PANDU PTM

2017
A COMMUNITY INTERVENTION MODEL ON PREVENTION AND CONTROL OF NCDs
IN INDONESIA
INDONESIA’S BACKGROUND

- **17,504 Islands**
  - 1,904,569 square kilometres wide

- **70.1**
  - Life Years Expectancy

- **9,767 Public Health Care (PHC)**
  - PHC Ratio per 30,000 people is 1.13

- **34 Provinces**
  - 416 District and 98 City with Decentralization government system

- **341,536 Health Workers**
  - including
  - **289,465 Medical professional**

- **The world’s fourth most populous country**
  - More than 258 million people

Source: Indonesia Health Profile, MOH 2016
Central Agency on Statistic (BPS) 2015
Indonesia is the largest archipelago in the world which consists of 17,504 islands and total land mass 1,904,569 square kilometer. Divided into 34 provinces, 416 district and 98 city with decentralization government system. The country is ranked fourth globally in terms of population, with a population of more than 258 million people.

The population density is 135.2 people per square kilometer with population growth rate approximately 1.38% and life expectancy 70.1 years.

The Indonesian health system has a mixture of public and private providers and financing. The public system is administered in line with the decentralized government system in Indonesia, with central, provincial and district government responsibilities. The central Ministry of Health is responsible for management of some tertiary and specialist hospitals, provision of strategic direction, setting of standards, regulation, and ensuring availability of financial and human resources.

Provincial governments are responsible for management of provincial-level hospitals, provide technical oversight and monitoring of district health services, and coordinate cross-district health issues within the province. District/municipal governments are responsible for management of district/city hospitals and the district public health network of community health centres (puskesmas) and associated subdistrict facilities. There are 9,767 primary health center (PHC) with PHC ratio per 30,000 people is 1.13 but only 1,618 PHC have health promoters.

Total health workers in Indonesia is 341,536 and 289,465 medical professionals. Indonesia has recently introduced a National health insurance (JKN) in Januari 2014 as a part of national social security system which have covered 171 million people (66.46%).
Sample Registration Survey, 2014:
From 41,590 death in Indonesia:
- 8,775 people die because of stroke,
- 5,365 people die because of CVD
- 2,786 people die because of DM and its complication
- 2,204 people die because of hypertension and its complication

Source: SRS 2014
(National Institute of Health, Research and Development MOH)
Indonesia has also emerged as a middle-income economy, economically strong and politically stable. The political and social landscapes have also been evolving through transition from authoritarianism to democracy and decentralization reforms. These macro-transitions have concurrently influenced an epidemiologic transition in which noncommunicable diseases (NCDs) are increasingly important, while infectious diseases remain a significant part of the disease burden.

Based on Sample registration survey (SRS) 2014, the third highest cause of death in Indonesia is NCDs: stroke as the highest cause of death followed by cardiovascular and diabetes with complication.

The increasing burden of noncommunicable diseases highlights the need to develop capacity to deliver care for chronic conditions, which require continuous long-term interactions between health providers and patients. According to the National health research (NHS) 2013, the highest prevalence of NCDs is hypertension 25.8 percent, followed by Injury 8.2 percent and Diabetes melitus 6.9 percent.
In other hand NCDs behavioural risk factor also contributes for increasing morbidity. NHS 2013 reported that Indonesian behavioural risk factor of NCDs consists of unhealthy diet, smoking, physical inactivity and mental emotional disorder. The highest prevalence of NCDs risk factor is eating less vegetable and fruit 93.6%.
Indonesia faces the challenge of increasing health expenditures, as nominal health spending has been steadily increasing for example the most spending health expenditure on catastrophic disease are heart disease, renal failure, cancer and stroke. According to social insurance administration (BPJS), there has been increase of heath expenditure since 2014 from 4.4 trillion to 7.4 trillion in 2016 and those spending mostly alocated for by pass surgery, stenting and medication.

Source: Social Insurance Administration Organization (BPJS)
NATIONAL MID-TERM DEVELOPMENT PLAN
INDICATOR OF NCDS PROGRAM 2015-2019
PRESIDENTIAL DECREE NO. 2, 2015

<table>
<thead>
<tr>
<th>No</th>
<th>Indicator</th>
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<tbody>
<tr>
<td>01</td>
<td>Hypertension prevalence</td>
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<tr>
<td>02</td>
<td>Halt Obesity prevalence</td>
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<tr>
<td>03</td>
<td>Smoking prevalence ≤ 18 years old</td>
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Addressing NCDs issues, the government needs to develop a comprehensive strategy which takes consideration the growing inter-regional disparities in terms of resources, services and health outcomes. With a large, widespread area and population, and with the commencement of a universal health coverage system, the need for a reliable and integrated health system to support planning and decision-making is becoming even more urgent.

The government is committed to preventing and controlling NCDs by setting up indicator of achievement in National mid-term development plan, National action plan 2015-2019 and MOH strategic plan 2015-2016. The president of Indonesia officially instructed community empowerment to promote and prevent NCDs risk factor by GERMAS (Gerakan Masyarakat Hidup Sehat) or community movement for healthy life such as: 1. Stop smoking, 2. Physical activity and 3. Eat more vegetable and fruit.
NCDs PREVENTION AND CONTROL STRATEGY THROUGH THE HEALTHY INDONESIAN PROGRAM:

MOH has made Healthy Indonesia Program which include blood pressure measurement for all citizens above 15 years old and suggesting all family member to stop smoking and not to smoke. This programme has to be implemented all over Indonesia in 2019.

01 Advocacy and partnership inter program and inter sector

02 Strengthening of health services capacity for risk factor early detection, diagnosis and integrated prompt treatment of NCDs cases

03 Community empowerment with health promotion, prevention and reducing NCDs risk factors

04 Strengthening surveillance, monitoring and NCDs researches.
SCOPE OF NCDs
INTEGRATED HEALTH SERVICES (PANDU PTM)

CBI
NCDs risk factor Early detection, monitoring, counseling and doing healthy activity
Reffering NCDs cases to PHC

PHC
NCDs risk factor Early detection, monitoring, counseling and doing healthy activity
Physical and laboratory examination, diagnosis and prompt treatment based on Pandu PTM are being done by the medical profesional.
Reffer NCDs cases with complication or target organ damage to the hospital

Hospital
Limited rehabilitation and paliative care for NCDs cases

REVERSE REFFERAL
The Ministry of Health also organizes and directs health promotion activities, which are delivered through the network of facilities at district and community levels. Preventive efforts also focus on NCDs, including health promotion to raise public awareness, and community-based health awareness groups, early screening and early detection in form of community based health services (UKBM).

For example, the Posbindu is a community engagement programme that addresses almost all NCD risk factors, and is integrated into other settings within the community to detect and monitor NCDs risk factor. If the health cadres detect NCDs risk factor in community they are able to refer the person to the PHC.

In PHC, health workers do early detection risk factor of NCD, monitor, Communicate, Inform, Educate and do physical activity together with community. The medical professional do physical and laboratory examination, diagnosed and case management of NCDs by Pandu PTM. They also do case referral if target organ damage occurs and provide limited case rehabilitation and palliative treatment.

The National Health Insurance covered for promotive, preventive, curative and rehabilitative NCDs cases including the referral expenditure from hospital to the primary health care.
INTEGRATED HEALTH SERVICES (PANDU PTM)

- Adapted from WHO-PEN and adjusted to Indonesian Health program
- Strengthening Health system and primary health care services
- It’s a prioritized set of cost effective intervention for an acceptable quality care that affordable for the local government.
- It is a minimum essential intervention in National Health Insurance.
- Focused on Hypertension and Diabetes management with additional core set of cancer, sight disorders, hearing disorders and community based rehabilitation.
- Involving the development of community based intervention (Posbindu PTM) as a part of referral mechanism to the primary health care.
### Difference Between Core Set of WHO-PEN and PANDU PTM

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<thead>
<tr>
<th>CORE SET WHO-PEN</th>
<th>PANDU PTM</th>
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<tbody>
<tr>
<td>Primary prevention of heart attacks and strokes</td>
<td>✓</td>
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<tr>
<td>Acute myocardial infarction</td>
<td>✓</td>
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<tr>
<td>Secondary prevention (post myocardial infarction)</td>
<td>✓</td>
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<tr>
<td>Secondary prevention (post stroke)</td>
<td>✓</td>
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<tr>
<td>Secondary prevention (Rheumatic heart disease)</td>
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<td>Type 1 Diabetes</td>
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<tr>
<td>Type 2 Diabetes</td>
<td>✓</td>
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<td>Prevention of foot complication through examination and monitoring</td>
<td>✓</td>
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<tr>
<td>Prevention of onset and delay in progression of chronic kidney</td>
<td>✓</td>
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<tr>
<td>Prevention of onset and delay of progression of diabetic retinopathy</td>
<td>✓</td>
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<tr>
<td>Prevention of onset and progression of neuropathy</td>
<td>–</td>
</tr>
<tr>
<td>Bronchial asthma</td>
<td>–</td>
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<tr>
<td>Prevent exacerbation of COPD and disease progression</td>
<td>✓</td>
</tr>
<tr>
<td>Cancer</td>
<td>✓ Focus on Breast and cervixs cancer</td>
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**Additional Package of PANDU PTM**

- Sight disorders
- Hearing disorders
- Community based rehabilitation

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**Difference between Core Set in WHO-PEN and PANDU PTM**

We adopted eleven core set of WHO-PEN, except secondary prevention of rheumatic heart disease, Type 1 Diabetes and Neuropathic management. Additional core set in PANDU PTM are management of sight disorders, hearing disorder and community based rehabilitation.
WHO-PEN was first introduced by Prof. Shanty Mendez in 2011, some participants were invited such as inter programme in MOH, representative of Province and District Health Offices, PHCs and health professional. We adapted WHO-PEN as PANDU PTM (Pelayanan Terpadu Penyakit Tidak Menular) as an Integrated health services for NCDs.
In 2012 we developed a guidelines Pandu PTM and piloted it in five provinces and we continued doing that in another 26 provinces in 2013 in the same year MOH set up the PANDU PTM as one of 2014 to 2015 strategic plan indicators.

In 2014 and 2015 MOH did assessment on readiness for implementing Pandu PTM in four districts. In 2016 and 2017 we had national training three times on WHO-PEN which Prof. Shanty Mendez attended as a technical consultant and other participants from cross programme in MOH, representative of Province and District Health Offices, PHCs, health professionals, University and State schools.

We also executed Training for Trainer in 34 Provinces for province program manager of NCDs and MOH master of training. Beside that we conducted some training for primary health workers on PANDU PTM in 321 primary health care of 22 provinces.

In 2018 we are planning to have another training PANDU PTM for untrained primary health workers and evaluation of implementing PANDU PTM will follow. We are targeting that 50% PHC will have conducted PANDU PTM in 2019.
OBSTACLES & CHALLENGES

OBSTACLES

- Limited budgeting
- NCDs program is not priority yet in province and district
- Frequent rotation among the trained health worker.

CHALLENGES

- Making PANDU PTM as a minimum standard as achievement of health services in provinces and district
- Recent advances in IT in operation of district offices
- Developing PANDU PTM as a curriculum of medical and nursing faculty.
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