

## Conference Paper

# Tackling Non-communicable Diseases in Asia Countries Systematic Review

Matta Ernita and Adik Wibowo

<sup>1</sup>Department of Health Policy and Administration, Faculty of Public Health, Universitas Indonesia, Depok, Indonesia<sup>2</sup>Lecturer Faculty of Public Health, Universitas Indonesia, Depok, Indonesia

## Abstract

NCDs impact the lives and health of many people, effective policies and program have to be put in tackling NCDs. This study aimed to find out the program and policies in asia countries. The method was a systematic review by using the search facility database online through uindonesia summon serialsolutions and Proquest by year of publication from 2007 to 2016. Journals were screened by tittle and abstract according to research topic, then selected using inclusion and exclusion criterias and at the end we found 8 journals to review. The epidemic of NCDs influence the universal health coverage in some countries. The ongoing program in tackling NCDs in southeast asia countries are a community based approach, improve the skill of health workers, increase an investment in public health intervention programs and involve all health sectors and related stakeholders. The policy maker should make the program that focus on health promotion, strengthening infrastructure including human resources and early diagnosis on diseases.

**Keywords:** tackling, non communicable diseases, policies, program

Corresponding Author:

Matta Ernita

matta.ernita@ui.ac.id

Received: 21 December 2018

Accepted: 23 January 2019

Published: 28 February 2019

Publishing services provided by  
Knowledge E

© Matta Ernita and Adik

Wibowo. This article is

distributed under the terms of

the [Creative Commons](#)[Attribution License](#), whichpermits unrestricted use and  
redistribution provided that the  
original author and source are  
credited.

Selection and Peer-review under

the responsibility of the 3rd

IMOPH &amp; the 1st YSSOPH

Conference Committee.

## 1. Introduction

WHO defines NCDs as including chronic diseases (principally cardiovascular diseases, diabetes, cancer, and asthma/chronic respiratory diseases), injuries and mental health. NCDs is a chronic conditions that do not result from an (acute) infectious process and hence or not communicable, that has a prolonged course, that does not resolve spontaneously, and for which a complete cure is rarely achieved (CDC).

Four behavioral risk factors for NCDs are: physical inactivity, tobacco use, alcohol use and unhealthy diets. The problem of NCDs continues to increase in all regions of the world and it is need the best health policies and programs. NCDs are probably the most important health threat the world is confronting in terms of “single” cause of death, disease and disability (although NCDs are not one but many diseases, as is well known) [1]. Evidence shows that NCDs are to a great extent preventable. Government has to make difficult choices on how best to allocate resources for health and health care [2].

NCDs are becoming the dominant causes of death and disability worldwide. Three NCDs are responsible for a considerable portion of the mortality, morbidity and health

## OPEN ACCESS

services utilization in Bangladesh, in particular, and South-East Asia, more generally: cardiovascular disease, diabetes and tobacco-related illness [3]. Most NCDs deaths are preventable and health systems are inadequate or unprepared in tackling NCDs.

## 2. Methods

The method was a systematic review by using the search facility database online through Uindonesia summon serialsolutions and Proquest by year of publication from 2007 to 2016. Search using a specific keyword is “tackling” AND “non communicable diseases” AND :policies” AND “program”. All journals were screened by free full text, article journal, year of publication and location. And then journals that have been further filtered were screened by reading title and abstract.

## 3. Results

We found 2137 journals by using data base online through Indonesia summon online and Proquest by using keywords: tackling, non communicable diseases, policies and program, 1052 journals were found from Uindonesia summon online and 1085 journals form Proquest. Then we screened by free full text, article journal, year of publication and location. At the end we found 8 journals to review (fig.1). Two studies from India and each one from Indonesia, Turkey, Bangladesh, Nepal, China and Iran.

Based on article reviewed, eight studies revealed that policies and program on tackling NCDs in Asia countries were need a health system approach that include all health sectors, related stakeholders and non government organization. The ongoing program in tackling NCDs in asia countries are a community based approach, improve the skill of health workers, increase an investment in public health intervention programs and involve all health sectors and related stakeholders. The policy maker should make the program that focus on health promotion, strengthening infrastructure including human resources and early diagnosis on diseases.

## 4. Discussion

Most NCDs are associated with preventable risk factors. Effective control of risk factors could reduce the incidence of heart attack, stroke and DM by at least 80% [4]. How to increase the awareness of health in community still be a problem nowadays in many countries in asia. Despite the good progress made to control and prevent NCDs, great challenges remain in China. One challenge is poor knowledge and low awareness about NCDs, particularly at the poor and rural community level [4].

Therefore, to control CVD in low and middle income country, investigations of a community-based primary- prevention of CVD risk factors are needed [5]. The government should strengthen the skill of health workers especially in promote and educate community. Generating national and sub-national information and monitor the trends of NCDs and their risk factors, establishing health promotion programs across the life

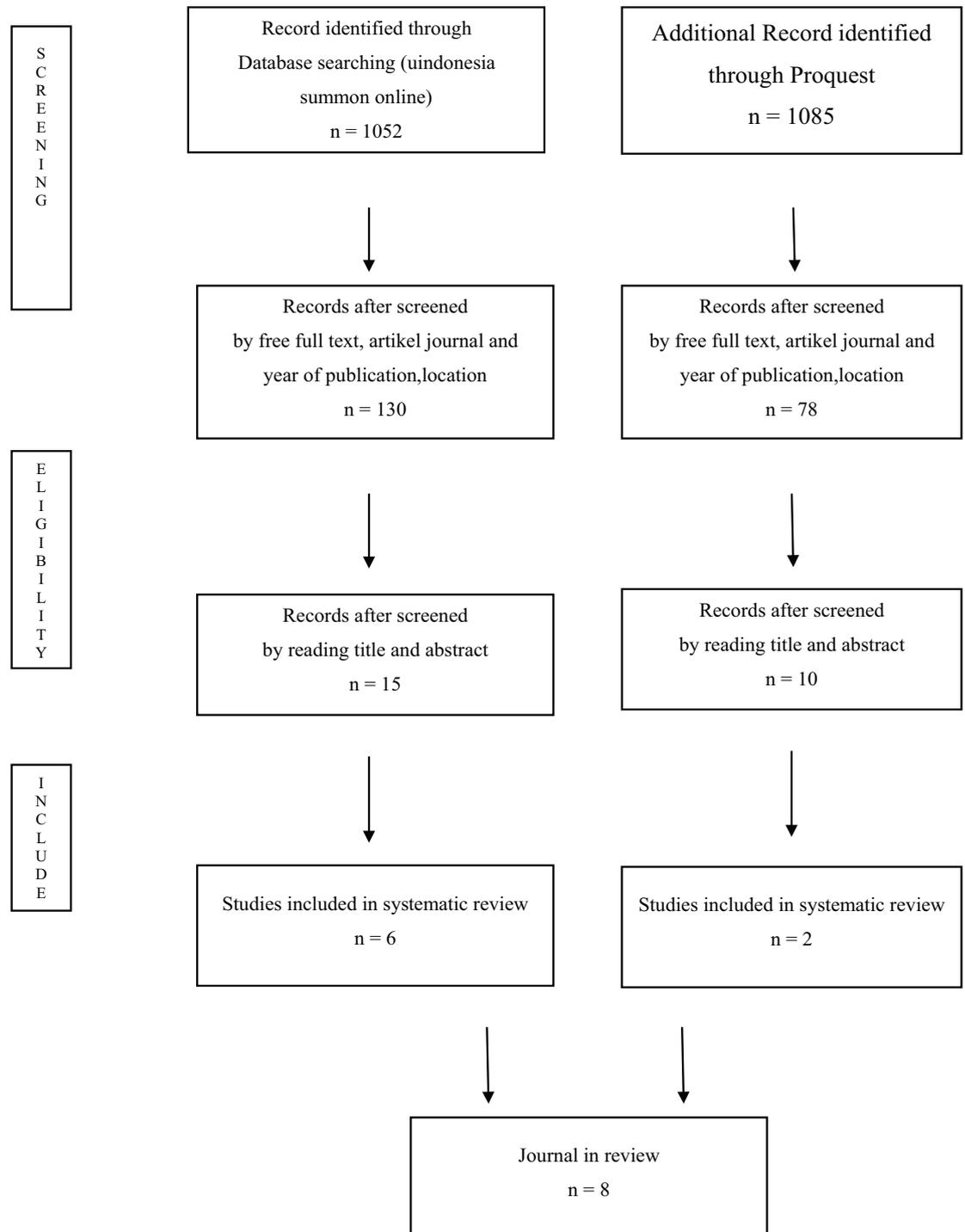


Figure 1: Systematic Review Flowchart.

course through primary health care system and universal health coverage components, and tackling issues through multi-sectoral approach are critical strategies be suggested [6].

The focusses of tackling NCDs is still in treatment rather than educate and promote. Although these services are essential to save the lives of those who are already diseased, they have not helped to slow down the growing epidemic of CVDs in the country

TABLE 1: The Journals in Review.

TITLE	AUTHOR	YEAR OF PUBLISH	METHOD/TYPE	VARIABLE	RESULT
A community intervention for behavior modification: an experience cardiovascular diseases in Yogyakarta, Indonesia	Fatwa Sari Tetra Dewi, Hans Stenlund, V Utari Marlinawati, Ann Ohman, Lars Weinehall	2013	Quasi experimental and based on mixed design involving both quantitative and qualitative. Four communities were selected as intervention areas and one communities was selected as a referent area.	Community empowerment approach, community motivation	Frequency and participation rates of activities were higher in the low socioeconomic status communities than in the high ses communities. The proportion of having high knowledge increased significantly among men in the intervention communities. The qualitative shows that respondents though PRORIVA improved their awareness of CVD and encouraged them to experiment healthier behaviours. PROVIVA was perceived as a useful program and was expected for the continuation. Citizens of low SES communities thought PRORIVA was a cheerful program
Health policy analysis for prevention and control of cardiovascular diseases and diabetes mellitus in Turkey	Bitent Kilit, Sibel Kalaca, Belgin Unal, Peter Phillimore, Shahaduz Zaman	2015	Qualitative studies, Evaluates existing policies, interview with key informants and rapid appraisal fieldwork in clinical settings about cardiovascular diseases and diabetes mellitus	Primary care services, training of staff, integration of patient data	Document review shows that prevention and control of CVD –DM were strongly addressed in Turkey. Coordination among the MoH, organizational structure at provincial level and civil society organizations are poor where mutual trust is a significant problem according to key informants. Clinical settings point to a complete lack of a referral structure and a lack of follow up, compounding the absence of functioning health information systema for patient records.

TITLE	AUTHOR	YEAR OF PUBLISH	METHOD/TYPE	VARIABLE	RESULT
Noncommunicable chronic disease in Bangladesh: overview of existing programs and priorities going forward	Sara N. Bleich, Tracey L.P.Koehlmoos, Mashida Rashid, David H.Peters, Gerard Anderson	2011	Qualitative studies by interview country experts	NCD programs	Bangladesh has a total of 11 NCD programs at varying levels of development, Roughly half of the programs involved diabetes, three addressed the reduction of primary risk factors and about half provided infrastructure for NCD services or health professional training. The program were roughly divided between the government and non government organizations
Tackling cardiovascular health and disease in Nepal: epidemiology, strategies and implementation	Abhinav Vaidya	2011	Epidemiology: Situational analysis of CVDs in Nepal		Recent national and international attention on CVDs led to the formulation of a non communicable diseases policy draft, which is yet to be endorsed by the government
Research Priorities for Prevention and control of Noncommunicable diseases in India	Prasahant Mathur, Bela Shah	2011	Overview of NCDs in India		There has been considerable progress in research related to noncommunicable diseases in the country. As we take its sock, it is apparent that a strategic direction and thrust is required to maximize research outputs to address the growing burden of chronic noncommunicable diseases

TITLE	AUTHOR	YEAR OF PUBLISH	METHOD/TYPE	VARIABLE	RESULT
Stengthening the Health System to Better confront Noncommunicable Diseases in India	Antonio Duran, Anagha Khot	2011	Article review		The NCDs have caught the indian health system seriously unprepared, creeping in fast and massively, while much attention was being paid to CD and reproductive and child health
A community based approach to non communicable chronic disease management within a context of advancing universal health coverage in china: progress and challenges	Nanzi Xiao, Qian Long, et all	2014	Article		China needs to develop appropriate human resource policies to attract more qualified health professionals to work at primary health facilities, especially in rural areas China needs to adjust the service benefit packages offered by the health insurance schemes to be in favor of the use of community based health services. China needs to continue to increase its investment in public health intervention programs and financial support to health insurance schemes.
National action plan for non communicable diseases prevention and control in Iran; a response to emerging epidemic	Niloofer Peykari, Hassan Hashemi et all	2017	Review Article		The structured and stepwise approach of Iran towards NCDs prevention and control bring out a proposed way in the mixture of callenges and successes

[7]. Establishment of alternative, low cost and feasible strategies for screening and early diagnosis of NCDs for their optimal use in health system settings [8].

Reducing the risk factors for NCDs through health promotion and primary prevention, involvement of the community and creation of an enabling environment are crucial for bringing about a sustained behavior change.

## 5. Conclusions

The burden of NCDs is impact the development of a country, financial burden that appear will allocate more in tackling NCDs. Need a strong commitment from government in tackling NCDs, involve all stakeholders to contribute. Educate people to live in a healthy live by reduce the risk factor of NCDs. Strengthening the health care system by improve the capacity of health worker, allocate more public health intervention program. Give an intervention to population based intervention rather than those at high risk individuals. The burden of NCDs is contributing to poverty and has become a barrier to development and achievement of the SDGs.

## References

- [1] Khot A, Duran A. Strengthening the Health System to Better Confront Noncommunicable Diseases in India. *Indian J Community Med.* 2011;36(5):32.
- [2] Faiz MA, Rahmanb MR, Karim MN. Prioritizing Policy Approach and Actions to Address Epidemic of Non Communicable Diseases (NCDs). *J Bangladesh Coll Physicians Surg.* 2012;30.
- [3] Bleich SN, Koehlmoos TLP, Rashid M, Peters DH, Anderson G. Noncommunicable chronic disease in Bangladesh: Overview of existing programs and priorities going forward. *Health Policy (New York)* [Internet]. 2011;100(2–3):282–9. Tersedia pada: <http://dx.doi.org/10.1016/j.healthpol.2010.09.004>
- [4] Xiao N, Long Q, Tang X, Tang S. A community-based approach to non-communicable chronic disease management within a context of advancing universal health coverage in China: progress and challenges. *BMC Public Health.* 2014;14(Suppl 2):S2.
- [5] Tetra Dewi FS, Stenlund H, Marlinawati VU, Öhman A, Weinehall L. A community intervention for behaviour modification: an experience to control cardiovascular diseases in Yogyakarta, Indonesia. *BMC Public Health.* 2013;13(1):1043.
- [6] Peykari N, Hashemi H, Dinarvand R, Haji-Aghajani M, Malekzadeh R, Sadrolsadat A, et al. National action plan for non-communicable diseases prevention and control in Iran; a response to emerging epidemic. *J Diabetes Metab Disord.* 2017;16(1):3.
- [7] Vaidya A. Tackling cardiovascular health and disease in Nepal: epidemiology, strategies and implementation. *Heart Asia.* 2011;87–92.
- [8] Shah B, Mathur P. Research Priorities for Prevention and Control of Noncommunicable Diseases in India. *Indian J Community Med.* 2011;36(5):72.