NCDs in Indonesia

6th INDONESIAN HEALTH ECONOMICS CONGRESS
INDONESIA’S BACKGROUND

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

34 Provinces
416 District and 98 City with Decentralization government system

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

Population density reaches 135.2 person/square kilometres

Population growth rate is approximately 1.38%

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

341,536 Health Workers
including 289,465 Medical professional

1,618 PHC
with health promoters workers

Source: Indonesia Health Profile, MOH 2016
Central Agency on Statistic (BPS) 2015
1

NCD SITUATION IN INDONESIA
TRANSITION – DETERMINANT OF HEALTH

Communicable Disease

Non Communicable Disease

DEMOGRAPHY
TECNOLOGY
ECONOMY
CULTURE
BEHAVIOUR
EPIDEMIOLOGY TRANSITION BASED ON DALYs LOST ACCORDING TO 3 DISEASE GROUP 1997 – 2017, (Indonesian BOD Study)
NCDs AS THE MAIN CAUSE OF DEATH

HIGHEST CAUSE OF DEATH IN INDONESIA (2014)

MEN AND WOMEN

- Stroke
- Cardiovascular Disease
- Diabetes Mellitus
- Tuberculosis
- Hypertension
- Low respiratory infection
- Liver
- Traffic Accident
- Pneumonia
- Diarrhea & Digestion infection

Source: SRS Indonesia (NIHS MoH)
Top 10 Rank DALY Lost on 1990 & 2017 in Indonesia

1990

01 Neonatal Disorders
02 Lower Respiratory Infect
03 Diarrheal disease
04 Tuberculosis
05 Stroke
06 Road Injuries
07 Congenital defect
08 Ischemic Heart Disease
09 Cirrhosis
10 Measles

2017

01 Stroke
02 Ischemic Heart Disease
03 Diabetes
04 Neonatal disorders
05 Tuberculosis
06 Cirrhosis
07 Diarrheal disease
08 Low Back Pain
09 COPD
10 Road injuries
DALYS LOST PERCENTAGE OF THREE DISEASE GROUP ACCORDING TO AGE GROUP IN INDONESIA (2017)

INDONESIA

Communicable Disease/ Nutrition/ Maternal & Child Health
NCD
Injury
<table>
<thead>
<tr>
<th>Penyakit</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in million)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cirrhosis hepatitis</td>
<td>271.691</td>
<td>319.755</td>
<td>334.220</td>
</tr>
<tr>
<td>Renal failure</td>
<td>3,486.753</td>
<td>2,339.685</td>
<td>2,395.347</td>
</tr>
<tr>
<td>Haemophilia</td>
<td>128.462</td>
<td>258.346</td>
<td>358.121</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>7,576.484</td>
<td>9,276.267</td>
<td>10,545.485</td>
</tr>
<tr>
<td>Cancer</td>
<td>2,615.200</td>
<td>3,180.153</td>
<td>3,406.306</td>
</tr>
<tr>
<td>Leukemia</td>
<td>211.917</td>
<td>326.468</td>
<td>333.326</td>
</tr>
<tr>
<td>Stroke</td>
<td>1,430.393</td>
<td>2,187.832</td>
<td>2,565.601</td>
</tr>
<tr>
<td>Thalassemia</td>
<td>496.391</td>
<td>532.866</td>
<td>490.997</td>
</tr>
<tr>
<td>% expenditure from services fee</td>
<td>24.12 %</td>
<td>21.81 %</td>
<td>21.64 %</td>
</tr>
</tbody>
</table>

Source: BPJS (2018)
80% of NCDs are associated with unhealthy lifestyle

NCD IS PREVENTABLE → RISK FACTORS FOR NCD’S SHOULD BE CONTROLLED

Source: Riskesdas (NHS) tahun 2013 & 2018
Prevalence of Smoker > 15 years old

- 2013: 28.8%
- 2018: 29.3%

Prevalence of Teenage Smoker (10 – 18 years old)

- 2013: 7.2%
- 2016: 8.8%
- 2018: 9.1%
NCD PREVENTION AND CONTROL POLICY
9 global targets for NCDs, by 2025

- A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases
- An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities
- A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances
- A 30% relative reduction in mean population intake of salt/sodium
- A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years
- A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances
- A 10% relative reduction in prevalence of insufficient physical activity
- A 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context
- Halt the rise in diabetes and obesity
- At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes
### Approaches for prevention and control NCDs in Indonesia

<table>
<thead>
<tr>
<th>Multisectoral actions &amp; Multistakeholder involvement to address NCD &amp; their underlying Social determinants and risk factor</th>
<th>Life-course approach as key to prevention &amp; control NCDs</th>
<th>Empowerment of people and communities to promote health status and active partner in managing disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health system strengthening particularly at primary care</td>
<td>Universal Health Coverage</td>
<td>Evidence Based Strategies to develop policies</td>
</tr>
</tbody>
</table>
For better prevention and control of NCDs, a public health approach is required that focuses on population and risk factors rather than on individual symptoms or diseases.

An effective prevention requires a multi-sector approach.

Promotion and preventive programs are low-cost solutions to reduce the common modifiable risk factors towards improving prevention and control of NCDs risk factors.
NCDs
PREVENTION AND CONTROL POLICY

Global Target (SDGs)

Healthy Indonesian Program with Family Approach (PIS-PK)

Minimum Standard for Health Services (SPM)

Community Empowerment (GERMAS)

National Action Plan for NCDs (RAN PTM)

National mid-term development plan (RPJMN)

MOH Strategic Plan for NCDs (RENSTRA KEMENKES)

MENTERI KESEHATAN
REPUBLIK INDONESIA
STRATEGY NCDs

- ADVOCACY
- HEALTH PROMOTION:
  Encourage healthy behavior change, such as physical activity, healthy diet, no smoking and alcohol.
- EARLY DETECTION:
  Screening by competent health workers or on their own
- SPESIFIC PROTECTION:
  Immunization for Ca Cervix and hazard protection
- TREATMENT:
  Standards treatment at facility health care
NCDs Focus Strategy

Community Based Health

1. Obesity Measurement
2. Blood pressure measurement
3. Blood sugar examination

WORK PLACE: COMMUNITY:

HEALTH CARE FACILITIES PRIMARY & SECONDARY

ADVOCACY TO LOCAL GOVERNMENT TO IMPLEMENTATION NO-SMOKING AREA IN 7 AREAS (school, health care facilities, work place, worship place, public transportation, public facilities, place for children’s activities)

IMMUNIZATION

1. PANDU PTM + Referral
2. Stop Smoking Counseling & Quitline.INA
1. Increased physical activity
2. Increased healthy lifestyle, including non-smoking lifestyle
3. Provision of healthy food and accelerated nutrition improvement
4. Increased prevention and early detection of diseases
5. Improved quality of environment, including the implementation of Free Smoke Zone, and
6. Improved education of healthy life.
Financing Strategies For Prevent and Controlling NCDs

Universal Health Coverage Through National Health Insurance (JKN)
During JKN, all people, particularly the poor and vulnerable, will have access to promotive, preventive, curative, rehabilitative and palliative basic health services, without exposing the users to financial hardship.

Mobilize and allocate significant resources to attain global NCD-related targets.

Raising new revenue through enhancing the tax base, introducing excise taxes on unhealthy products, and improving tax compliance.

Public Private Partnership
Working in innovative partnerships with private sector will expand access for preventing and controlling NCD and emerging financing gaps for NCDs.
CLOSING

- Health is the basic thing that must be achieved to live productively.
- Commitment and revolutionary behavior change are needed to implement clean and healthy lifestyle behavior.
- Support and multy sector role are very influential in realizing health, it's important to mainstreaming health in all policy in every sector to achieve “INDONESIA MAJU” and “INDONESIA EMAS 2045”
THANK YOU

Check health status routine and regularly
Encourage to avoid smoking and other
Raise physical activity
Daily consumption with healthy diet
Implement adequate rest
Keep balance between body and mind
Prevalance smoker in Teenager 10-18 y.o

- Prevalence of smoker showed an increasing trend in 2018 compare to previous report in 2013.
- Total Spending Health Services for diseases related Tobbaco in 2013 is 5,3 Trillion IDR and wil had snowball effect if total smoker prevalence increase. It is will become burden of JKN Spending.

Total Spending Services For Diseases Related Tobbaco, 2013

<table>
<thead>
<tr>
<th>Disease</th>
<th>Total Kasus</th>
<th>Biaya per episode</th>
<th>Total Biaya (Rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birth Weight babies</td>
<td>21,650</td>
<td>6,118,382</td>
<td>129,634,780</td>
</tr>
<tr>
<td>Tumor Mulut dan Tenggorokan</td>
<td>5,670</td>
<td>3,733,141</td>
<td>20,208,840</td>
</tr>
<tr>
<td>Neoplasm of Esophagus</td>
<td>1,710</td>
<td>3,733,141</td>
<td>6,288,671</td>
</tr>
<tr>
<td>Neoplasm of Stomach</td>
<td>10,440</td>
<td>3,733,141</td>
<td>38,973,992</td>
</tr>
<tr>
<td>Neoplasm of Liver</td>
<td>13,400</td>
<td>3,733,141</td>
<td>50,002,069</td>
</tr>
<tr>
<td>Neoplasm of Pancreas</td>
<td>2,710</td>
<td>3,733,141</td>
<td>10,863,440</td>
</tr>
<tr>
<td>Neoplasm of Lung, Bronchus and Trachea</td>
<td>54,300</td>
<td>3,733,141</td>
<td>202,709,586</td>
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<tr>
<td>Neoplasm of Cervix</td>
<td>28,940</td>
<td>3,733,141</td>
<td>108,607,110</td>
</tr>
<tr>
<td>Neoplasm of Ovary</td>
<td>7,690</td>
<td>3,733,141</td>
<td>28,707,264</td>
</tr>
<tr>
<td>Neoplasm of Gall Bladder</td>
<td>10,160</td>
<td>3,733,141</td>
<td>37,928,712</td>
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<tr>
<td>Coronary Heart Disease</td>
<td>83,950</td>
<td>6,017,579</td>
<td>1,106,936,857</td>
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<tr>
<td>Cerebrovascular Disease/Stroke</td>
<td>144,260</td>
<td>7,286,946</td>
<td>1,118,707,241</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary Disease</td>
<td>204,310</td>
<td>4,551,951</td>
<td>1,294,165,186</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>5,533,829,437,590</strong></td>
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</tbody>
</table>
Many countries have allocated the tobacco excise tax to assure the sustainability of their health insurance programs.

In Indonesia, the cigarette local tax fund is allocated for public health services, law enforcement, and other programs.
The Way Forward: Sugar-Sweetened Beverages Taxes To Support Financing in NCD

- To reduce over-consumption of sugars need comprehensive action plans that combine taxation, education

- Encourage producers, distributors and retailers to reformulate their products and marketing plans with less sugar

- Revenue from Sugar Sweetened Beverages taxes is expected to be next a new resource financing to enhancing prevent and controlling NCDs

### Consumption Sugar-Sweetened Beverages in Indonesia

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<tbody>
<tr>
<td>Air teh kemasan</td>
<td>19,04</td>
<td>29,27</td>
<td>49,24</td>
<td>109,50</td>
<td>234,44</td>
<td>248,43</td>
<td>357,36</td>
<td>405,44</td>
<td></td>
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<tr>
<td>Sari buah kemasan</td>
<td>3,72</td>
<td>2,55</td>
<td>7,59</td>
<td>43,07</td>
<td>87,00</td>
<td>213,93</td>
<td>280,17</td>
<td>265,81</td>
<td>268,14</td>
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<tr>
<td>Minuman ringan mengandung CO2</td>
<td>24,02</td>
<td>34,73</td>
<td>54,04</td>
<td>72,65</td>
<td>48,67</td>
<td>74,57</td>
<td>68,76</td>
<td>64,52</td>
<td>66,64</td>
</tr>
<tr>
<td>Minuman kesehatan/berenergi</td>
<td>4,43</td>
<td>2,61</td>
<td>9,45</td>
<td>28,03</td>
<td>35,27</td>
<td>42,25</td>
<td>37,73</td>
<td>40,72</td>
<td>40,30</td>
</tr>
<tr>
<td>Total</td>
<td>51,21</td>
<td>69,17</td>
<td>120,33</td>
<td>253,24</td>
<td>289,01</td>
<td>565,19</td>
<td>635,09</td>
<td>728,42</td>
<td>780,53</td>
</tr>
</tbody>
</table>