra T. Kathriarachchi to be the Chairperson and formed the Expert Committee comprising Professor Thilini Rajapakse, Dr Lakmi Seneviratne (Secretary), Dr Sudath Samaraweera, Dr Ruwan Ferdinando (Convener), Dr Sajeeva Ranaweera, Dr Prabath Wickrama, Dr Jayamal De Silva, Dr. Madhava Gunasekera, Mr Thirupathi Suveendran, Dr. Kapila Jayaratne and myself.

The burden of suicides in Sri Lanka cannot be over-emphasized. In 1995, Sri Lanka had the highest rate of suicide in the world with 47 suicides per 100,000 population, averaging 25 suicides per day. Fortunately, by 2015 this had decreased to 20 suicides per 100,000 population, with around 10 suicides per day. However, this is no reason for complacency as there are around 10 suicide attempts for every successful completed suicide in Sri Lanka.

The main reason for the dramatic reduction of suicides between 1995 and 2015 was the banning of the most potent organo-phosphorus compounds 3-4 DPA monocotophos, diaminophos, methaminophos from the Sri Lankan agro-chemical formulary. The banning of these pesticides was the main recommendation of the Presidential Task Force on Suicide Prevention appointed by President, Chandrika Bandaranaike Kumaratunga in 1995.

Today, the two pesticides which are primarily responsible for suicides in Sri Lanka are carbosulfan and profenofos. If the Expert Committee of the SLMA on Suicide Prevention along with the Mental Health Directorate of the Ministry of Health could convince the Ministry of Agriculture and the Registrar of Pesticides to ban these lethal products, we would then have reached our main target. I am happy that the SLMA Expert Committee on Suicide Prevention has already produced a Cabinet paper in this regard. We

hope to present this document to the government for implementation in the near future. This will certainly help to reduce the burden of suicides in Sri Lanka and elevate our position in the Global Happiness Index.

Dr Anula Wijesundere
President
Sri Lanka Medical Association 2019

CHAPTER 1

Introduction

Importance of Addressing Suicide and Self Harm in Sri Lanka

Chapter writer

Prof Samudra T. Kathriarachchi

Chair and Senior Professor of Psychiatry, Department of Psychiatry

Faculty of Medical Sciences, University of Sri Jayewardenepura

Introduction

Importance of addressing self-harm and suicide in Sri Lanka

Suicide and self-harm add to the domestic, health and economic costs of a country, and Sri Lanka is no exception. This phenomenon has received the attention of scientists and researchers of different disciplines in Sri Lanka. The efforts of a variety of stake holders and changes in socio-economic factors have led to significant changes in the patterns and rates of suicide and self-harm in Sri Lanka over the last two decades.

The national rates of suicide in Sri Lanka increased dramatically from the 1950's to 1995, increasing up to 8 fold (1). Evidence indicates that 26% of people who committed suicide had a past history of suicidal gestures, while depression and alcohol use disorders were the most commonly associated psychiatric disorders (2). The most common method of suicide at that time was ingestion of toxic pesticides. This reached a peak in 1995 to 47 per 100,000, ranking Sri Lanka as the country with the 2nd highest rate of suicides in the world at that time (1). Since 1995, for the next decade, suicide rates in Sri Lanka declined by 50% (3).

Activities to curtail this included the establishment of the Presidential Task Force for Suicide Prevention in 1997 which led to the implementation of several preventive measures, the most significant of these being the banning of certain class I pesticides (1). This was accompanied by a dramatic fall in the suicide rates in Sri Lanka after 1995, mainly of pesticide ingestion, reaching a 14.3 per 100,000 by 2015 (4). However, this decline was accompanied by a relatively smaller concurrent rise in non-pesticide related suicide mortality with a 2% increase (4). Other notable contributions of the civic society and academia include, decriminalization of self-harm attempts, measures to ensure responsible media reporting, introduction of life skills in school curricula and teaching undergraduate and postgraduate medical students assessment of persons who had engaged in self-harm and after care.

The current situation

Similar to the rest of the world, rates of suicide in Sri Lanka too are more common among males compared to females; and in recent years, the rates of suicide have been greater among older compared to younger males, again similar to worldwide patterns (5). When examining rates of suicide among females by age, rates of suicide among young females still appear to be higher than rates among older females (5).

The decrease in the rates of suicide has been accompanied by a different but related phenomenon – an increase in rates of hospital admissions due to attempted or non-fatal self-poisoning (6). The commonest method of non-fatal self-poisoning is by medicinal overdose (7). Non-fatal self-poisoning in Sri Lanka, similar to elsewhere in the world, is much more common among young people, with a slight female preponderance. The act of non-fatal self-poisoning seems to be most often triggered by an interpersonal conflict (8).

Changes have also been observed in the patterns of maternal suicide ratio compared to the maternal mortality ratio in the recent past, which merit more focused interventions directed at this vulnerable group. From 2002 to 2010, the maternal suicide ratio has gradually increased from 0.8 to 12.1, while the maternal mortality ratio has seen a gradual decline, making suicides one of the main reasons of maternal deaths in the recent years (9),(10).

Despite the fall in rates of suicide since the mid-1990s, suicide remains a significant problem in Sri Lanka, and the last few years have shown a slight upward trend in rates, with a relative increase of suicides among older males. These changes, together with the increasing trends of attempted self-harm by self-poisoning, should be an eye opener to policy planners. The mental health morbidity of sufferers, survivors and bereaved relatives directly and indirectly add to the economic and social costs of the nation.

What interventions have worked

Restriction of access to means such as implementation of a ban on the importation of pesticides, has served well as a major measure responsible for the dramatic decline in pesticide-related suicides in Sri Lanka (4). Since pesticide ingestion for self-poisoning still remains a common problem, this needs to be an ongoing measure. Sustainable measures to reduce pesticide related suicide and self-harm include responsible pesticide use at every level

such as distribution, storage, use in farming industry and disposal. Supportive measures directed to reduce the distress of the at-risk population, in order to improve the quality of life among them as well as their families have been identified by the Department of Health and Social Services.

Programs directed at raising public awareness to seek out help and education and training of media personnel regarding responsible reporting of suicides are among other interventions that have contributed to primary prevention. Other primary preventive measures that have been implemented in the recent years include, organizing continuing professional development (CPD activities) for medical officers, including psychiatry as a final year merit subject in all medical faculties, appointing psychiatrists in all districts to ensure improved services, training and raising awareness and allocating diploma holders as medical officers in mental health in less accessible areas.

Introducing self-harm assessment of patients admitted to hospitals, decriminalization of the act of self-harm, providing counselling and brief psychotherapy to patients, aiding referrals to appropriate agencies and counselling families are some noteworthy contributions in secondary prevention (12-14). Including assessment and management of self-harm as part of the medical and nursing curricula is also a notable development. Education of gatekeepers, strengthening them to support those who survive and improving care for high risk patients by providing improved psychiatric facilities has led to positive results (15).

Development of an investigation tool to assess psychological and psychiatric causes of maternal suicides (PAMS), as a joint venture by the Family Health Bureau and the special interest group of psychiatrists is another important recent development in Sri Lanka in assessing the magnitude of the problem.

School counselling services and family counselling services have been introduced to schools, higher educational institutions and divisional secretariats directed towards reducing distress among school children and families (15). However, these services are of variable standards as training of personnel and facilities are vastly different.

Services offered to elder population have received attention in the recent past. Notable contributions have been made by the Elder Secretariat, Department of Social Services and the Postgraduate Institute of Medicine, University of

Colombo (15). These initiatives need considerable resource allocation to ensure sustainability.

Increasing public awareness on self-harm has led to strengthening of counselling services offered by the Sri Lanka Sumithrayo and other counselling services. Three national help-lines were initiated by different stakeholders. A counselor training programme was commenced by the University of Sri Jayewardenepura, and several other state universities of Sri Lanka (15).

Interest and commitment of individuals and special interest groups have made vast strides in suicide prevention activities in Sri Lanka. The need for a central authority, which provides direction and support to different stakeholders is identified as the key area of development at present.

The need to re-address this phenomenon at present

Despite a multitude of interventions directed at reducing suicide rates in Sri Lanka, a more coordinated approach is required to make these interventions more effective and address the current concerns about rising trends in non-fatal deliberate self-harm.

This is a challenge the world-over, but evidence suggests that a multimodal approach is needed; no one single strategy is sufficient, but rather we need to consider a combination of evidence based strategies, probably at universal, as well as, individual levels (16). This should give rise to a national-level policy and plan for minimization of self-harm and suicide in the country. On the one hand, this may include strategies focused at minimization of associated factors such as depression and substance use disorders, especially alcohol use disorders and risks associated with growing elderly population in a changing society; it may also include measures to help young people and families cope with the distress of interpersonal conflicts in more adaptive ways; and the identification of those who have attempted self-harm who are at high risk of repetition, and follow-up of such individuals.

Involvement of all stakeholder groups in the development of policies, while ensuring collaboration among the different stakeholder groups (extending to the grass root level of the community) and evoking an attitudinal change amongst them to accommodate a broader perspective on the subject, are key areas that need to be focused on during future interventions. Formation of a

National Authority on Suicide Prevention with wider participation of multiple stake-holders is highly recommended in this regard.

Bibliography

1. Gunnell D, Fernando R, Hewagama M, Priyangika WDD, Konradsen F, Eddleston M. The impact of pesticide regulations on suicide in Sri Lanka. International Journal of Epidemiology. 2007 Dec; 36(6): 1235–1242.
2. Abeyasinghe R, Gunnell D. Psychological autopsy study of suicide in three rural and semi-rural districts of Sri Lanka. Social Psychiatry and Psychiatric Epidemiology. 2008 Apr; 43(4):280-5. doi: 10.1007/s00127-008-0307-3
3. Gunnell D, Fernando R, Hewagama M, Priyangika WD, Konradsen F, Eddleston M. The impact of pesticide regulations on suicide in Sri Lanka. International Journal of Epidemiology. 2007; 36(6):1235-1242.
4. Knipe DW, Chang S-S, Dawson A, Eddleston M, Konradsen F, Metcalfe C. Suicide prevention through means restriction: Impact of the 2008-2011 pesticide restrictions on suicide in Sri Lanka. PLOS ONE. 2017 March 6; 12(3): e0172893. https://doi.org/10.1371/journal.pone.0172893.
5. Knipe DW, Metcalfe C, Fernando R, Pearson M, Konradsen F, Eddleston M. Suicide in Sri Lanka 1975–2012: age, period and cohort analysis of police and hospital data. BMC Public Health. 2014 Aug 13; 14:839. doi: 10.1186/1471-2458-14-839.
6. Hanwella R, Senanayake SM, De Silva VA. Geographical variation in admissions due to poisoning in Sri Lanka: a time series analysis. Ceylon Medical Journal. 2012 Dec; 57(4):152-8. doi: 10.4038/cmj.v57i4.5083.
7. De Silva V, Ratnayake A. Increased Use of Medicinal Drugs in Self-Harm in Urban Areas in Sri Lanka. Archives of Suicide Research. 2008;12(4):366-9. doi: 10.1080/13811110802325265.
8. Rajapakse T, Griffiths KM, Christensen H, Cotton S. Non-fatal self-poisoning in Sri Lanka: associated triggers and motivations. BMC Public Health. 2015; 15: 1167. doi:10.1186/s12889-015-2435-5
9. Jayaratne K. Maternal Suicides in Sri Lanka: Lessons learnt from review of maternal deaths over 9 years (2002-2010). In: Proceedings - Suicide in Sri Lanka: Past, Present and Future Transformations. 2013.

10. Isuru LLA, Gunathillaka KDK, Kathriarachchi ST. Reducing maternal suicide in Sri Lanka: closing the gap. Sri Lanka Journal of Psychiatry. 2016; 7(1): 1–3. DOI: http://doi.org/10.4038/sljpsyc.v7i1.8095

11. Police, Sri Lanka. Suicides in Sri Lanka. Performance Report Sri Lanka Police. 2018.

12. Kathriarachchi ST, Manawadu VP. Deliberate Self-Harm (DSH) - guidelines on assessment of patients admitted to hospitals. Journal of the Ceylon College of Physicians. 2002; 35 (Suppl):1-12.

13. Perera EA, Kathriarachchi ST. Problem—solving counseling as a therapeutic tool on youth suicidal behavior in the suburban population in Sri Lanka. s.l. : Indian Journal of Psychiatry. 2011 Jan; 53(1):30-5. doi: 10.4103/0019-5545.75558.

14. Seneviratne RMAVL, Kathriarachchi ST. Efficacy of Solution Focused Brief Therapy in reducing psychological distress in persons presenting with deliberate self-harm to a Teaching Hospital in Sri Lanka. (Dissertation for MD in Psychiatry). Colombo: University of Colombo; 2018.

15. Kathriarachchi, ST, Seneviratne VL, Amarakoon L. Development of Mental Health Care in Sri Lanka: Lessons Learned. Taiwanese Journal of Psychiatry. 2019; (33): 55-65.

16. Mann JJ, Apter A, Bertolote J, Beautrais A. Suicide prevention strategies: a systematic review. Journal of the American Medical Association. 2005 Oct 26;294(16):2064-74.

CHAPTER 2

Recommendations for Action: Priority activities

The Sri Lanka Medical Association (SLMA) Expert Committee on Suicide Prevention

As recommended by the World Health Organization, the Expert Committee recommends an evidence-based National Plan for the Minimization of Suicide and Self-harm which needs to;

- Be adapted to the local community and involve local stakeholders from the beginning
- Include engagement of the media
- Be monitored for efficacy and acceptability, together with community feedback.

General Recommendations

The SLMA, the Ministry of Health, the National Secretariat for Elders, the Ministry of Social Empowerment and Welfare and the Sri Lanka Colleges of Psychiatrists, General Practitioners and Community Physicians to:

1. Identify addressing suicides as a national priority based on the significant morbidity, mortality, social and economic costs of deliberate self-harm and suicides and a challenge to meeting the Sustainable Development Goals.
2. Advocate the establishment of an independent authority that is exclusively responsible for addressing the prevention of suicides through multi-sector partnerships.
3. Work towards integrating the prevention of suicides as an agenda in the existing relevant national legislations, policies, plans, partnerships and programmes, especially related to health (including child, adolescent and maternal health), social welfare and elder-care and strengthen interventions for the prevention of alcohol use disorders.

4. Take steps to improve health information and develop surveillance systems to gather data and promote research on suicides. This is required for the development and implementation of effective interventions for prevention.

Specific Recommendations

A. Addressing the use of pesticides and weedicides and pharmaceutical drugs in suicides

A.1 Priority recommendations

A.1.1 Priority recommendations on pesticides and weedicides

The SLMA and the Ministry of Health in collaboration with the Ministry of Agriculture to initiate action to:

1. Modify recommendations for the use of carbosulfan and quinalphos which would limit its use for specific requirements only. The recommendations for the use of profenofos were modified recently to restrict its indications for use, resulting in a significant reduction of its use.
2. Take steps to ensure issuance of carbosulfan, profenofos and quinalphos only on prescription by the Agriculture Instructor for essential situations.
3. Strengthen collaborations to restrict the use or discontinuing selected lethal pesticides currently in use and the practicalities of making available alternative chemical and other methods of pest and weed control. The prevention of the illicit use of these pesticides and increasing toxicity of the pesticides by mixing other substances too, should be addressed through this forum.
4. Encourage research that is directed at identifying suitable eco-friendly alternatives for carbosulfan, profenofos and quinalphos.

A.1.2 Priority recommendations on pharmaceuticals

The SLMA in collaboration with the Ministry of Health and the National Medicines Regulatory Authority, in collaboration with the professional organisations of Pharmacists to:

1. Initiate a process to monitor and address deliberate self-harm using pharmaceuticals.

2. Commence gatekeeper training for those involved in the retail sale of pharmaceuticals.
3. Commence a programme that addresses the issues related to over-prescription of medications, safe storage and proper disposal of unused medications. These interventions should be focused towards medical teachers, medical practitioners, gatekeepers of healthcare facilities and primary healthcare teams.

A.1.3 Other recommendations

The SLMA and the Ministry of Health in collaboration with the Ministry of Agriculture to:

1. Provide other less lethal pesticides and pest control methods to farmers at a subsidized rate.
2. Encourage research on disease resistant crops and eco-friendly agricultural methods.
3. Conduct sustained gatekeeper training for the prevention of suicides in agricultural communities.
4. Empower farming communities to use pesticides and weedicides in a responsible manner. This includes limited use and proper disposal of pesticides and weedicides to prevent easy access to those at risk of self-harm.
5. Conduct awareness campaigns through the mass media on responsible pesticide and weedicide use.

B. Community-level interventions

The Medical Faculties, the SLMA, the Ministry of Health, the National Institute of Health Sciences and the Colleges of Psychiatrists, Community Physicians and General Practitioners to:

1. Include preventive and clinical approaches to suicide prevention in the curricula of general practitioners, nurses and primary care staff training programmes. In addition, in-service refresher courses to be carried out by the College of General Practitioners, the National Institute of Health Sciences and the RDHS offices, with technical guidance from the Sri Lanka College of Psychiatrists.

2. Establish a system for a proactive collaborative follow-up of those discharged from hospital, following self-harm. Strengthen a collaborative approach in providing continuity of the hospital care plan through primary care teams and GP practices, incorporating a shared care model in the management of patients with a high risk of suicide.
3. Continue to develop mental health services and allocate trained mental healthcare professionals throughout the country and also focus on the minimization of alcohol and other substance use disorders.
4. Strengthen maternal mental health services through the Ministry of Health.
5. Work with the Postgraduate Institute of Medicine and the Colleges of Obstetricians & Gynaecologists and Community Physicians to include measures to address maternal suicides by obtaining technical guidance from the Sri Lanka College of Psychiatrists.
6. Ensure that community mental health promotion programmes are considered a component of policies and programmes aimed at preventing suicides.
7. Develop collaborative care with stakeholder agencies to provide a safety net for the elderly.
8. Provide technical assistance to train staff of all helplines that handle issues relating to mental health, in both the government and non-government sectors, to handle callers at risk of suicide and self-harm and carry out appropriate interventions. Ensure, in collaboration with the managers of the helplines, the monitoring of service provision to maintain ethical and moral standards.

C. Collaboration with the media

The SLMA, the Ministry of Health and the Sri Lanka College of Psychiatrists in consultation with media professionals to:

1. Initiate/strengthen discussions with media organizations in order to establish a collaborative process to improve suicide reporting in the print and electronic media through collective efforts.
2. Identify and address the barriers to the process of including appropriate/responsible reporting of suicide in training curricula of journalists.
3. Collaborate with the Ministry of Mass Media to establish a system of surveillance of suicide reporting in the print and electronic media and

provide feedback and recommendations to media institutions and agencies.

4. Support the Telecommunications Regulatory Commission (TRC) and the Sri Lanka Computer Emergency Readiness Team (SL-CERT) to monitor and control material promoting suicides and cyber bullying in social media and the Internet.

D. Minimizing self-harm among adolescents and young people

The Medical Faculties, the SLMA, the Ministry of Health, the Ministry of Social Services, the Ministry of Education, the Family Health Bureau and the Sri Lanka Colleges of Psychiatrists, Community Physicians and General Practitioners to:

1. Develop community and school health education programs to help adolescents understand the physical, sexual and emotional changes they are experiencing; and conduct locally suited programs to help adolescents develop more adaptive coping skills.
2. Develop and implement a national policy on the provision of trained counsellors for schools, who are dedicated to that purpose.
3. Develop regular training programs to increase awareness among school-teachers and counsellors about psychological disorders among school children and how best to respond to such children and adolescents as well as the mechanism of referral to healthcare providers.
4. Develop community programs to help parents understand and cope with issues of adolescence.
5. With the support of medical and IT experts, develop online platforms in local languages, to engage adolescents and young people for provision of psychological support.
6. Engage the media and improve the strategies of reporting related to suicide and self-harm.

CHAPTER 3

Addressing means of suicide: Pesticides, weedicides and pharmaceutical drugs

Chapter writers

Dr Madhava Gunasekera

Consultant Community Physician, Directorate of Mental Health,

Ministry of Health

Dr Sajeeva Ranaweera

National Consultant, World Health Organization Country Office, Sri Lanka

Mr Thirupathy Suveendran

National Programme Officer - Mental Health, World Health Organization Country Office, Sri Lanka

Addressing means of suicide: pesticides, weedicides and pharmaceutical drugs

One of the most effective means of addressing completed suicides is restricting access to the means of suicide. Studies carried out in many parts of the world have shown that this approach is effective in addressing suicide at national and local levels (1-3). Restrictions on easy access to lethal means works well because in many (though not all) persons, impulse to self-harm or commit suicide are often short-lived and fluctuate, lasting only a few minutes to a few hours. Studies have shown that restriction of access to high points, firearms and different kinds of poisons including pesticides and insecticides are successful in reducing suicides.

Pesticides and weedicides: The global scenario

A systematic review on articles published from 1990 to 2007 found that more than 30% of suicides globally are due to pesticide poisoning (4). The study further found that the rates varied from 4% in the European region to over 50% in the Western Pacific Region (4). The number of suicides did not correlate with the volume of pesticides sold, but to the pattern and the toxicity of the pesticides used (4). The importance of pesticides in suicides has dwindled since then but is still considered among the three most important causes of suicides globally (3).

Situation in Sri Lanka

In Sri Lanka, nearly 30% of completed suicides occur due to pesticides (Table 1). In addition, there are over 9900 admissions annually in Sri Lanka due to self-harm from different kinds of pesticide and weedicide poisoning, which places an enormous burden on the health system (5).

Table 1: Methods of Suicide in Sri Lanka 2011-2017

Method	Sex	2011	2012	2013	2014	2015	2016	2017
Hanging	Males	38.18	43.59	49.17	51.21	52.49	54.90	58.31%
	Females	26.96	33.04	38.03	40.61	38.86	42.13	45.20%
Ingestion of Insecticides & Pesticide	Males	49.23	41.75	35.29	33.13	32.02	29.84	26.99%
	Females	37.30	34.16	25.93	24.24	22.72	25.51	22.75%
Drowning	Males	2.01	2.21	3.33	3.10	2.97	2.18	2.78%
	Females	5.66	6.09	8.38	7.12	8.37	6.12	5.47%
Setting fire to oneself	Males	1.33	1.84	1.81	1.69	2.01	1.80	1.62%
	Females	11.67	10.56	11.04	11.06	14.65	10.93	10.64%
Jumping in front of a moving vehicle	Males	1.94	2.90	3.07	3.18	4.65	4.53	5.30%
	Females	2.05	1.99	3.46	2.73	2.99	4.37	3.84%

Data Source: Sri Lanka Police

Effect of banning of pesticides on rates of suicide

A meta-analysis of studies conducted in 16 countries including both low and high income countries revealed that the national banning of pesticides is effective in reducing both the overall suicide rate and suicides due to pesticides in almost all the countries (6).

Effect of banning pesticides on suicide rates in Sri Lanka

The suicide rate in Sri Lanka was one of the highest in the world in mid the 90's and a presidential taskforce was appointed to solve the problem. One of the main recommendations (among many) was to ban lethal pesticides and the trend in suicides following the ban of different pesticides and insecticides in Sri Lanka are shown below. Figure 1 shows the upward trend in completed suicide following the "green revolution" in the 1960, when chemical means of pesticide and weedicide use became widely available.

Evidence indicates that banning of pesticides has resulted in the decline of the number of completed suicides. The overall reduction of suicide rates has

been driven by the reduction in pesticide and weedicide related suicides since 1997, as the Figure 2 illustrates below. This effect has been shown in both males and females. Though pesticide poisoning is an ongoing problem in Sri Lanka, the country has saved 93 000 lives between 1995 and 2015 due to banning of pesticides (7).

Figure 1: Association between banning of specific lethal pesticides and suicide rate in Sri Lanka (1880-2015)

Figure reproduced from the article "Preventing deaths from pesticide self-poisoning—learning from Sri Lanka's success' by Duleeka W Knipe, David Gunnell and Michael Eddleston (7)

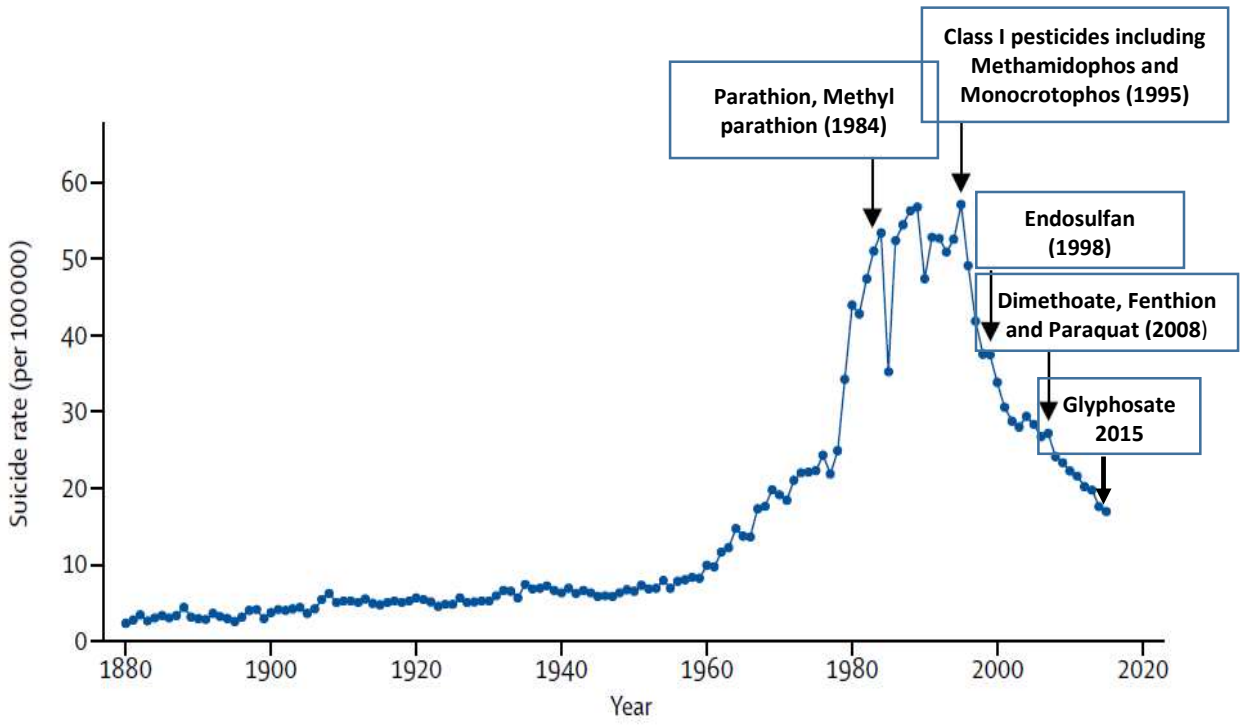
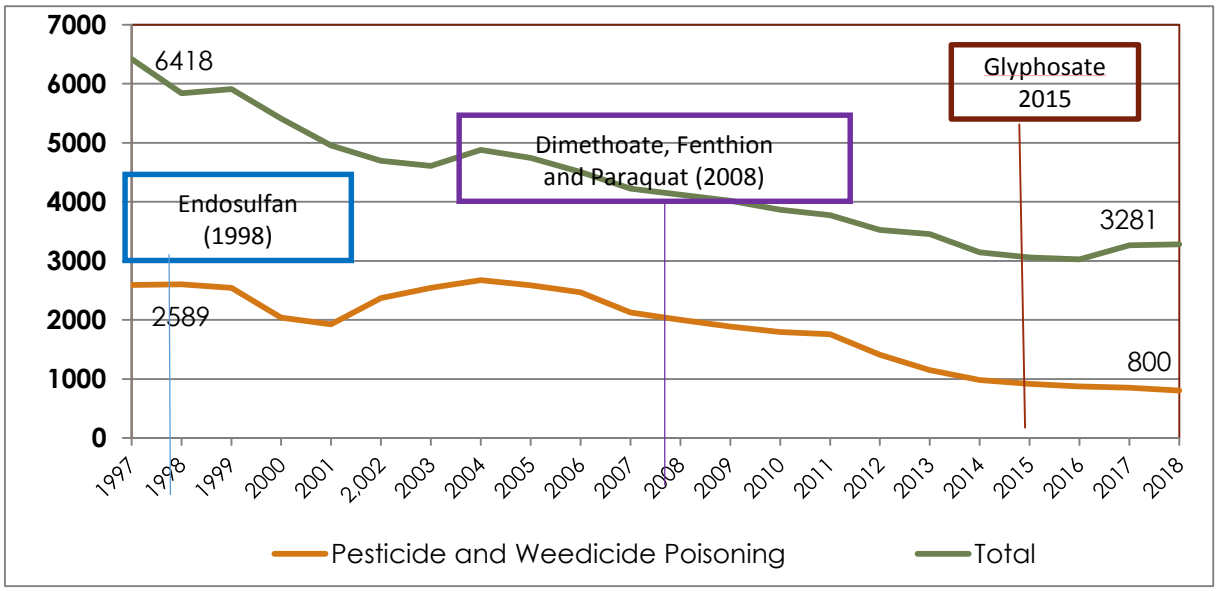


Figure 2: Relationship between the total number of suicides and pesticide / weedicide associated suicides 1997-2018 in Sri Lanka

Data Source: Sri Lanka Police



Commonly used lethal pesticides at present

A recent study undertaken in the North Central Province has shown that two pesticides are responsible for **56% of the suicides, which are caused by pesticides** in the province (8). These pesticides are carbosulphan (which is a carbamate, and kills by inhibition of the enzyme acetylcholineesterase) and propanophos (which is an organophosphate and also kills by inhibition of the enzyme acetylcholineesterase). The European Union banned carbosulfan in 2007 (9). Propanophosand quinalphoswere also found to be the cause of a significant proportion of deaths due self-poisoning and also responsible for patents requiring prolonged ventilation in the Central Province (10).

All the evidence suggests that restriction of lethal pesticides and weedicides can be done without affecting Sri Lanka's agricultural output as long as effective alternatives, ideally without pesticides, can be identified in advance. The removal of highly hazardous pesticides from agricultural production offers additional benefits in terms of biodiversity conservation, safe food, sustainable agricultural practices and wider health benefits for agricultural communities.

Identifying agricultural alternatives

The Department of Agriculture currently recommends carbosulfan for chili leaf curl complex, aphids, thrips, and white flies in chilies, stem borer and paddy bug in rice, bean fly in beans, potato aphids, thrips, and whitefly in potato, whiteflies, thrips, and aphids in tomato, and pineapple mealy bug in pineapple.

Profenofos is recommended for gall fly in cucurbits. Quinalphos is not recommended for particular crops and is not popular in the North Central Province.

Abamectin, pyrometrozin, etofenprox, thiamethoxam 20% + chlorantraniliprole 20% combination product, and flubendiamid have been recommended as alternatives for carbosulfan, although formal comparisons with carbosulfan have not yet been done. No alternative for the use of profenofos is recommended for gall fly in cucurbits.

Non-chemical alternatives, as well as insecticides of much lower acute toxicity, are available for these pests. Local study is required to identify the presence of natural enemies, the ecology of the pests, and the need for inputs so that these insecticides can be removed from agricultural use for the benefit of human and environmental health.

In 2019, the WHO and the Food and Agriculture Organization (FAO) published guidelines for Pesticide Registrars and Regulators on the prevention of suicide (11).

In 2019, the SLMA formed the Expert Committee on Suicide Prevention in Sri Lanka, which collaborated with the Directorate of Mental Health of the Ministry of Health in organizing a stakeholder meeting in September 2019 to explore the possibility of restricting use of highly lethal pesticides. With collaboration from representatives from the Ministry of Agriculture, including the Registrar of Pesticides, Agriculture Research Officers and other stakeholders, recommendations were formulated, and are incorporated to the policy document as priority recommendations.

Use of pharmaceuticals as a means of suicide in Sri Lanka

Pharmaceutical misuse is becoming a concern in Sri Lanka, with benzodiazepines and opioids being the commoner drugs of misuse (12). Studies have shown that although the number of deaths from suicides has reduced since 1995, the number of hospitals admissions due to self-harm has increased with medicinal drug overdoses becoming commoner than before (13) (14). Pharmaceuticals were also commonly used for deliberate self-harm by adolescents (15).

The easy over-the-counter availability of pharmaceutical medications in Sri Lanka gives easy access for medication overdoses among young people, as does the accumulation of unused medication in households, which is an increasing challenge.

Priority recommendations

Priority recommendations on pesticides and weedicides

The SLMA and the Ministry of Health, in collaboration with the Ministry of Agriculture to initiate action to:

1. Modify recommendations for the use of carbosulfan and quinalphos which would limit its use for specific requirements only. The recommendations for the use of profenofos were modified recently to restrict its indications for use, resulting in a significant reduction of its use.
2. Take steps to ensure issuance of carbosulfan, profenofos and quinalphos only on prescription by the Agriculture Instructor for essential situations.

3. Strengthen collaborations to restrict the use or discontinuing selected lethal pesticides currently in use, and the practicalities of making available alternative chemical and other methods of pest and weed control. The prevention of the illicit use of these pesticides and increasing toxicity of the pesticides by mixing other substances too should be addressed through this forum.
4. Encourage research that is directed at identifying suitable eco-friendly alternatives for carbosulfan, profenofos and quinalphos.

Priority recommendations on pharmaceuticals

The SLMA in collaboration with the Ministry of Health and the National Medicines Regulatory Authority, in collaboration with the professional organisations of Pharmacists to:

1. Initiate a process to monitor and address deliberate self-harm using pharmaceuticals.
2. Commence gatekeeper training for those involved in the retail sale of pharmaceuticals.
3. Commence a programme that addresses the issues related to over-prescription of medications, safe storage and proper disposal of unused medications. These interventions should be focused towards medical teachers, medical practitioners, gatekeepers of healthcare facilities and primary healthcare teams.

Other recommendations

The SLMA and the Ministry of Health, in collaboration with the Ministry of Agriculture to:

1. Provide other less lethal pesticides and pest control methods to farmers at a subsidized rate.
2. Encourage research on disease resistant crops and eco-friendly agricultural methods.
3. Conduct sustained gatekeeper training for the prevention of suicides in agricultural communities.

4. Empower farming communities to use pesticides and weedicides in a responsible manner. This includes limited use and proper disposal of pesticides and weedicides to prevent easy access to those at risk of self-harm,
5. Conduct awareness campaigns through the mass media on responsible pesticide and weedicide use.

Bibliography

1. World Health Organization. Reducing access to means of suicide. Geneva : World Health Organization; 2015.
2. World Health Orgranization. Suicide [Online]. 2019. [Cited: 2019 September 27] Available from: https://www.who.int/mental_health/resources/preventingsuicide/en/.
3. World Health Organization. Preventing Suicides; a global imperative. Geneva : World Health Organization; 2014. ISBN 978 92 4 156477 9.
4. Gunnell D, Eddleston M, Phillips MR, Konradsen F.The global distribution of fatal pesticide self-poisoning: Systematic review. BMC Public Health. 2007 December 21; 7: 357.
5. Ministry of Health. Indoor Morbidity and Mortality Return. [Online] 2017. [Cited: 2019 September 20]. Available from: http://www.health.gov.lk/moh_final/english/others.php?pid=110.
6. Gunnell D, Knipe DW, Chang S, Pearson M, Konradsen F, Lee WJ, Eddleston M. Prevention of suicide with regulations aimed at restricting access to highly hazardous pesticides: a systematic review of the international evidence. The Lancet. 2017 August 11; 5(7): e1026-e1037. doi: 10.1016/S2214-109X(17)30299-1.
7. Knipe DW, Gunnell D, Eddleston M. Preventing deaths from pesticide self-poisoning—learning from Sri Lanka's success. The Lancet. 2017 July 01; 5(7): e651-e652.
8. Weerasinghe M, Pearson M, Konradsen F, Agampodi S, Sumith JA, Jayamanne S, Senanayake SMHMK, Rajapaksha S, Eddleston M. Emerging pesticides responsible for suicide in rural Sri Lanka following the 2008-2014 pesticide bans. BMC Public Health. Under review

9. Wikipedia. Carbosulfan. [Online]. 2019August 21 [Cited: 2019 Sept 21]. Available from: https://en.wikipedia.org/wiki/Carbosulfan.

10. Alahakoon C, Dassanayake TL, Gawarammana IB, Weerasinghe VS, Buckley NA. Differences between organophosphates in respiratory failure and lethality with poisoning post the 2011 bans in Sri Lanka. Clinical Toxicology. 2019 Sep 9; 1-5. doi: 10.1080/15563650.2019.1660782https://doi.org

11. World Health Organization and Food and Agriculture Organization. Preventing Suicides. A Resource for Pesticide Registrars and Regulators. Geneva : World Health Organization; 2019. ISBN 978-92-4-151638-9.

12. United Nations Office for Drugs and Crime. Misuse of Prescription Drugs: a South Asia Perspective. New Delhi: United Nations Office for Drugs and Crime; 2011.

13. Rajapakse TN. A review of the changing patterns of suicide and deliberate self-harm in Sri Lanka. Sri Lanka Journal of Psychiatry. 2017; 8(1): 3-9. http://doi.org/10.4038/sljpsyc.v8i1.8132.

14. De Silva VA, Senanayake S, Dias P, Hanwella R. From pesticides to medicinal drugs: time series analyses of methods of self-harm in Sri Lanka. Bulletin of the World Health Organanization. 2012; 90(1): 40–46.

15. Senadheera C, Marecek J, Hewage C, Wijayasiri WAA. A Hospital-Based Study on trends in deliberate self-harm in children and adolescents. Ceylon Medical Journal. 2010; 55(2): 67–68. doi.org/10.4038/cmj.v55i2.1991.

CHAPTER 4

Community Based Interventions for Reducing Suicide

Chapter writers

Dr Jayamal De Silva

Senior Lecturer, Head of Department of Psychiatry,
Faculty of Medical Sciences,
University of Sri Jayewardenepura

Dr Ruwan Ferdinando

Consultant Community Physician,

National Institute of Health Sciences, Kalutara

Dr Kapila Jayaratne

Consultant Community Physician,

National Programme Manager - Maternal & Child Morbidity & Mortality Surveillance

Family Health Bureau

Dr Sudath Samaraweera

Deputy Director General (Education Training and Research),

Ministry of Health

Strategies to minimize self-harm and suicide in the community is a challenge the world-over, but evidence suggests that a multimodal approach is needed (1). No one single strategy is sufficient, but rather it is necessary to consider a combination of evidence-based strategies, at all levels. The national policy and program that focuses on community engagement needs to be evidence based and should also take into consideration the local socio-economic and cultural issues (2). It is also imperative to involve and engage key stakeholders early, from different disciplines, including but not limited to, the Ministries of Health, Social Services, Women's and Children's Affairs, as well as relevant local and regional administrative bodies.

The WHO publications titled "Preventing Suicide: A global perspective", "Preventing Suicide: A Community Engagement Toolkit", "Public health action for the prevention of suicide: a framework" and "Suicide and Suicide Prevention in Asia" give directions on how suicide and deliberate self-harm prevention has been and can be attempted at community level (3-6). These publications emphasize that, for national responses to be effective, a comprehensive multi-sectoral suicide prevention strategy is needed and also that the strategy has to take the local context into account. In Sri Lanka, a number of community based initiatives have already been undertaken in suicide prevention which needs further strengthening, and these can be summarized under the following main content areas for recommendations for action.

1. Training primary health care staff in preventive interventions.

2. Establishing and strengthening networks to provide aftercare and follow-up for patients presenting with self-harm.

3. Strengthening mental health services throughout the country, including development of inpatient and outpatient services at the divisional level.

4. Taking measures to strengthen maternal mental health care to address the issue of rising maternal suicides in the country.

5. Sustaining and strengthening public health activities to promote overall health and mental health promotion in the community.

6. Providing a safety-net to detect and support vulnerable elderly people.

7. Supporting telephone helplines to promote help-seeking behavior of vulnerable individuals.

1. Training primary health care staff in preventive interventions

Primary health care staff needs to be trained regarding community preventive interventions and on identification of indicators of self-harm behaviours and common psychiatric illnesses to address deliberate self-harm and suicide in the community.

Training on preventive interventions are also aimed at improving the competencies of the health staff in changing the cultural and social determinants that contribute to self-harm and suicide and in improving mental health literacy among the general public (8). It is important to encourage primary and preventive care staff to specifically tailor activities to the target groups. For example, risk of self-harm among impulsive adolescents and ways of recognizing young people's distress can be directly addressed with parents and teachers, while more indirect approaches such as utilizing good coping skills at times of stress instead of using maladaptive coping strategies could be discussed with teenagers themselves (9).

Until the dawn of the new millennium, mental health promotion had not received much recognition in the preventive care services in Sri Lanka (10). At present, most community activities on mental health promotion and suicide prevention are conducted by the health sector in Sri Lanka are currently carried out by the respective teams of Medical Officers of Health (MOH), Psychiatrist led clinical teams of the district, Medical Officers on Maternal and Child Health (MOMCH) and Medical Officers of Mental Health (MOMH) (11). The staff of the MOH office as a unit and other categories of staff should receive further training on mental health promotion and recommended suicide prevention strategies and activities. Psychiatrists need to take the lead role in such activities and Community Physicians in the local Regional Director of Health Service (RDHS) areas and other relevant stake-holders need to be aware of the training needs and also agree upon resource material, methods and resource personnel in delivering such programs, as per the recommendations of the updated mental health policy. When developing training programmes it is imperative to be as evidence based as possible, while also taking into account the local cultural socio-economic milieu. A national programme in this regard is recommended.

Training is also intended to empower (a) the communities and (b) individuals. The following are some of the recommended content areas that could be included in training primary health care staff in prevention of suicides and deliberate self-harm.

(a) Training of primary healthcare staff with an aim to community empowerment could include:

i. Raising public awareness on detection of mental illnesses and reducing stigma, which will facilitate access of appropriate mental health care facilities by vulnerable individuals (12).

ii. Empowering communities to prevent alcohol and drug abuse and to direct affected families for support services (13).

iii. Educating the public on how to respond to and provide initial support for people who express suicidal ideas or attempt self-harm.

iv. Mobilizing communities for targeted preventive activities such as elimination of poisonous plants, supervision of enforcement of pesticide sales and access to pesticides, empowering communities to use social media effectively and barricading "favourite" spots where suicides are attempted.

(b) The primary care professionals need to be trained in identification of those who are in distress in order to be able to identify, provide appropriate initial support and facilitate referral to mental health care facilities. The content to be covered in such clinically related training programmes need to include:

i. Definitions, associations, nature, epidemiology and consequences of suicides and deliberate self-harm in Sri Lanka.

ii. Identification of signs of depression, substance abuse and other common and important mental disorders associated with self-harm and suicide. Where relevant, validated instruments to identify these conditions in the community should also be introduced (14).

iii. Identification of warning signs of suicide, suicidal risk assessment of vulnerable individuals and method of referring to a mental health care facility (15).

iv. Communication skills, problem-solving and counselling skills.

2. Establishing and strengthening networks to provide aftercare and follow-up for patients presenting with self-harm

After care is one of the most important aspects of suicide prevention among the hospitalized patients (16). Ideally, all patients presenting with deliberate self-harm need to be assessed by a psychiatrist or a trained mental health professional. This is generally possible in Sri Lanka as most main hospitals are served by mental health trained medical officers. In places where professional mental health services are not available, first contact health care staff in hospitals needs to be trained in conducting psycho-social assessments (17). After an attempt of suicide, the risk of suicide is high in the first few weeks after discharge from hospital (18). Therefore, it is imperative that the treating team, at discharge, re-evaluate the risks of further self-harm in each patient admitted with self-harm and draw up an appropriate follow-up plan, based on the risk, which includes access to services at times of crisis. Particularly with regards to high-risk patients being discharged from the hospital, there should be a regular mechanism to maintain and transfer vital information to community health care teams, to ensure continuity of care. A collaborative care model is recommended which involves local primary care mental health services and/or other local health services, including General Practitioners, where appropriate.

In this regard, liaison work between teams as identified by the latest National Mental Health Policy need to be strengthened by a directive from the Ministry of Health, specifically on suicide prevention liaison activities between psychiatrist led clinical (mental health) teams and preventive and primary care teams (19). This can be achieved by a national circular or directive from the Ministry of Health entailing details of such collaborations.

3. Strengthening mental health services throughout the country, including development of inpatient and outpatient services at the divisional level.

Availability of mental health services in all areas of the country is of paramount importance in providing comprehensive care for vulnerable persons throughout the country. Transfer of patients with high suicidal risk to central facilities is not a long-term cost effective solution and causes significant inconvenience to patients and families. Mental health teams at every level should be able to provide care for high risk patients in the locality. Also they should have resources to have community teams to carry out community care and preventive activities to reduce rates of self-harm and

suicide rate in the country. Therefore, priority needs to be given to ongoing developments of mental health services throughout the country including the divisional levels, as described in the mental health policy (19). This should include allocation of trained mental health professionals to all mental healthcare teams as described in the mental health policy. This should include (but is not limited to) psychiatrists, trained medical officers, community psychiatric nurses, clinical psychologists, psychiatric social workers, occupational therapists, counselors and community support assistants.

According to the new mental health policy, delivery of mental health services at the divisional level is delivered by the Medical Officer - Mental Health (MOMH) or Medical Officer - Psychiatry under the clinical supervision of the Consultant Psychiatrist. Such mental health trained medical officers appointed to clinical care institutions are expected to provide services to each Medical Officer of Health (MOH) area. Thus, they will be able to closely collaborate with the MOH and Public Health teams, Primary Medical Care teams and other relevant officers. These medical officers are part of Consultant Psychiatrist lead teams, hence will be a valuable resource to the community. In addition, the community support centers (CSC) will be established at Medical Officer of Health (MOH) areas with community, family, consumer participation and in collaboration with other ministries and organizations whenever possible. Consultant Psychiatrist led teams in the area will have to provide technical guidance to the Community Support Assistant (CSA) who will be attached to the CSC, through mental health trained medical officers. Community Physicians in the area need to be involved in planning and management of health services to provide care for such patients in the community.

These activities, if coordinated well, will be an immense support towards minimization of suicide and self-harm in the country. Further, given the link between substance use and suicide and paucity of available health resources for individuals and families with substance use disorders, these mental health services could cater to the need of coordinating care for patients with substance use disorders as well.

4. Taking measures to strengthen maternal mental health care to address the issue of rising maternal suicides in the country.

Sri Lanka has seen a reduction of maternal mortality over the years to reach the region's lowest rates (20). But over the last 10 years the rate of maternal mortality has remained stagnant at 30 deaths per 100,000 live births (7). Ending preventable maternal mortality due to deliberate self-harm by mothers during and immediately after pregnancy is still a subject of concern.

A maternal suicide is considered as a 'death caused by self-directed injurious behavior with any intent to die, as a result of the behavior in a woman who is pregnant or has recently delivered (one year after termination of pregnancy)' (21).

Suicide is a leading cause of maternal death in developed countries (22). Statistics from the UK show that in the first year after childbirth, suicide risk increases 70-fold and suicide is the leading cause of maternal death up to 1 year after delivery in women in the triennium from 2001 to 2003 (24). Failure to recognize the risk factors and institute appropriate treatment plans has emerged as a main contributory factor in the UK and many other countries. The trend may be universal (24). In Sri Lanka too, a significant number of maternal suicides are reported throughout the country. The country reported 448 maternal suicides during the period 2002 – 2018. In the year 2018, there were 38 such deaths reporting a maternal suicide rate of 11.7 per 100,000 live births.

The analysis of maternal suicides in Sri Lanka shows that primi mothers are more vulnerable to suicide. The majority killed themselves in the antenatal period and a significant proportion (one third) was reported in the post-natal period. A majority (>75%) of women committed suicide were under the age of 30 years, with a peak in the 26-30 year age group and many of the victims were married, warranting strengthening of care for this segment.

Among the causes of maternal suicides, unwanted pregnancies, complicated psycho-social circumstances and relationship issues triggered by sudden impulses are of high priority. In addition, there had been a family history of suicide and a history of attempted suicides in several women. Self-poisoning is the commonest method seen in maternal suicides. Post-partum psychosis and postpartum depression have not been reported as major causes of maternal suicide in Sri Lanka – but a significant proportion of these women have had undiagnosed psychiatric disorders (25).

Community level strategies employed to prevent maternal suicides:

The current maternal care program includes several activities to promote perinatal mental health among women. Screening for maternal mental health

problems in the antenatal period is included as a guide for the Public Health Midwives and Medical Officers of Health. The screening is done with the objectives to; identify and manage normal anxieties that the mother and family members may have, detect existing mental illnesses and early relapses, capture new cases early and to refer for appropriate management as needed. In the postnatal period, mental health assessments are done by public health midwives (PHMs) at strategic time frames; within first 10 days, the PHM assesses the woman for mental distress, lack of sleep, frustrated feelings and suicidal thoughts. During the post-natal 11-21 days, they are screened for their mental condition (rest, sleep, unhappiness, loneliness etc.). At the postnatal clinic at 4 weeks, a structured mental health assessment is carried out using Edinburgh post-partum depression scale (EPDS). At 42 days, mental health status, family support, sexual relationship are evaluated.

Women with possible problems will be referred to the relevant Medical Officer of Health (MOH) by the PHM and the cases will be discussed at the monthly conference. The index case will be entered in the Register of Eligible Women in Danger at the MOH office for targeted care by the field care team and are referred to mental health teams to arrange treatment and shared care.

In the present National Maternal Death Surveillance and Response System, all public health midwives and hospitals in the country should inform "deaths of all women of reproductive age (15 - 49 years) during the pregnancy or one year after termination of pregnancy irrespective of the cause of death" to Family Health Bureau within 24 hours. This includes maternal suicides. As such all probable maternal deaths are notified, data collected and reviewed at field, hospital and national levels.

In 2016, due to growing number of maternal suicides, an in-depth review modality, using a structured format - Psychological Autopsy Tool for Maternal Suicides (PAMS) was introduced (25). It is a comprehensive assessment to build the story of the deceased woman, exploring different facets. Currently all maternal suicides are reviewed by a team led by a Consultant Psychiatrist at the household level using the PAMS. The **findings** are disseminated to major stakeholders and preventive strategies are contemplated.

Recommendations for minimization of maternal self-harm and suicide:

Prevention of maternal suicide is a complex and difficult task. Preventive strategies go beyond health boundaries. The Family Health Bureau, the MCH arm of the Ministry of Health, is working collaboratively with psychiatrist lead clinical teams and other agencies to minimize maternal self-harm. The following recommendations are advocated:

1. General measures to promote planned pregnancies and family planning for vulnerable women. Health education regarding the use of proper contraceptives and emergency contraceptives need to be strengthened.

2. More focused prevention of gender-based violence to improve psychological wellbeing of vulnerable mothers.

3. Targeted interventions to capture difficult clients. The current strategy needs to be strengthened by more focused training to primary care staff, especially targeting women facing complex social situations.

4. Strengthening monitoring of managing patients with complex psychiatric and adverse psycho-social circumstances by developing a shared care model between psychiatrist led clinical teams and primary care teams.

5. Raising awareness about the importance of identifying mental health issues among women of reproductive age and providing support to them, their partners, relatives, caregivers and the general public. Community empowerment facilitated by clinical and primary care teams is valuable in this regard.

5. Sustaining and strengthening public health activities to promote overall health and mental health promotion in the community.

Sri Lanka is often cited as a country with significant health achievements despite a marginal economic growth. In health economic and development terms, Sri Lanka's health gains compare with the income gains of the East Asian tigers who have shown significant economic developments, and deserve the epithet of a "health miracle" (26). Sri Lanka's health system has served as a role model for successful implementation of Primary Healthcare for a number of years (27). Sri Lanka has a well-organised system of public health services, conducted by Medical Officer of Health led teams in the community. Some of these services such as maternal and child health programmes are delivered to the doorsteps of people in the form of domiciliary care (28). Sri Lanka is considered as a country where allied health workers have contributed immensely towards improving overall health of people and the role of the Public Health Midwife is much accepted in the local communities (29). Integrating specialized health services - such as mental health services into Primary Healthcare is one of WHO's most fundamental health care recommendations, however, the role of mental health promotion

is not reflected in the regular activities of the public health field service delivery as of today (30-31). Hence, it is important to advocate and implement sound interventions to strengthen mental health component in the public health system of the country. The respective roles of the public health staff in mental health promotion need to be defined properly in their job descriptions and their services need to be regularly monitored and evaluated.

Health promotion interventions carried out by primary health care teams in communities, schools and work places are several fold. These include early childhood interventions such as Early Childhood Care and Development activities which are aimed at promoting mental health of the infants and preschool children, successful social empowerment activities such as prevention of substance abuse programmes, carer support groups, creating healthy work places, tackling adverse social circumstances like domestic violence, preventing unwanted pregnancies and community development programmes (32).

When developing training or educational programs for professionals working in public health, as well as for the community, as mentioned in the first part of this chapter it is imperative to be as evidence based as possible, while taking into account the local cultural socio-economic factors. The recommendations of the most recent mental health policy should be used as a guideline for development of these strategies (19).

6. Providing a safety-net to detect and support vulnerable elderly people

Sri Lanka is the fastest ageing country in South Asia and approximately 80% of Sri Lanka's elderly live with extended families (33-35). In Sri Lanka increasing trends have been reported in suicides among elderly population. In the document "Public health action for the prevention of suicide: a framework" the WHO has identified some key prevention strategies for vulnerable sub-populations at risk such as the elderly (36). Two such strategies are gate keeper training and community mobilisation (37). Gate keepers interact with community members in natural and often non-medical environments and can be trained to recognize risk factors for suicide. In order to be effective, gatekeeper training must be a continuous and sustained effort with close monitoring and evaluation, ideally as part of a professional training curriculum (38). Training gatekeepers should go hand-in-hand with quality service development. In the Sri Lankan context, gatekeepers could consist of informal and formal community leaders such as government officers including Grama Niladharis and Samurdhi Niladharis, spiritual and religious leaders and community based organizations. To look after the

health of the elderly population, there are designated Elderly Care officers at the divisional secretary offices and it will be necessary to establish the liaison with them for funding and other logistical requirements for such activities. Since many elderly live within the communities of their origin it is important to mobilize communities to incorporate safety nets to detect and support vulnerable elderly people.

In order to provide optimum care for the elderly to reduce suicides, collaborative work between hospital teams, district psychiatrists, community care teams, General Practitioners, Police stations, care homes and social services should be facilitated. As in many other countries, elder abuse by their own family members is a grave concern in Sri Lanka as well. In a community study it was found that about 1/5 elders are abused either physically, emotionally of financially (39). Facilitating implementation of a Parliamentary act related to elderly care which includes detection of elder abuse and reporting procedure will be necessary as the first step in prevention of elder abuse (40). Delivery of integrated and effective care for the elderly and providing a meaningful life for them are important considerations in holistic care package to vulnerable elderly population. These collaborative multi-disciplinary approaches are proven to be effective in the elderly care, and they can be expected to contribute significantly for reduction of suicides among elderly population.

Supporting families to look after the needs of elderly people and support for carers should be encouraged by all means. Providing improved facilities, carer support and financial and other logistical support can be provided as incentives for caring for elderly in their own communities.

Thus, a greater coordination between agencies such as social services, health sector, legal system and education need to be reformed to achieve a sustainable effect to reduce suicide rate of the elderly.

7. Supporting telephone helplines to promote help-seeking behavior of vulnerable individuals.

Helplines are provided as a component of suicide reduction programmes in many areas of the world (41). Even though the evidence regarding their efficacy in preventing suicides and self-harm is not conclusive, anecdotal evidence suggests that some people in distress benefit from these measures, in that the opportunity is provided to communicate and relieve their distress (42).

Currently there are three helplines available in the country. One is manned by nurses trained in mental health, while the other two are manned by volunteer staff of respective organizations. The service run by National Institute of Mental Health is delivered round the clock and provides counselling to distressed individuals and also provides direct support to the distressed individuals by linking them with local psychiatric services (43). As this service is provided by trained mental health nurses, users receive professional help until they are able to link with mental health service of the area, if required. This service is monitored on a regular basis by a consultant psychiatrist.

All helpline staff should be governed by a code of ethics used by the health care workers / counsellors and they must have a basic training which enables them to identify high risk situations, common mental illnesses and drug and alcohol related problems. They should be sensitive to cultural differences of the service users and need to demonstrate good communication skills to encourage service users to reach out for appropriate support services. They need to demonstrate skills to discourage unhealthy coping strategies such as substance use and risk taking behaviours.

All helplines need to be monitored for quality of service provided and also should be adequately supported to carry out an effective service. It is highly recommended that such service providers are registered with the Ministry of Health to assure quality and standards and to prevent mishandling of this service. Moreover, it is important to see that popularizing of helplines should be carried out in a manner that does not increase attention or glamourize self-harm or suicide.

Overall Recommendations of this chapter:

The Medical Faculties, the SLMA, the Ministry of Health, National Institute of Health Sciences, the Colleges of Psychiatrists, Community Physicians and General Practitioners to:

1. Include preventive and clinical approaches to suicide prevention in curricula of general practitioners, nurses and primary care staff training programmes. In addition, in-service refresher courses to be carried out by the College of General Practitioners, the National Institute of Health Sciences and the RDHS offices, with technical guidance from the Sri Lanka College of Psychiatrists.

2. Establish a system for proactive collaborative follow-up of those discharged from hospital following self-harm. Strengthen collaborative approach in providing continuity of hospital care plan through primary care

teams and GP practices, incorporating a shared care model in the management of patients with high risk of suicide.

3. Continue to develop mental health services and allocate trained mental health care professionals throughout the country and also to focus on minimization of alcohol and other substance use disorders.

4. Strengthen maternal mental health services through the Ministry of Health.

5. Work with the Postgraduate Institute of Medicine and the Colleges of Obstetricians and Gynaecologists, and Community Physicians to include measures to address maternal suicides by obtaining technical guidance from the Sri Lanka College of Psychiatrists.

6. Ensure that community mental health promotion programmes be considered as a component of policies and programmes aimed at preventing suicides.

7. Develop collaborative care with stake-holder agencies to provide a safety net for the elderly.

8. Provide technical assistance to train staff of all helplines that handle issues relating to mental health, in both the government and non-government sectors, to handle callers at risk of suicide and self-harm and carry out appropriate interventions. Ensure, in collaboration with the managers of the helplines, the monitoring of service provision to maintain ethical and moral standards.

Bibliography

1. Hegerl U, Wittenburg L. Focus on Mental Health Care Reforms in Europe: The European Alliance Against Depression: A Multilevel Approach to the Prevention of Suicidal Behavior. Psychiatric Services. 2009; 60(5): 596-599.

2. Hong J, Knapp M. Impact of macro-level socio-economic factors on rising suicide rates in South Korea: panel-data analysis in East Asia. J Ment Health Policy Econ. 2014; 17(4): 151–162.

3. World Health Organization. Preventing suicide: A global imperative [online]. 2014 [Cited 2020 Feb 10]. Available from: https://www.who.int/mental_health/suicide-prevention/world_report_2014/en/.

4.Collective Impact Forum[online].2014[Cited 2020 Feb 10] Available from: https://www.collectiveimpactforum.org/sites/default/files/Community%20Engagement%20Toolkit.pdf.

5. World Health Organization. Public health action for the prevention of suicide [online]. 2012 [Cited 2020 Feb 10]. Available from: https://www.who.int/mental_health/publications/prevention_suicide_2012/en/.

6. World Health Organization. Suicide and suicide prevention in Asia [online]. 2008[Cited 2020 Feb 10]. Available from: https://www.who.int/mental_health/publications/suicide_prevention_asia/en/

7. Isuru L, Gunathillaka K, Kathriarachchi S. Reducing maternal suicide in Sri Lanka: closing the gap. Sri Lanka Journal of Psychiatry. 2016; 7(1):1.

8. Appleby L, Amos T, Doyle U, Tomenson B, Woodman M. General Practitioners and Young Suicides. British Journal of Psychiatry. 1996;168(3):330-333.

9. Torok M, Calear A, Smart A, Nicolopoulos A, Wong Q. Preventing adolescent suicide: A systematic review of the effectiveness and change mechanisms of suicide prevention gatekeeping training programs for teachers and parents. Journal of Adolescence. 2019; 73: 100-112.

10. Fernandopulle S, Thalagala N, Barraclough S. Mental Health in Sri Lanka: Challenges for Primary Health Care. Australian Journal of Primary Health. 2002; 8(2): (31).

11. Suveendran T, Fernando N, de Silva C. Decentralizing provision of mental health care in Sri Lanka. WHO South-East Asia Journal of Public Health. 2017; 6(1)1: 8.

12. Arikan M, Uysal Ö, Cetin G. Public awareness of the effectiveness of psychiatric treatment may reduce stigma. The Israel journal of psychiatry and related sciences. 1999; 36: 95-9.

13. Weitzman E. Poor Mental Health, Depression, and Associations With Alcohol Consumption, Harm, and Abuse in a National Sample of Young Adults in College. The Journal of Nervous and Mental Disease. 2004;192(4):269-277.

14. Beidas R, Stewart R, Walsh L, Lucas S, Downey M, Jackson K, Fernandez T, Mandell D. Free, Brief, and Validated: Standardized Instruments for Low-Resource Mental Health Settings. Cognitive and Behavioral Practice. 2015; 22(1):5-19.

15. Cochrane-Brink K, Lofchy J, Sakinofsky I. Clinical rating scales in suicide risk assessment. General Hospital Psychiatry. 2000; 22(6): 445-451.

16. Hvid M, Vangborg K, Sørensen H, Nielsen I, Stenborg J, Wang A. Preventing repetition of attempted suicide—II. The Amager Project, a randomized controlled trial. Nordic Journal of Psychiatry. 2010;65(5):292-298.

17. Kathriarachchi S, Manawadu V. Deliberate Self-Harm (DSH) – guidelines on assessment of patients admitted to hospitals. Journal of the Ceylon College of Physicians. 2002; 35(Suppl):1-12.

18. Wise J. Mental health patients pose high suicide risk in first two weeks after discharge, inquiry finds. British Medical Journal. 2014; 349: g4659-g4659.

19. National Mental Health Policy-2019-2030. [online] Ministry of Health and Indigenous Medical Services 2020 [cited 2020 Feb 27], Available from: http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/mentalhealthpolicy.pdf

20. Haththotuwa R, Senanayake L, Senarath U, Attygalle D. Models of care that have reduced maternal mortality and morbidity in Sri Lanka. International Journal of Gynecology & Obstetrics. 2012;119: S45-S49.

21. Lysell H, Dahlin M, Viktorin A, Ljungberg E, D'Onofrio B, Dickman P, Runeson B. Maternal suicide – Register based study of all suicides occurring after delivery in Sweden 1974–2009. PLOS ONE. 2018;13(1):0190133.

22.World Health Organization [online]. 2020 [Cited 2020 Feb 10]. Available from:
https://www.who.int/mental_health/prevention/suicide/Perinatal_depression_mmh_final.pdf

23. Wijesinghe P, Jayaratne K, Peiris D. National Maternal Death surveillance and Response: Sri Lankan scenario. Ceylon Medical Journal. 2019;64(1):1.

24. Rishard M, Ranaweera A, Senanayake H. Can we reduce maternal suicides? Sri Lanka Journal of Obstetrics and Gynaecology. 2012; 34(3):123.

25. Kathriarachchi ST, Amarakoon DLU, Jayaratne K, Rajapakse T, Amarabandu HGI. Analysis of maternal suicides in Sri Lanka using the newly developed Psychological Tool for Maternal Suicides (PAMS). Proceedings of the World Congress of the Asian Federation of Psychiatric Associations (AFPA); 2019 Feb; Sydney, Australia.

26.Rannan-Eliya, Ravi P. "Sri Lanka's Health Miracle". South Asia Journal. 2006;14.

27. Rohde J, Cousens S, Chopra M, Tangcharoensathien V, Black R, Bhutta Z, Lawn J. 30 years after Alma-Ata: has primary health care worked in countries? The Lancet. 2008;372(9642):950-961.

28. Gunathunga W, Fernando D. Assessment of community maternal care performance of public health midwives of a province in Sri Lanka: a multi-method approach. [online]. 2020 [Cited 2020 Feb 10]. Available from: http://archive.cmb.ac.lk:8080/research/handle/70130/2205

29. Sandall J, Devane D, Soltani H, Hatem M, Gates S. Improving Quality and Safety in Maternity Care: The Contribution of Midwife-Led Care. Journal of Midwifery & Women's Health. 2010;55(3):255-261.

30. The world health report 2001 - Mental Health: New Understanding, New Hope. World Health Organization [online], 2001. [Cited 10 Feb. 2020]. Available from: https://www.who.int/whr/2001/en/, Full report

31. Integrating mental health services into primary health care. World Health Organization [online], 2007. [Cited 10 Feb. 2020]. Available from: http://www.who.int/mental_health/policy/services/en/index.html,
Mental Health Policy, Planning and Service Development Information Sheets, Sheet3

32. Guyer B, Ma S, Grason H, Frick K, Perry D, Sharkey A, McIntosh J. Early Childhood Health Promotion and Its Life Course Health Consequences. Academic Pediatrics. 2009;9(3):142-149.e71.

33.Menike HRA. Important Features of the Elderly Population in Sri Lanka. Research Process: International Journal of Social Research Foundation. 2014;2:29-38.

34. Groundviews. Resource or Burden? A different perspective on the elderly in Sri Lanka [online]. 2020 [Cited 2020 Feb 10]. Available from: https://groundviews.org/2011/10/05/resource-or-burden-a-different-perspective-on-the-elderly-in-sri-lanka

35. Kalutantiri KDMS, Aging and the changing role of the family in Sri Lanka, [thesis available online]. The University of Adelaide. 2014 [Cited 2020 Feb 10] Available from: https://digital.library.adelaide.edu.au/dspace/bitstream/2440/93498/3/02whole.pdf.

36. Kitulwatte I, Paranavithana S, Perera A, Edirisinghe P. Elderly victims dying of unnatural causes: a retrospective descriptive study from Ragama, Sri lanka. Sri Lanka Journal of Forensic Medicine, Science & Law. 2018;9(1):15.

37. Isaac M, Elias B, Katz L, Belik S, Deane F, Enns M, Sareen J. Gatekeeper Training as a Preventative Intervention for Suicide: A Systematic Review. The Canadian Journal of Psychiatry. 2009;54(4):260-268.

38. Rae Swanke J, Melinda Dobie Buila S. Gatekeeper training for caregivers and professionals: A variation on suicide prevention. Advances in Mental Health. 2010;9(1):98-104.

39. Maduwage S. Situational Overview of Elder Abuse in Sri Lanka. In: Shankardass MK, editor. International Handbook of Elder Abuse and Mistreatment. Springer, Singapore. 2019; 427-437.

40. Protection of The Rights of Elders Act [online], Ministry of Justice of Sri Lanka. 2000 [Cited 2020 Feb 10]. Available from: https://www.lawnet.gov.lk/1946/12/31/protection-of-the-rights-of-elders-3/

41. Ftanou M, Cox G, Nicholas A, Spittal M, Machlin A, Robinson J, Pirkis J. Suicide Prevention Public Service Announcements (PSAs): Examples from Around the World. Health Communication. 2016;32(4):493-501.

42. Hoffberg, A, Stearns-Yoder K, Brenner L. The Effectiveness of Crisis Line Services: A Systematic Review. Frontiers in Public Health. 2020; 7.

43. NIMH in the news: NIMH introduces mental health helpline '1926'. [online]. National Institute of Mental Health, Sri Lanka. 2020 [Cited 2020 Feb 10] Available from: http://nimh.health.gov.lk/en/2018/10/23/nimh-in-the-news-nimh-introduces-mental-health-helpline-1926/

CHAPTER5

Collaborating with Media to Address Suicides

Chapter writers

Dr. Prabath Wickrama

Consultant Psychiatrist,
Ministry of Health

Dr. Lakmi Seneviratne

Senior Lecturer, Department of Psychiatry
University of Sri Jayewardenepura

Collaborating with the media to address suicides

Background

The media exert both positive and negative effects on suicide in a community, based on the way they report suicide. In some instances, incorrect reporting of suicide by the media without honoring the ethical code can lead to an increase in the suicide rates by 'copycat suicides'; whereas in contrast, the same media can contribute to a decrease in rates by increasing the mental health literacy of the community and by discouraging suicides.

The link between media and suicide was first brought to light following the novel written by Goethe "The sorrows of young man Werther" in the late 18th century. The resultant rise of suicides was termed "Werther effect" by Phillips (1). The phenomenon is currently known as 'copycat suicide'.

There is evidence that newspaper reporting of suicide can increase the number of suicides (2,3) . Such an effect has also been shown in television (6,7). Newspaper reports on suicide, at times, tend to violate the existing guidelines abroad and in Sri Lanka (4, 5 and 21). Repeated portrayal of suicidal behaviour or attempted self-harm also may contribute to increased self-harm among young people which is particularly important in Sri Lanka which already has a high rate of attempted self-harm by self-poisoning among youth.

Increased suicide risk has also been attributed to the immense quantity of information that is available regarding suicide in the internet and social media (9). Direct suicidal effects of cyberbullying and cyber harassment are becoming more widespread (10). Some of the specific harmful effects exerted by social media include, dissemination of details on suicidal acts, discussions on methods of suicide, media contagion effects through social media exposing vulnerable groups to suicide and deliberate self-harm and the effects of chat room discussions on suicide among vulnerable people (11-14). Possible mechanisms that link adverse media reporting on suicide to high suicide rates have also been postulated (16). On the other hand, steps have also been taken through social media to protect communities from suicide (15) too.

It has been shown that working with media can produce non-promotive reporting of suicide (17, 20). Sri Lanka has published several media guidelines on suicide reporting. This includes the Suicide Reporting Guidelines of the Mental Health Directorate of the Ministry of Health (2018), Suicide Sensitive Journalism by the Center for Policy Alternatives and Press Wise Trust, UK (2003) and the Handbook for Journalists on reporting in suicide and mental health by Voluntary Service Overseas (2011). The World Health Organization has also published its guidelines - Preventing suicide: a resource for media professionals (2017).

Thus, engaging in responsible reporting of suicide, as well as, working towards prevention of suicide through media reporting need to be taken up as a priority in collaboration with the media profession.

Collaborating with the media to prevent suicides should ensure:

- The readers and viewers are given accurate information about where to seek help if and when required.
- Opportunities are used to educate the public about mental illnesses such as depression, along with available pathways of referral and treatment, and suicide prevention.
- Focus on stories of how to cope with life stressors and how to get help, giving prominence to positive measures.
- Interviewing bereaved family or friends should be avoided as far as possible, in consideration of the effect it will have on them, as well as, on vulnerable groups who read or view these descriptions.
- Recognizing that media professionals themselves may be affected by stories about suicide.

The media could also consider avoiding, through self-regulation, the following:

- Placing stories about suicide prominently and repeating such stories.
- Using language or headlines, which sensationalizes or normalizes suicide, or presents it as a constructive solution to problems. Avoid giving judgments or opinions.
- Explicitly describing the location, method used or over simplification of the cause of suicide. For example, should not mention a reason or a "triggering factor" for the suicide.

- Giving details of suicide notes or glorification of the victim or the method.
- Using photographs, video footage, graphics or social media links.
- Over emphasizing the community grief due to the suicide.

To operationalize the above, the following is recommended.

SLMA, the Ministry of Health and the Sri Lanka College of Psychiatrists in consultation with media professionals to:

1. Initiate/strengthen discussions with media organizations in establishing a collaborative process to improve suicide reporting in the print and electronic media through collective efforts.
2. Identify and address the barriers to the process of including appropriate/responsible reporting of suicide in training curricula of journalists.
3. Collaborate with the Ministry of Mass Media to establish a system of surveillance of reporting suicides in the print and electronic media and provide feedback and recommendations to media institutions and agencies.
4. Support the Telecommunications Regulatory Commission (TRC) and the Sri Lanka Computer Emergency Readiness Team (SL-CERT) to monitor and control material promoting suicides and cyber bullying in social media and Internet.

Bibliography

1. Phillips DP. The influence of suggestion on suicide: Substantive and theoretical implications of the Werther Effect. American Sociological Review. 1974; 39: 340-54.
2. Chen YY, Chen F, Gunnell D, Yip PSF. The Impact of Media Reporting on the Emergence of Charcoal Burning Suicide in Taiwan. PLoS One. 2013 January 30; 8(1): e55000. https://doi.org/10.1371/journal.pone.0055000.
3. Au JSK, Yip PSF, Cecilia LW, Chan CLW, Law YW. Newspaper Reporting of Suicide Cases in Hong Kong. Crisis. 2004; 25 (4): 161–168.
4. Pridmore S, Patterson T, Bruno R. Newspaper Reports of Suicide: The Impact of Newsworthiness. German journal of Psychiatry.2006; (9):97-100.
5. Gould MS, Shaffer D. The impact of televised movies about suicide. Evidence of imitation. New England Journal of Medicine. 1986 Sep 11; 315(11):690-4.
6. Shoval G, Zalman G, Polakevitch J et al. Effect of the broadcast of a television documentary about a teenager's suicide in Israel on suicidal behavior and methods. Crisis. 2005; 26(1):20-4.
7. Phillips DP, Paight DJ. The impact of televised movies about suicide. A replicate study. New England Journal of Medicine. 1987 Sep 24;317(13):809-11.
8. Biddle L, Donovan J, Hawton K, Kapur N, Gunnell D. Suicide and the Internet. British Medical Journal. 2008; 336(7648):800-802.
9. Hinduja S, Patchin JW. Bullying Beyond the Schoolyard: Preventing and Responding to Cyberbullying. Thousand Oaks, CA: Sage Publications; 2009. ISBN-13: 978-1483349930
10. Naito A. Internet suicide in Japan. Journal of Clinical child Psychology and Psychiatry. 2007; 12(4):583-597.
11. Morii D, Yasusuke M, Nakamae N, Murao M, Taniyama K. Japanese experience of hydrogen sulfide: the suicide craze in 2008. Journal of Occupational medicine and toxicology. 2011; 5:28.
12. Lewis SP, Heath NL, St Denis JM, Noble R. The scope of non-suicidal self-injury on YouTube. Pediatrics. 2011; 127(3):e552-e557.

13. Dunlop SM, More E, Romer D. Where do youth learn about suicides on the Internet, and what influence does this have on suicidal ideation? Journal of Clinical child Psychology and Psychiatry. 2011;52(10):1073-1080.
14. Luxton DD, June JD, Fairall JM. Social media and suicide: a public health perspective. Am J Public Health. 2012 May;102(Suppl 2):S195–200.
15. Blood RW, Pirkis J. Suicide and the Media Part III: Theoretical Issues. Crisis. 2001; 22 (4): 163-169.
16. Ramadas S, Kuttichira P. The development of a guideline and its impact on the media reporting of suicide. Indian Journal of Psychiatry. 2011 Jul-Sep; 53(3): 224–228.
17. Tor PC, Ng BY, Ang YG. The Media and Suicide. ANNALS Academy of Medicine Singapore. 2008; 37:797-9.
18. Michel K, Frey C, Wyss K, Valach L. An Exercise in Improving Suicide Reporting in Print Media. Crisis.2000;21/2:71-79.
19. Pirkis J, Dare A, Blood RW et al. Changes in Media Reporting of Suicide in Australia Between 2000/01 and 2006/07. Crisis. 2009; 30(1):25–33.
20. Brandt Sørensen J, Pearson M, Andersen MW, Weerasinghe M, Rathnaweera M, Rathnapala DGC, Eddleston M, Konradsen F. Self-Harm and Suicide Coverage in Sri Lankan Newspapers. Crisis. 2019 Jan;40(1):54-61.

CHAPTER 6

Minimizing Self-harm among Adolescents and Young People

Chapter writer

Prof Thilini Rajapakse

Professor and Chair, Department of Psychiatry

University of Peradeniya

Minimizing self-harm among adolescents and young people

Deliberate or attempted self-harm in Sri Lanka

Self-harm in Sri Lanka, similar to elsewhere in the world, is much more common among adolescents and young people, with a female preponderance (1). Previous studies have shown that 61% of those who attempt self-poisoning in Sri Lanka are below the age of 25 years (2). The most commonly ingested substance by those attempt self-poisoning are medicinal overdose – most commonly paracetamol (1). Medication overdoses are more common among young people who attempt self-poisoning, whereas pesticide ingestion is more common among older people (2). Ingestion of other types of medication, and other poisonous substances are also commonly seen.

Particularly among adolescents and young people, the act of non-fatal self-poisoning is often triggered by recent interpersonal conflict, usually with a close family member or friend (3). The act is often carried out soon after a conflict, with acute emotional distress and mixed motivations; for example to die, to escape, to communicate, or to escape intolerable distress (4, 5). Psychiatric morbidity, such as depression and alcohol use disorders also play a role in a proportion of people who self-harm, but this is more common among older persons who attempt self-poisoning.

However psychiatric morbidity may also play a role among self-harm in a proportion of young people – a study conducted among 16-year old school children in Sri Lanka found that about 20% of male and female adolescents were depressed, and in males, alcohol use and smoking were significantly associated with the occurrence of depression (6). Another study has reported rates of depression in Sri Lankan adolescents to be as high as 35% (7). Added to this, alcohol use disorders is an important factor that contributes directly, as well as indirectly towards the occurrence of attempted self-poisoning by increasing the likelihood of domestic disputes and interpersonal conflicts.

The way forward

Reducing self-harm and attempted suicide among adolescents and young people is a challenge the world-over. A multi-model, evidence based approach is needed, with a focus on adolescents and young adults (8). The reported rate of repetition at one year after an index attempt of self-harm in Sri Lanka is about 7.9%, significantly lower than the rate of about 15% reported from the West of (8-10). This is an intriguing finding that has been reported from other South Asian countries as well, which indicates that strategies for *primary* prevention of self-harm will be an important – albeit challenging - area.

Consideration of special needs of this group

Prevention self-harm in adolescents should consider the special requirements of this age group. It is a transitional age, and for example conflicts between teenagers and parents, often related to issues around romantic relationships, are commonly seen triggers for self-harm. Other stressors include examination pressures, and relationship issues. For young women, gender role conflict also has an impact (11). Teenagers and young people growing up in households with long-term difficulties, such as parental conflict, domestic violence and alcohol misuse related issues, are likely to be more vulnerable to try the 'solution' of self-harm when acutely distressed. Other vulnerable groups may include early school-drop outs, and young people, especially young women, in certain work sectors such as the free trade zone. While we need to explore primary prevention strategies at a universal population level, we should also target these more vulnerable groups of adolescents and young people.

Teenagers and young people may also be influenced by knowing others who have reacted to stress by self-harming, and increasingly, may copy behaviours seen on television or described by media – making it almost a 'learnt' maladaptive coping behaviour.

Self-harm in adolescents and young people – strategies for prevention:

1. Community and/or school health education programs to help adolescents understand the physical, sexual and emotional changes they

are experiencing; and innovative, locally suited programs to help adolescents develop more adaptive coping skills.
2. Provision of trained school counselors in all schools.
3. Programmes directed at parents of young people on understanding issues in adolescence.
4. Providing psychosocial support to families with difficulties and vulnerable adolescents.
5. Use of social media and online platforms.

The following are recommended to operationalize these strategies:

1. Community and/or school health education programs to help adolescents understand the physical, sexual and emotional changes they are experiencing; and innovative, locally suited programs to help adolescents develop more adaptive coping skills.

Adolescents are going through many changes in their life, both physical and psychological, and they can find this a challenging time – but this is a little discussed issue in Sri Lanka. A system should be established to regularly conduct educational programs for adolescents, on topics such sexual health, and emotional and social development. This should be done in simple, interactive terms that the teenagers can relate to. These could part of school health education programs, or conducted within the community. Online educational platforms could also be considered.

Furthermore, developing programs to help adolescents and young people to cope more adaptively with acute emotional distress, and developing problem-solving skills, should be considered. Again this could be conducted through schools – but the challenge is to deliver interactive school programs that do not become part of the 'syllabus' to be memorized by rote, hence losing all efficacy. There is already a Life Skills Program carried out in schools, but with variable impact; perhaps this could be revisited, evaluated and further developed, or lessons learnt could be used to develop new programs.

2. Provision of trained school counselors in all schools

The provision of counsellors in schools is being implemented by the Ministry of Education in Sri Lanka. While some schools have designated counsellors and facilities for counselling this varies greatly between schools, and many schools have no or minimal counselling facilities. In some schools, teachers are allocated to counsellor duties irrespective of their interest or commitment to the field, and also irrespective of their other academic work burden. Thus there needs to be minimum standards developed and implemented for the provision of counselling facilities in every school in the country. This should include the provision of trained and full time dedicated counselors, rather than 'temporary' teachers assigned to do counseling on top of all their other school work.

Training of school-teachers and counselors about psychological disorders among school children, how best to respond such children, and when and how to refer to psychiatry services, should go hand-in-hand with these measures.

3. Programmes directed at parents of young people on understanding issues in adolescence.

Parents of teenagers too often struggle to understand the changes their adolescent is going through. Parents may also not be familiar with different socio-cultural environment that teenagers today face, compared to their own upbringing. These issues often lead to conflict between parents and young people. Therefore, there should be a system of community health education programs for parents, in the community, to help them understand and develop parenting strategies to manage teenagers; while trying to minimize either extreme permissiveness or restrictions which are too harsh – both of which lead to family conflict.

4. Providing psychosocial support to families with difficulties and vulnerable adolescents.

Programs to help families and vulnerable adolescents cope in more adaptive ways with interpersonal conflict, and to improve problem-solving skills– should be explored and developed further. There should be more focus on families with difficulties, for example families with problems such as alcohol misuse or domestic violence, which are likely to make the family and the adolescent more vulnerable.

Evidence suggests that problem solving training or therapies may help reduce suicidal ideation and self-harm (12, 13). The challenge would be to develop locally and culturally suited ways of providing this support in the community, which is sustainable for this country. However, Sri Lanka has an already well-established primary care health service. Preventive care programs have been developed and carried out in other specialties, with identified grass root workers – a good example is the primary care services provided for maternal health and childcare. It would be worth exploring and developing a similar model of care at a primary care level, to provide support and guidance at a primary prevention level for families, teenagers and young people, to help develop strategies to deal with everyday conflicts and problems. This cannot be done by the health services alone – it would need collaboration with many other services, such as for example, the Department of Social Services and the Family Health Bureau –and requires collaboration between resource persons of different backgrounds, such as social workers, and counsellors. The health sector could play a collaborative role in developing and coordinating such a program, including training resource persons.

4. Use of social media and online platforms

Adolescents and young people are very active online, often accessing Facebook, using social media frequently, and Sri Lanka is no exception to this. Many young people have 'smart phones' and interact online with peers and friends. A hidden negative side of this phenomenon is the role of social media in propagating self-harm - for example by glamourizing and giving attention to such behaviours in others. Limiting this is a challenge that needs to be addressed.

On the other hand, adolescent familiarity with the internet may also be used to an advantage; the internet maybe a way to access, engage and provide support for troubled teenagers, which has not been done in Sri Lanka so far. For example, establishment of interactive online websites or platforms, to provide support for adolescents in distress – that are accessible and use friendly - maybe a way forward.

Furthermore, as mentioned previously, engaging the media to improve strategies of reporting related to suicide and self-harm, is particularly important with regards to minimization of 'copycat' suicides and self-harm among young people.

Recommendations

The Medical Faculties, the SLMA, the Ministry of Health, the Ministry of Social Services, the Ministry of Education, the Family Health Bureau and the Sri Lanka Colleges of Psychiatrists, Community Physicians and General Practitioners to:

1. Develop community and school health education programs to help adolescents understand the physical, sexual and emotional changes they are experiencing; and conduct locally suited programs to help adolescents develop more adaptive coping skills.
2. Develop and implement a national policy on the provision of trained counsellors for schools, who are dedicated to that purpose.
3. Develop regular training programs to increase awareness among school-teachers and counsellors, about psychological disorders among school children, how best to respond to such children and adolescents, as well as the mechanism of referral to healthcare providers.
4. Develop community programs to help parents understand and cope with issues of adolescence.

5. With the support of medical and IT experts, develop online platforms in local languages, to engage adolescents and young people for provision of psychological support.
6. Engage the media and improve the strategies of reporting related to suicide and self-harm.

Bibliography

1. De Silva V, Ratnayake A. Increased Use of Medicinal Drugs in Self-Harm in Urban Areas in Sri Lanka. Archives of Suicide Research. 2008;12(4):366-9.

2. Rajapakse T, Christensen H, Cotton S, Griffiths KM. Non-fatal self-poisoning across age groups, in Sri Lanka. Asian Journal of Psychiatry. 2016;19:79-84.

3. Rajapakse T, Griffiths KM, Christensen H, Cotton S. Non-fatal self-poisoning in Sri Lanka: associated triggers and motivations. BMC Public Health. 2015:1-7.

4. Hettiarachchi J, Kodituwakku GCS. Self Poisoning in Sri Lanka: Motivational Aspects. International Journal of Social Psychiatry. 1989;35(2):204-8.

5. Konradsen F, Hoek Wvd, Peiris P. Reaching for the bottle of pesticide—A cry for help. Self-inflicted poisonings in Sri Lanka. Social Science & Medicine. 2006;62(7):1710-9.

6. Perera B, Torabi MR, Jayawardana G, Pallethanna N. Depressive Symptoms among Adolescents in Sri Lanka: Prevalence and Behavioral Correlates. Journal of Adolescent Health. 2006;39(1):144-6.

7. Rodrigo C, Welgama S, Gurusinghe J, Wijeratne T, Jayananda G, Rajapakse S. Symptoms of anxiety and depression in adolescent

students; a perspective from Sri Lanka. Child Adolesc Psychiatry Ment Health. 2010;4(1):10. doi: 10.1186/1753-2000-4-10.

8. Owens D. Fatal and non-fatal repetition of self-harm: Systematic review. The British Journal of Psychiatry. 2002;181(3):193-9.

9. Mohamed F, Perera A, Wijayaweera K, Kularatne K, Jayamanne S, Eddleston M, Dawson A, Konradsen F,Gunnell D. The prevalence of previous self-harm amongst self-poisoning patients in Sri Lanka. Social Psychiatry Psychiatric Epidemiol. 2011 Jun; 46(6): 517–520.

10. Pushpakumara PHGJ, Thennakoon SUB, Rajapakse TN, Abeysinghe R, Dawson AH. A prospective study of repetition of self-harm following deliberate self-poisoning in rural Sri Lanka. PLoS ONE. 2019;14(2):e0199486-16.

11. Marecek J. Young Women's Suicides in Sri Lanka: Cultural, Ecological, and Psychological Factors Asian Journal of Counselling. 2006; 13(1): 63–92.

12. Kathriarachchi S, Perera Ramani EA. Problem-solving counseling as a therapeutic tool on youth suicidal behavior in the suburban population in Sri Lanka. Indian J Psychiatry. 2011;53(1):30.

13. McAuliffe C, McLeavey BC, Fitzgerald T, Corcoran P, Carroll B, Ryan L, et al. Group problem-solving skills training for self-harm: randomised controlled trial. The British Journal of Psychiatry. 2014;204(5):383-90.

14. Carter GL, Clover K, Whyte IM, Dawson AH, D, Este C. Postcards from the Edge: 5-year outcomes of a randomised controlled trial for hospital-treated self-poisoning. The British Journal of Psychiatry. 2013;202(5):372-80.