Building the Foundations for Sustainable Development: A Case for Global Investment in the Capabilities of Adolescents

Purpose: Information
Submitted by: Victoria University
Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents

7th APEC High level Meeting on health and the Economy
23-24 August 2017

SESSION 5: Plenary Panel on Making the Best Investments in Adolescent Health and Well-being

Professor Bruce Rasmussen
Director, Victoria Institute of Strategic Economic Studies
Victoria University, Melbourne
APEC Life Sciences Innovation Forum, Executive Board Member
Outline

• Adolescence is a neglected cohort which is pivotal to outcomes for later life and next generation

• Our study for the UNFPA was to evaluate the net benefits from health, education and other social programs for adolescents (Sheehan, P., Sweeny, K., Rasmussen, B., et al. 2017, ‘Building the foundations for sustainable development: A case for global investment in the capabilities of adolescents’, The Lancet, online 19 April 2017, DOI: http://dx.doi.org/10.1016/S0140-6736(17)30872-3)

• Assessed almost 100 ‘best practice’ interventions, some 70 in health
Adolescent burden of disease, 2013*

*DAYLs per 100,000 persons aged 10-19

- Unintentional injuries
- Transport injuries
- Self-harm and interpersonal violence
- Nutritional deficiencies
- Neurological disorders
- Mental and substance use disorders
- Neglected tropical diseases and malaria
- Maternal disorders
- HIV/AIDS and tuberculosis
- Common infectious diseases

75 Developing countries vs OECD
Model components

- Health (One Health Tool)
- Employment
- Education
- Intimate partner violence
- HPV
- Road accidents

Model components:

- Child marriage
- Health (One Health Tool)
- Employment
- Education
- Intimate partner violence
- HPV
- Road accidents
Intervention modelling: Estimating economic and social returns

Interventions model

Interventions
For example:
- HIV / AIDS treatment
- School retention
- Social norms programs

Costs

Outcomes

Benefit-cost ratio

Benefits model

Global evidence and database

- Lives saved
- Reduced morbidity
- Improved lifetime productivity
- Demographic dividend
## Interventions

<table>
<thead>
<tr>
<th>Health</th>
<th>Nutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal/newborn and reproductive health</td>
<td>Women of reproductive age and adolescent girls</td>
</tr>
<tr>
<td>Family planning</td>
<td>Pregnant and lactating women</td>
</tr>
<tr>
<td>Safe abortion and management</td>
<td>Mental, neurological, and substance use disorders</td>
</tr>
<tr>
<td>Pregnancy care</td>
<td>Depression and anxiety disorders</td>
</tr>
<tr>
<td>Childbirth care</td>
<td>Epilepsy</td>
</tr>
<tr>
<td>Postpartum care</td>
<td></td>
</tr>
<tr>
<td>Malaria</td>
<td>Alcohol use/dependence</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Cervical cancer</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td></td>
</tr>
<tr>
<td>Care and treatment</td>
<td></td>
</tr>
</tbody>
</table>

### Education

<table>
<thead>
<tr>
<th>Supply expansion of schools</th>
<th>Learning quality enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target interventions to reduce drop-out</td>
<td></td>
</tr>
</tbody>
</table>

### Child marriage

<table>
<thead>
<tr>
<th>Reducing child marriage via increased school retention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs to reduce child marriage within schooling groups</td>
<td></td>
</tr>
</tbody>
</table>

### Interpersonal violence against women

| Group training (social norms/life skills) programs | |

### Road safety

| Behavioural measures: helmet usage, speed compliance, alcohol testing, seat belt use, graduated licensing | |

---

[Victoria University and VISES logo]
### Evaluation of intervention programs

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Cost per capita per annum* (US$)</th>
<th>Cost % GDP</th>
<th>Benefit-cost ratio to 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health services (40 countries)</td>
<td>4.5</td>
<td>0.11</td>
<td>10.2</td>
</tr>
<tr>
<td>Education* (72 countries)</td>
<td>22.6</td>
<td>0.57</td>
<td>11.8</td>
</tr>
<tr>
<td>School attendance interventions</td>
<td>7.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School quality interventions</td>
<td>8.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental schooling costs</td>
<td>5.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads accidents (75 countries)</td>
<td>0.6</td>
<td></td>
<td>5.9</td>
</tr>
<tr>
<td>Child marriage (31 countries)</td>
<td>3.8</td>
<td></td>
<td>5.7</td>
</tr>
<tr>
<td>Overall cost*</td>
<td>31.5</td>
<td>0.8</td>
<td></td>
</tr>
</tbody>
</table>

* Approximate, due to different country coverage in model components
Outcomes

- Benefit cost ratios of 10-12 times for health and education and 5-6 times for other social programs
- Economic value came from better employment opportunities
- For girls, finishing secondary education delivered big benefits
- For all adolescents, living healthier and better educated lives provided sizeable social, as well as economic, gains
Policy Implications

• Public social expenditure and tax concessions are increasingly shifting resources to the elderly as concern for the ageing population grows

• These results are a reminder of the high value of investing in comprehensive social programs for adolescents
  – Returns are high because it is an investment in a lifetime of valuable employment and community contribution
  – Still 1.2 billion adolescents (10-24) in the world and they are more than quarter of the population for Indonesia, Mexico, Thailand, Papua New Guinea in the APEC region

• Key components of this program are health and education
  – However gender related issues and road accidents are also important to address
Thank you
Issues for adolescents in developing countries

% women married at 17 (a)  | Violence against girls 15-19 (b)  | % not finishing high school (c)  | % informal jobs (d)  | % NEET (e)

Notes:
(a) Women 20–24 married by 17
(b) Burden in DALYs per 100,000
(c) Share of persons 20–24 not completed secondary school
(d) Share of informal employment, persons 20–24
(e) Persons 20–24 not in education, employment or training

Sources: (a) ABS 2011, (b) IHME 2015, (c) ILO 2016 and OECD 2014 (d) ILO 2016 and Hazans 2011 (e) ILO 2016 and OECD 2013.