# An analysis of Sri Lankan government policies for prevention and control of non-communicable diseases and its risk factors

# Sriyani Ranasinghe<sup>1</sup>, Nalika Gunawardena<sup>2</sup>

<sup>1</sup>Deputy Director, Teaching Hospital Ratnapura, Ministry of Health Sri Lanka, <sup>2</sup>National Professional Officer, World Health Organization (WHO) Country Office for Sri Lanka

Correspondence to: Sriyani Ranasinghe, E-mail: sri.ranasinghe@yahoo.com

Received: January 28, 2021; Accepted: March 10, 2021

## **ABSTRACT**

Non-communicable diseases (NCDs) are the leading causes of mortality, morbidity, and disability in Sri Lanka. The Government of Sri Lanka is committed to address the NCD burden of the country. This report presents an analysis of the Sri Lankan government policies of health sector as well as all other related sectors in relation to prevention and control of NCD and its risk factors in the country. Collection of policies and selection, the relevant policies to be included in the analysis were based on a systematic approach and the analysis was based on a framework which included aspects of prevention and control of NCD/NCD risk factors that are supported by the policy; and the main policy directives/strategies proposed. The selected policies were also mapped against the four strategic areas of the multisectoral action plan for the prevention and control of NCD of Sri Lanka. The analysis showed that a great majority of health and non-health policies have explicitly specified its support to the relevant areas of NCD or NCD risk factor prevention or control. The main aspects that were not explicitly specified by the health sector policies were prevention and control of psychological stress, obtaining the support of media in inculcating healthy lifestyles and targeted interventions to the marginalized or vulnerable population groups and people with special needs. Almost all the policy documents analyzed were well aligned with the four strategic action areas of the National Multisectoral Action Plan for the prevention and control of NCD 2016–2020. The Government of Sri Lanka has adequate health and non-health policy support to prevent and control NCD and NCD risk factors.

KEY WORDS: Policies; Non-communicable Diseases; Risk Factors; Sri Lanka

# INTRODUCTION

The major non-communicable diseases (NCDs), such as cardiovascular disease (CVD), diabetes, cancer, chronic respiratory disease, and mental diseases, are the leading causes of morbidity and mortality, globally. Major risk factors for the occurrence of NCDs are tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol, exposure to indoor and

Access this art	icle online
Website: http://www.ijmsph.com	Quick Response code
<b>DOI:</b> 10.5455/ijmsph.2021.01012202110032021	

outdoor air pollution, and stress. Environmental exposure to carcinogens such as asbestos and ionizing radiation increases the risk of cancers. Inappropriate use of agro-chemicals in agricultural activities, dehydration due to long exposure to heat may contribute to chronic kidney diseases.

According to the World Health Organization (WHO) Global Action Plan for the Prevention and Control of NCDs 2013–2020, 63% of global deaths were due to NCD and nearly 80% NCD deaths occurred in the low- and middle-income countries. According to the WHOs, projections mortality due NCD will increase further and it is predicted that by 2030 deaths due to NCD will increase to 55 million.

NCDs are the leading causes of mortality, morbidity, and disability in Sri Lanka. The government hospital data for year

International Journal of Medical Science and Public Health Online 2021. © 2021 Ranasinghe and Gunawardena. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

2016 show that approximately 50% of the total deaths were due to major NCD.<sup>[2]</sup> The probability of dying between the ages of 30 and 70 years from the four main NCDs (CVD, cancer, chronic respiratory disease, and diabetes) was 18%. According to STEPS survey Sri Lanka, 15% of 18–69 age group adults are currently smoke tobacco; 35% of adult men drink alcohol; 73% of adults do not consume sufficient fruits and vegetables while 26% of adults are having high blood pressure or currently on medication and 7.4% had raised fasting blood sugar.<sup>[3]</sup>

The challenge of preventing and control of NCDs and major risk factors can be achieved only by high political backup, multisectoral approach with participation of all relevant stakeholders to implement evidence-based interventions. Life course approach is necessary when intervening on the major risk factors as the exposure start early in life and may progress to adulthood. Health promotional approach has been identified as an effective mechanism to address the crisis of NCDs. It calls for a move beyond the "lifestyles" approach to impact on the determinants that underpin the NCDs epidemic across populations. Any effective NCDs strategy must address risk factors such as unhealthy diet, physical inactivity, alcohol, tobacco, and indoor air pollution.

For prevention and control of NCD and its risk factors, it is very crucial to have comprehensive multisectoral policies at local, national, and international level and also proper implementation of those policies and strategic plans. [4] Any effective NCD strategy must address risk factors such as unhealthy diet, physical inactivity, alcohol, tobacco, and indoor air pollution. The policies also need to support required changes in the environment (physical, economic, social, and cultural) which would enable healthy lifestyles.

The objective of this analysis was to assess the extent of the support of government policies for prevention and control of NCD and its risk factors in Sri Lanka.

## **METHODS**

Collection of policies and selection, the relevant policies to be included in the analysis were based on a systematic approach.

## **Collection of Policies and Policy Documents**

The first component was to identify and collect all the national level policies and policy-related documents that may have relevance for prevention and control of NCD and its risk factors in Sri Lanka. The analysis was aimed at policies of health sector as well as non-health sectors. A list of the non-health national ministries which are stakeholders to address NCD and/or NCD risk factors was identified.

Several steps were followed to ensure that all the relevant national level policies were identified and collected.

#### Step 1

The official websites of the ministries of health and other national ministries which are stakeholders to address NCD and/or NCD risk factors were searched. When the website provided the copies of policies, they were downloaded. When the copies were not available for downloading, they were collected by visiting the ministry offices. Policy repository of the Ministry of Health was the main source of policies of Ministry of Health.<sup>[5]</sup>

# Step 2

A general search of the web was performed to search all major electronic databases using the key words "NCD" AND "Policy" OR "Strategies" AND "Sri Lanka" to identify any policies that are not listed in the government ministerial websites.

# Step 3

If no policy was retrieved through the above two web searches, an attempt was made to identify any existing policies in contact relevant officers of the identified ministries to get information and copies of the policies were obtained by visiting the offices.

## Selection of the Policies to be Included in the Analysis

The second component of the methods was selecting the relevant policies to be included in the analysis. Following inclusion criteria were used to select the policies:

- The policy is officially approved by the government or in the final stages of draft
- Policy or policy documents that explicitly address chronic NCD or NCD risk factors

#### Developing a Framework to be used in the Analysis

Both authors agreed on the relevant policies to be included in the analysis (Annexure 1) and on the framework to be used in the analysis.

The framework included the following aspects:

- Aspects of prevention and control of NCD/NCD risk factors that are supported by the policy
- Aspects of prevention and control of NCD/NCD risk factors that are not specified or not supported by the policy
- Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors

The analysis of the selected policies using the agreed on framework was performed by the principal investigator. Following this analysis, each of the selected policies were then mapped against the four strategic areas of the multisectoral action plan for the prevention and control of NCD of Sri Lanka. [6] The four strategic areas are as follows:

- 1. Advocacy, partnerships, and leadership
- 2. Health promotion and risk reduction
- 3. Health system strengthening for early detection and management of NCD and their risk factors
- 4. Surveillance, monitoring and evaluation, and research. Ethical approval was not obtained as we used already published policy documents for this analysis.

#### RESULTS

The health and non-health national policies identified and selected for the analysis are shown in Table 1.

Results of the analysis of the selected policies using the developed framework, which depicts the extent of support it provides for prevention and control of NCD and its risk factors in Sri Lanka, are shown in Table 2.

Table 3 shows the mapping of the content of the policies against the four strategic areas of the multisectoral action

plan for the prevention and control of NCD of Sri Lanka 2016–2020.

#### DISCUSSION

The Government of Sri Lanka is committed to address NCD burden of the country. This is reflected by the availability of numerous policies in the health and also non-health sectors that support the prevention and control of NCD and NCD risk factors in the country. Almost all the policy documents analyzed here were well aligned with the four strategic action areas of the National Multisectoral Action Plan for the prevention and control of NCD 2016–2020.<sup>[6]</sup>

The challenge of preventing and control of NCD and major risk factors can be achieved only by high political backup, multisectoral approach with participation of all relevant stakeholders to implement evidence-based interventions. Life course approach is necessary when intervening on the major risk factors as the exposure start early in life and may progress

Table 1: Health and non-health national policies identified and selected to be included in the analysis

No.	Policy	Ministry	Year	Status of approval
1.	National Health Policy	Ministry of Health, Nutrition and Indigenous Medicine	2017	Approved not published
2.	The National Policy and Strategic Framework for Prevention and Control of Chronic Non-communicable Disease		2010	Published
3.	National Policy and Strategic Framework on Cancer Prevention and Control – Sri Lanka		2015	Published
4.	National Health Promotion Policy		2010	Approved and not published
5.	National Nutrition Policy of Sri Lanka		2010	Published
6.	The Mental Health Policy of Sri Lanka		2005-2015	Published
7.	National Elderly Health Policy		2017	Published
8.	National Policy on Alcohol Control		2016	Published
9.	National Policy on Maternal and Child Health		2012	Published
10.	National Immunization Policy		2014	Published
11.	National Policy and Strategy on Health of Young Persons		2015	Approved and not published
12.	National Youth Policy Sri Lanka	Ministry of Youth Affairs and Skill Development	2014	Published
13.	Policy Guidelines for Fortification of Food in Sir Lanka	Ministry of Health, Nutrition and	2008	Published
14.	National Oral Health Policy for Sri Lanka	Indigenous Medicine	-	Draft
15.	National Environmental Health Policy		-	Draft
16.	National Environmental Policy and Strategies	Ministry of Environment	2003	Published
17.	National School Health Policy	Ministry of Education and Ministry of Health		Draft
18.	School Canteen Policy	Ministry of Education and Ministry of Health	2006	Not Published
19.	Sri Lanka National Agricultural Policy	Ministry of Agriculture Development and Agrarian Services	2007	Last published in 2007
20.	National Sports Policy of Sri Lanka	Ministry of Sports	2012	Published
21.	National Media Policy	Ministry of Mass media and Information	2007	Draft

	ī
	7
7	٠
+	3
- 5	
2	3
-	٠
$\overline{}$	
~	-

	No. Policy	Year	Aspects of prevention and control of NCDs/NCD risk factors that are supported by the policy	Aspects of prevention and control of NCDs/NCD risk factors that are not specified or not supported by the policy	Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors
<del></del>	National Health Policy	2017	The policy specifies that it supports the prevention and control of the following NCDs  • DM, CVD, cancers, chronic kidney disease of unknown origin, COPD, asthma, and mental health problems  The policy specifies that it is supporting the prevention and control following NCD risk factor  • Unhealthy dietary practices	The policy does not contain direct statements on reducing  • Harmful effects of tobacco and alcohol  • Physical inactivity promotion  • Stress  Prevention of mental health issues has not been mentioned specifically	The policy specifically indicate its focus on  Improving health services which include NCD care services in the country  Improving health status of youth and adolescents through special programs on risk behaviors and this provides the framework to prevent and control NCD risk factors alcohol and tobacco use and physical inactivity
4	National Policy and Strategic Framework for the Prevention and Control of Chronic NCD	2010	The policy specifically address the prevention and control of DM, CVD, chronic renal disease, COPD Following are the NCD risk factors that are specified in the policy for prevention and control Tobacco Harmful use of alcohol Unhealthy dietary practices Physical activity Indoor and outdoor air pollution Stress	The policy does not specify  • Prevention of mental health illnesses is not been mentioned • Interventions for NCD prevention among vulnerable population groups and people with special needs Although indicated, prevention of COPD and chronic kidney disease is not addressed adequately	The policy explicitly indicates  • Establishment of the multisectoral coordination mechanism for the activities on prevention and control of NCD and NCD risk factors in the country  • An NCD Bureau to coordinate the activities of the different directorates/units of the Ministry of Health on NCD and NCD prevention and control  • Implementation of interventions that have been proved to be effective in NCD and NCD risk factor control  • Scaling up of primordial, primary, secondary, tertiary, rehabilitative, and palliative care services  • Community empowerment and health promotion have been identified as policy strategies  • Public private partnership is encouraged in almost all the policy documents  • Encouraging research and utilization of findings for prevention and control of NCDs  • Strengthening or mainstreaming routine surveillance system  • Conducting regular or periodic national surveys to identify trends of NCDs and NCD risk factors and for evaluating interventions
Ŕ	National Policy and Strategic Framework on Cancer Prevention and Control Sri Lanka	2010	The sole focus of the policy is on prevention and control of cancers The main NCD risk factors that are specified in the policy for prevention and control of cancers are  • Tobacco use • Alcohol use • Unhealthy diet	The policy does not directly address reducing "stress" or providing mental and psychological support for cancer patients	Following interventions mentioned in the policy for prevention and control of cancers and the modifiable risk factors  • Public educational and awareness programs  • Multisectoral approach  • Community empowerment for healthy lifestyle  • Capacity building of health team  Empowering the community and family members to support cancer patients from point of diagnosis to the end of life care

(Contd

			]	Table 2: (Continued)	
No.	Policy	Year	Aspects of prevention and control of NCDs/NCD risk factors that are supported by the policy	Aspects of prevention and control of NCDs/NCD risk factors that are not specified or not supported by the policy	Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors
4.	National Health Promotion Policy	2015	This is focused on promoting healthy lifestyles and thereby NCD and NCD risk factors prevention and control	None	The policy is based on the life course approach and broad strategies under each policy objectives provide framework for NCD risk factor prevention and control
и́	National Nutrition Policy of Sri Lanka	2005–2015	The policy supports prevention and control of malnutrition which is a risk factors for NCDs The main NCD risk factor that is specified in the policy for prevention and control is unhealthy diet	Legislations to control social media influence on healthy eating behaviors are not addressed adequately in the policy  No activities being identified to promote nutrition/fruit and vegetable consumption in public places/in restaurants and canteens of all educational institutions	The policy specifically indicates its focus on  • The life course approach to reduce intergenerational impact of malnutrition  • Other successful interventions mentioned in the policy in relation to addressing unhealthy diet are  • Food-based approach  • Nutrient enhancement  • Dietary diversification  • Food safety  • Multi sectoral action  • Targeted interventions for vulnerable populations and people with chronic diseases  • Strengthening regulations/acts
.6	The Mental Health Policy of Sri Lanka 2005–2015	2005–2015	The policy specifies prevention and control of mental health issues including the mental illnesses. The risk factors that are specified in the policy for prevention and control are  • Tobacco use  • Alcohol use	The policy does not specifically mention prevention and control of stress No specific strategies/actions identified to prevent suicide/homicide and violence Providing mental health support following disasters (psychological first aid) is not addressed	The policy specifically indicates its focus on  • Improving mental health of schoolchildren, adolescents, elderly, and pregnant mothers  • Providing psychosocial community support and establishment of mental health community support centers
<b>1</b> -	National Elderly Health Policy	2016	Although NCD or NCD risk factor prevention and management is not specifically mentioned in the policy, its focus is on healthy aging, health promotion, and primary prevention for the elderly which includes NCD prevention and control among elders	None	Policy objectives and statement to promote healthy aging, health promotion, and primary prevention for the elderly encompass activities on the prevention and control of common NCDs and risk factors
oó	National Policy on Alcohol Control	2012	Focuses on prevention and control of the NCD risk factor, use of alcohol	The areas that are not specifically indicated in the policy are  Controlling social media influence to reduce alcohol use  policy actions to reduce alcohol consumption among vulnerable populations	The policy is in par with the provisions of National Alcohol and Tobacco Act of Sri Lanka. The priority policy areas mentioned in the policy are on  • Marketing  • Pricing, trade, and investment  • Availability and accessibility of alcohol products  • Interventions to protect from consequences of alcohol use  • Drink driving  • Community actions  • Surveillance, monitoring and evaluation, and research  • Strengthen supportive services and rehabilitation

(Contd

_
inued)
(Conti
 ::
Se
$\mathbf{Tabl}$

				Table 2: (Continued)	
No.	Policy	Year	Aspects of prevention and control of NCDs/NCD risk factors that are supported by the policy	Aspects of prevention and control of NCDs/NCD risk factors that are not specified or not supported by the policy	Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors
9.	National Policy on Maternal and Child Health	2014	Indirectly targets prevention and control of all major NCDs through promoting life course approach and other relevant interventions. The NCD risk factors that are specified in the policy for prevention and control are  Unhealthy diet  Physical inactivity	None	The policy specifies the following interventions that contribute to NCD and NCD risk factor prevention and control.  • Cervical cancer screening through well woman clinics • Pre-conception care program • School health program • Adolescent health program • Nutrition program • Infant and young child feeding and growth monitoring and promotion
10.	National Immunization Policy	2010	The national immunization policy contributes to prevention and control of liver and cervical cancer through vaccination against hepatitis B human papilloma virus	None	Target to reduce chronic infection with hepatitis B by HBV vaccination and by HPV vaccination to prevent cervical cancer
Ħ	National Policy and Strategy on Health of Young Persons	2015	Although the policy does not specify NCDs, it has identified several interventions to prevent and control the following NCD risk factors  • Tobacco use • Alcohol use • Unhealthy dithery practices • Physical inactivity • Stress • Substance abuse	The policy does not directly address the issues of marketing and advertisements of unhealthy food habits among youth	This interventions that have been identified to improve health of young people are  Interventions to prevent young people from substance abuse  Ensuring optimum nutrition and regular physical recreational and sport activities  Promoting physiological and mental well-being  Improving life skills  Interventions to prevent suicide, self-harm  Empowering community, parents, teachers to promote psychosocial well-being of youth  Targeted micronutrient and food supplementation of young people with nutritional problems
12.	National Youth Policy Sri Lanka	2008	Specifically indicate the prevention and control of the following NCD risk factors among youth  Tobacco use Alcohol use Unhealthy dithery practices Physical inactivity Stress	None	This policy highlights the implementation of National Policy and Strategy on Health of Young Persons as the strategy to promote health of the youth in the country
13.	Policy Guidelines for Fortification of Food in Sir Lanka	2008	This policy aims at improving the micronutrient deficiencies which is a known risk factor for NCDs	None	This policy has guidelines for fortification of food with micronutrients for improving micronutrient deficiencies among populations of all sectors

(Contd

7	3
,	7
.;	
,	
1	_
ċ	7
(	Ľ
3	7
É	۷.

				lable 2: (Continued)	
No.	Policy	Year	Aspects of prevention and control of NCDs/NCD risk factors that are supported by the policy	Aspects of prevention and control of NCDs/NCD risk factors that are not specified or not supported by the policy	Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors
4.	National Oral Health Policy for Sri Lanka	Draft	The policy indirectly supports the prevention and control of oral cancers	Do not have targeted actions or strategies on oral cancer prevention and control activities. Does not specifies screening for pre-cancerous lesions in the prevention and control of oral cancers.  Does not specifically indicate strategies to control tobacco use, alcohol, betel quid, and areca nut chewing which are risk factors of oral cancers	This policy encourages evidence based approaches to reduce oral health burden by age specific strategies and common risk factor approach
15.	National Environmental Health Policy		The policy supports the prevention and control of chronic lung diseases, asthma and chronic renal diseases  The policy specifies that it is supporting prevention and control of unhealthy dithery practices and improving Indoor and outdoor air pollution	None	This policy document aims at  Promoting multisectoral participation on addressing environmental health  Encouraging evidenced-based practices to improve environmental health practices  Promotion of health practices  Promotion of health cities concept, promotion of safe and health work place by improving occupational health, development of a uniform set of national air quality standards, and promoting urban planning to ensure lower level of air pollution  Minimum requirements and guidelines for use of chemicals including the use of pesticides in food production  The need for periodic assessment for food safety risks, review and revise food safety standards, regulations and legislations, providing adequate testing facilities to detect food contamination, and quality of food products  Encourages citizens to become responsible partners in the promotion and protection of their own health
16.	National Environmental Policy and Strategies	2003	The policy specifically focuses on improving the indoor and outdoor air pollution which is a risk factor for chronic lung diseases, asthma, and chronic renal diseases	None	This policy document encourages multisectoral approach for managing the environment Important interventions specified in the policy are  • Use of sound agricultural practices • Reduce consumption, recycle, and reuse materials to the maximum extent possible • Control measures to minimize emission of gaseous and particulate matter from industry and transport and other sources • Measures to control emission of ironizing and microwave radiation • Legal and regulatory measures to control emission of atmospheric pollutants, that is, from vehicles • Minimize chemical use or agricultural and aqua cultural practices • Proper collection and disposal of solid waste including hazardous waste

#
C

				Table 2: (Continued)	
No.	Policy	Year	Aspects of prevention and control of NCDs/NCD risk factors that are supported by the policy	Aspects of prevention and control of NCDs/NCD risk factors that are not specified or not supported by the policy	Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors
17.	National School Health Policy	Draft	This policy addresses prevention and control of the following NCD risk factors among schoolchildren  • Tobacco use • Alcohol use • Unhealthy dithery practices • Physical inactivity • Stress	None	The policy identifies the following as interventions  • Development of life skills for prevention of substance use/ alcohol  • Empowering schoolchildren on healthy lifestyles of healthy eating and physical activity promotion  • Policies on advertisements and marketing within the school premises  • Policies to discourage taking sponsorships for school events from tobacco and alcohol companies, etc.  • School feeding programs and micronutrient supplementation program targeting all eligible schoolchildren
18.	School Canteen Policy	2006	The policy addresses the NCD risk factor addressed of unhealthy dithery practices among schoolchildren	The policy covers only schools with more than 200 students and school canteens	This policy document targets healthy eating habits of schoolchildren It requires schools to take measures to reduce availability of unhealthy food items in school canteens and to develop school canteens as a health-promoting centers
19.	Sri Lanka National Agricultural Policy	Last published in 2007 (final Draft 2017)	The policy indirectly address NCD prevention and control by way of promoting availability of healthy foods and healthy dietary practices	None	Policy document aims to  Increase domestic agricultural production Promote home gardening and urban agriculture to enhance household nutrition and income Promote women's participation in home gardening and youth involvement in agriculture Ensure food safety by promoting good agricultural practices and organic agriculture Adoption of environmental healthy technologies in farming and actions to prevent water pollution from agricultural and agro-based industrial activities are stressed Identifies the need for public-private partnerships
20.	National Sports Policy of Sri Lanka	2012	The policy addresses prevention of physical inactivity which is a main NCD risk factor	None	The policy  • Encourage people to adopt sports as an integral part of their lives to ensure improved physical mental health throughout their life  • Encourage participation in sports among schoolchildren, women, disabled, and the elderly  • 21 provide opportunities to engage in sports at village level

nţ

Formulation of legal and institutional codes, necessary to

establish quality, standards for organizations, producing

programs, and commercials

• Updating the existing laws and regulations that affect the

mass media field

Formulating a code of ethics for mass media

			T	Table 2: (Continued)	
.o.	No. Policy	Year	Aspects of prevention and control of NCDs/NCD risk factors that are supported by the policy	Aspects of prevention and control of Main p NCDs/NCD risk factors that are not supported by the policy factors	Main policy directives/strategies proposed to support the prevention and control NCD/NCD risk factors
21.	National Media 2007 Policy	2007	The policy focuses on issues related to social The poresponsibility and public advertising which have prevent a direct influence on NCD risk factors and NCDs factors	The policy does not identify its role to support  The policy directs the media on prevention and control of NCDs and NCD risk  • Production of media content v factors  knowledge, skills, and attitude a well-informed and democrat	The policy focuses on issues related to social The policy does not identify its role to support The policy directs the media on responsibility and public advertising which have prevention and control of NCDs and NCD risk factors and NCDs factors

DM: Diabetes mellitus, CVD: Cardiovascular diseases, COPD: Chronic obstructive pulmonary diseases, NCD: Non-communicable disease

to adulthood.[1] Health promotional approach has been identified as an effective mechanism to address the crisis of NCD.[7] It calls for a move beyond the "lifestyles" approach to impact on the determinants that underpin the NCD epidemic across populations. The analysis of aspects of prevention and control of NCD/NCD risk factors that are supported by the policy of the health sector of Sri Lanka showed that a great majority of the policies have explicitly specified its support to the relevant areas of NCD or NCD risk factor prevention or control. It was encouraging to note that the main policy directives/strategies proposed by the health sector policies to support the prevention and control NCD/NCD risk factors were mostly comprehensive and in keeping with the health promotional approach, encouraging community mobilizations and multisectoral involvements, public private partnerships, and monitoring and evaluation mechanisms. Few main aspects that were not explicitly specified by the health sector policies were prevention and control of psychological stress, obtaining the support of media in inculcating healthy lifestyles among populations and targeted interventions to the marginalized or vulnerable population groups and people with special needs. The corresponding analysis of the non-health sector policies also showed that almost all non-health sectors also pledged to support the relevant aspects of prevention and control of NCD/NCD risk factors. The multisectoral action plan for NCD prevention and control 2016–2020 of the Ministry of Health was shown to be a very comprehensive plan which has captured most of the actions related to strategies identified by the policies of the health and non-health sectors. [6] Furthermore, it had actions that promote and set the stage for multisectoral actions and coordination with other non-health ministries. This action plan has been developed to achieve the 10 voluntary targets adopted by Sri Lanka based on the nine global targets and the specific regional target identified for the Southeast Asian region. [6] The four strategic areas (advocacy, partnership and leadership, health promotion, and risk reduction) have been identified to strengthen the health system for early detection and management of NCDs and their risk factors and surveillance, monitoring evaluation, and research. However, proper implementation of these policies remains problematic at provincial and district level. Difficulties encountered in implementation and monitoring of these strategic directives could be due to the district disparities. Bangladesh and Mongolian governments had done two studies using WHO 2008–2013 NCD Action Plan came out with similar findings that in spite of having well-developed action plans on NCDs they lacked forceful implementation. [8,9] However, further research should be carried out to examine factors that affect implementation, focusing on the over-performing and underperforming countries.[10]

# **Limitations of the Analysis**

This policy analysis was limited to the publicly available national polices. The analysis did not assess the implementation status or outcome of the available policies.

**Table 3:** Mapping of the content of the policies against the four strategic areas of the multisectoral action plan for the prevention and control of NCD of Sri Lanka 2016–2020

No.	Policy	Year	Strategic areas				
			Advocacy, partnerships, and leadership	Health promotion and risk reduction	Health system strengthening for early detection and management of NCD and risk factors	Surveillance, monitoring and evaluation, and research	
1.	Sri Lanka National Health Policy	2017	√	V	V	√	
2.	National policy and Strategic Framework for Prevention and Control of Chronic NCD	2010	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	
3.	National Policy and Strategic Framework for Cancer Prevention	2015	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	
4.	National Health Promotion Policy	2010	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$	
5.	National Nutrition Policy of Sri Lanka	2010	$\checkmark$	$\sqrt{}$	$\checkmark$	$\checkmark$	
6.	National Mental Health Policy	2005– 2015	$\checkmark$	$\sqrt{}$	$\checkmark$	$\checkmark$	
7.	National Elderly Health Policy	2017	$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	
8.	National Policy on Alcohol Control	2016	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	
9.	National Maternal and Child Health Policy	2012	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	
10.	National Immunization Policy	2014	$\sqrt{*}$	$\checkmark$	<b>√</b> ∗	$\sqrt{*}$	
11.	National Policy and Strategy on Health of the Young Persons	2015	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	
12.	National Youth Policy Sri Lanka	2014	$\checkmark$	$\sqrt{}$	$\checkmark$	$\checkmark$	
13.	Policy Guideline for fortification of Food in Sir Lanka	2008	$\checkmark$	$\checkmark$	-	-	
14.	National Oral Health Policy for Sri Lanka	Draft	$\checkmark$	√**	$\checkmark$	$\checkmark$	
15.	National Environmental Health Policy	Draft	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	
16.	National Environmental Policy and Strategies	2003	$\checkmark$	$\sqrt{}$	$\checkmark$	$\checkmark$	
17.	School Health Policy	Draft	$\checkmark$	$\checkmark$	$\sqrt{}$	$\sqrt{\#}$	
18.	School Canteen Policy	2006	$\checkmark$	$\checkmark$	$\sqrt{}$	$\sqrt{\#}$	
19.	Sri Lanka National Agriculture Policy	2007	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	
20.	National Sports Policy of Sri Lanka	2012	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	
21.	National Media Policy	2007	$\checkmark$	$\sqrt{}$	-	-	

NCD: Non-communicable disease

# CONCLUSIONS AND RECOMMENDATIONS

The Government of Sri Lanka has adequate policy support to prevent and control NCD and NCD risk factors. Policy documents of Ministry of Health pay sufficient attention in addressing NCD and NCD risk factors in all of its relevant policies. There are substantial numbers of policy documents developed by non-health ministries of Sri Lanka which also directly or indirectly support to NCD and prevention and control activities. The policy and strategic directives are well aligned to direct implementation of the actions indicated in the policy.

It is recommended that the health and non-health policies also incorporate the gaps that were identified, namely, addressing psychological stress, using media to promote healthy lifestyles, and targeted interventions to the marginalized or vulnerable population groups.

#### ACKNOWLEDGMENT

Authors would like to acknowledge the general support extended for collection of policies/policy documents by all heads of departments and units' heads and program managers.

#### REFERENCES

- World Health Organization. Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-2020. Geneva: World Health Organization; 2020. Available from: http://www.apps.who.int/iris/ bitstream/10665/94384/1/9789241506236\_eng.pdf. [Last accessed on 2020 Jun 10].
- Annual Health Bulletin. Medical Statistics Unit, Ministry of Health. Colombo: Nutrition and Indigenous Medicine; 2016.
- World Health Organization. STEP Approach to Chronic Disease Risk Factor Surveillance; No Communicable Disease Risk Factor Survey. Geneva: World Health Organization; 2020. Available from: https://www.who.int/ncds/surveillance/steps/ steps-report-2015-sri-lanka.pdf. [Last accessed on 2020 Jun 25].
- 4. Mendis S. The policy agenda for prevention and control of

- non-communicable diseases. Br Med Bull 2010;96:23-43.
- Policy Repository of Ministry of Health Sri Lanka; 2016;2020:20: Available from: http://www.health.gov.lk/moh\_final/english/public/elfinder/files/publications/publishpolicy/policyrepository.pdf. [Last accessed on 2020 Aug 25].
- Ministry of Health. National Multisectoral Action Plan for the Prevention and Control of Noncommunicable Diseases; 2016-2020. Colombo: Ministry of Health, Nutrition and Indigenous Medicine; 2020.
- 7. Kumar S, Preetha G. Health promotion: An effective tool for global health. Indian J Community Med 2012;37:5-12.
- 8. Chimeddamba O, Peeters A, Walls HL, Joyce C. Noncommunicable disease prevention and control in Mongolia: A policy analysis. BMC Public Health 2015;14:660.
- 9. Biswas T, Pervin S, Tanim MI, Niession L, Islam A. Bangladesh policy on prevention and control of non-communicable diseases: A policy analysis. BMC Public Health 2017;17:582.
- Luke AN, Nicholson BD, Yeung BY, Goiana-da-Silva F. Implementation of non-communicable disease policies: A geopolitical analysis of 151 countries. Lancet Glob Health 2020;22:50-8.

**How to cite this article:** Ranasinghe S, Gunawardena N. An analysis of Sri Lankan government policies for prevention and control of non-communicable diseases and its risk factors. Int J Med Sci Public Health 2021;10(1):1-13.

Source of Support: Nil, Conflicts of Interest: None declared.

# **ANNEXURE**

Annexure 1: List of policy documents selected for the analysis

No.		Ministry	Year	Website
1.	National Health Policy	Ministry of Health, Nutrition and indigenous Medicine	2017	http://www.health.gov.lk/moh_final/english/ public/elfinder/files/publications/2017/ NationalHealthPolicy2016-2025.pdf
2.	The National Policy and Strategic Framework for Prevention and Control of Chronic Non-communicable Disease		2010	http://www.health.gov.lk/enWeb/NCD/temp/NCD%20 Policy%20English.pdf
3.	National Policy and Strategic Framework on Cancer Prevention and Control – Sri Lanka		2015	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
4.	National Health Promotion Policy		2010	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
5.	National Nutrition Policy of Sri Lanka		2010	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
6.	The Mental Health Policy of Sri Lanka		2005– 2015	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
7.	National Elderly Health Policy		2017	
8.	National Policy on Alcohol Control		2016	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
9.	National Policy on Maternal and Child Health		2012	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
10.	National Immunization Policy		2014	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
11.	National Policy and Strategy on Health of Young Persons		2015	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
12.	National Youth Policy Sri Lanka	Ministry of youth affairs and skill development	2014	http://www.youthpolicy.org/national/Sri_Lanka_2014_ National_Youth_Policy.pdf
13.	Policy Guidelines for Fortification of Food in Sir Lanka		2008	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
14.	National Oral Health Policy for Sri Lanka		-	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
15.	National Environmental Health Policy		-	http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/PolicyRepository.pdf
16.	National Environmental Policy and Strategies	Ministry of Environment	2003	http://www.environmentmin.gov.lk/web/images/pdf/national%20environmental%20policy%202003%20english.pdf
17.	National School Health Policy	Ministry of Education and Ministry of Health		From Personal contacts. Not the final draft
18.	School Canteen Policy	Ministry of Education and Ministry of Health	2007	From Personal contacts

(Contd...)

# Annexure 1:(Continued)

No.	Policy	Ministry	Year	Website
19.	Sri Lanka National Agricultural Policy	Ministry of Agriculture Development and Agrarian Services	2007	http://www.agrimin.gov.lk/web/images/ docs/1277294350E%20NATIONAL%20 AGRICULTURAL%20POLICY.pdf
	Sri Lanka National Agricultural Policy (Draft framework for new policy)		2016	http://www.agrimin.gov.lk/web/index.php/en/special-messages/717-agricultyre-policy
20.	National Sports Policy of Sri Lanka	Ministry of Sports	2012	http://speed.lk/document-resources/ send/2-sl-policy/12-national-sports-policy-sri-lanka
21.	National Media Policy (Draft)	Ministry of Mass media and Information	2007	http://www.sancomonline.net/wp-content/uploads/2015/02/SL-national-media-policy1.pdf