Nutrition program priorities in dealing with maternal and child undernutrition in Indonesia

Direktur Bina Gizi Masyarakat
Overview

- Nutrition problems (trends, causal)
- Evidences of cost effective intervention
- Policy directions and nutrition program priorities
Nutritional Status of Children Under-5
(RISKESDAS 2010)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gizi Kurang</td>
<td>17.9</td>
</tr>
<tr>
<td>Penek</td>
<td>35.6</td>
</tr>
<tr>
<td>Kurus</td>
<td>13.3</td>
</tr>
<tr>
<td>Gemuk</td>
<td>14.2</td>
</tr>
</tbody>
</table>
Critical period of Child’s growth

Victora, dkk. Worldwide Timing of Growth Faltering: Revisiting implication for intervention. PEDIATRIC VOL 125 No 3 MARCH 2010
Critical period of Child’s growth

(lanjutan, data Indonesia)

Abas, 2009
Prevalence of stunting by age groups, 2010

<table>
<thead>
<tr>
<th>Age group (months)</th>
<th>0-11</th>
<th>12-23</th>
<th>24-35</th>
<th>36-47</th>
<th>48-59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence</td>
<td>27.0</td>
<td>40.5</td>
<td>43.6</td>
<td>41.0</td>
<td>41.7</td>
</tr>
</tbody>
</table>
Intergenerational cycle of Growth Failure

- Child growth failure
  - Low birth weight baby
  - Early pregnancy
  - Low weight and height in teens
  - Small adult women

Conceptual model of pathways to undernutrition, death and disability

Poverty
Social and political contexts
Increased exposure to infections
Food insecurity
Poor access to or uptake services

Intrauterine growth restriction
Micronutrient deficiencies
Reduced energy intake
Breastfeeding

Infection

Disability

Cronic undernutrition (stunting)
Acute undernutrition

Death

Infection
Data Riskesdas 2007

- Terjadi disparitas prevalensi stunting menurut kabupaten

- Tingginya Prevalensi Stunting di Kabupaten berkaitan dengan:
  - Tinggi badan ibu (faktor ibu)
  - Proporsi Gakin
  - Cakupan Air Bersih dan pemenuhan sanitasi dasar
  - Tingkat pendidikan ibu/ayah
Effects of nutrition related interventions on mortality and stunting in 36 countries

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Proportional reduction in death before (%)</th>
<th>Relative reduction in prevalensi of stunting at (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 months</td>
<td>24 months</td>
</tr>
<tr>
<td>99 % coverage with balanced energy protein supplementation</td>
<td>3-6</td>
<td>3-1</td>
</tr>
<tr>
<td>99 % coverage with intermittent preventive treatment</td>
<td>2-4</td>
<td>2-1</td>
</tr>
<tr>
<td>99 % coverage with multiple micronutrient in pregnancy</td>
<td>2-0</td>
<td>1-7</td>
</tr>
<tr>
<td>99 % coverage with breastfeeding promotion and support</td>
<td>11-6</td>
<td>9-9</td>
</tr>
<tr>
<td>99 % coverage with feeding intervention (promotion of compl. feeding and others supportive strategies)</td>
<td>0</td>
<td>1-1</td>
</tr>
<tr>
<td>99 % coverage with vitamin A (including neonatal)</td>
<td>6-9</td>
<td>7-1</td>
</tr>
<tr>
<td>99 % coverage with zinc supplementation</td>
<td>1-3</td>
<td>2-8</td>
</tr>
<tr>
<td>99 % coverage with hygiene intervention</td>
<td>0</td>
<td>0-1</td>
</tr>
</tbody>
</table>
Effect of combination of nutrition related intervention on mortality and stunting in 36 countries

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Proportional reduction in death before (%)</th>
<th>Relative reduction in prevalensi of stunting at (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 months</td>
<td>24 months</td>
</tr>
<tr>
<td>General nutrition interventions</td>
<td>14-8</td>
<td>13-9</td>
</tr>
<tr>
<td>Micronutrient interventions</td>
<td>10-0</td>
<td>11-3</td>
</tr>
<tr>
<td>Disease control interventions</td>
<td>3-0</td>
<td>2-7</td>
</tr>
</tbody>
</table>
**Effect of nutrition related intervention on mortality and stunting in 36 countries, by coverage**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Proportional reduction in death before (%)</th>
<th>Relative reduction in prevalence of stunting at (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 months</td>
<td>24 months</td>
</tr>
<tr>
<td>99 % coverage with all intervention</td>
<td>24-0</td>
<td>24-4</td>
</tr>
<tr>
<td>90 % coverage with all intervention</td>
<td>22-0</td>
<td>22-2</td>
</tr>
<tr>
<td>70 % coverage with all intervention</td>
<td>17-3</td>
<td>17-3</td>
</tr>
</tbody>
</table>
Arah kebijakan perbaikan gizi masyarakat
Medium-term National Development Plan 2010-2014

- Increase Life Expectancy
- Reduce Infant Mortality Rate
- Reduce Maternal Mortality Rate
- Reducing the prevalence of underweight from 18.5% to 15%.
- Reducing the prevalence of stunting among under-5 children from 37 to 32%
Misi Kementerian Kesehatan

- Meningkatkan derajat kesehatan masyarakat, melalui pemberdayaan masyarakat,
- Menjamin tersedianya upaya kesehatan yang paripurna
- Menjamin ketersediaan dan pemerataan sumberdaya kesehatan
- Menciptakan tata kelola kepemerintahan yang baik
Nutrition program priorities in dealing with maternal and child undernutrition

1. Behavior changed intervention;
   - Breastfeeding promotion and support
   - Complementary feeding promotion (provision of food is outlined in intervention)
   - Handwashing with soap and promotion of hygiene
Pola pemberian makan Bayi dan Anak

a. Inisiasi Menyusu Dini (IMD),
b. Hanya air susu ibu saja sejak lahir sampai bayi berumur 6 bulan
c. Memberikan makanan pendamping ASI mulai umur 6 bulan
d. Menyusui dilanjutkan sampai anak berumur 24 bulan atau lebih.
Strategi Peningkatan Pemberian ASI

- Menyusun kebijakan dan regulasi
- Meningkatkan kapasitas petugas dan fasilitas kesehatan
- Peningkatan komitmen dan kapasitas stakeholder dalam meningkatkan, melindungi dan mendukung pemberian ASI
- Pemberdayaan ibu, keluarga dan masyarakat.
2. Micronutrient intervention
   - Vit A supplementation
   - Multiple micronutrient powders (Taburia), as a home fortification of complementary food
   - Iron Folic Acid for pregnant women
   - Salts idozation
   - Therapeutic zinc supplement (as part of diarrhea treatment)
Nutrition program priorities in dealing with maternal and child undernutrition (lanjutan)

3. Complementary and therapeutic feeding intervention;

- Prevention or treatment of moderate malnutrition in 6-23 months of age;
- Prevention and treatment of pregnant mothers with energy, protein and micronutrient supplementation
- Treatment of severe acute malnutrition
  - In-patient,
  - out-patient
The 20 countries with the highest burden of undernutrition

Countries with stunting prevalence $\geq 20\%$ in children under the age of 5 years that together account for $>80\%$ of the world's undernourished children.
10 of 36 countries w/ 90% global burden of stunting are in Asia

1. Afghanistan  2. Bangladesh  
3. Cambodia  4. India  
5. Indonesia  6. Myanmar  
7. Nepal  8. Pakistan  

5 of 32 small countries with stunting prevalence >20% are in Asia

1. Bhutan  2. Maldives  
5. Timore-Leste  
( Laos PDR not listed)
Terima Kasih