Population Dynamics: Socio-Economic Change and Health Impacts

Africa's Stalled Fertility Transition: Causes, Cures, and Consequences?

Jeffrey Jordan
President and CEO, PRB
1. Global and Regional Population Change
2. Demographic Dividend (lost)
3. Disease Burden and Noncommunicable diseases (NCDs)
Projected Population Change, by Country

Percent Population Change, 2005-2050

Decline in Average Number of Children per Woman in Developing Regions

<table>
<thead>
<tr>
<th>Region</th>
<th>1990-95</th>
<th>2005-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>6.1</td>
<td>5.1</td>
</tr>
<tr>
<td>South-Central Asia</td>
<td>4.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>3.0</td>
<td>2.3</td>
</tr>
</tbody>
</table>

## The Demographic Divide: Niger and the Netherlands

<table>
<thead>
<tr>
<th></th>
<th>Niger</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2013)</td>
<td>16.9 million</td>
<td>16.8 million</td>
</tr>
<tr>
<td>Projected Population (2050)</td>
<td>65.8 million</td>
<td>17.9 million</td>
</tr>
<tr>
<td>Lifetime Births per Woman</td>
<td>7.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Annual Births</td>
<td>845,000</td>
<td>176,000</td>
</tr>
<tr>
<td>Annual Deaths</td>
<td>195,000</td>
<td>141,000</td>
</tr>
<tr>
<td>% of Population Below Age 15</td>
<td>50%</td>
<td>17%</td>
</tr>
<tr>
<td>% of Population Ages 65+ (2013)</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>% of Population Ages 65+ (projected 2050)</td>
<td>3%</td>
<td>27%</td>
</tr>
<tr>
<td>Life Expectancy at Birth (all)</td>
<td>57 years</td>
<td>81 years</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1,000 live births)</td>
<td>51</td>
<td>3.7</td>
</tr>
<tr>
<td>Annual Number of Infant Deaths</td>
<td>43,000</td>
<td>650</td>
</tr>
</tbody>
</table>


LATIN AMERICA & CARIBBEAN


AFRICA

Accelerated economic growth can happen as the population age structure changes.
Global Burden of Disease

1. Demographic transition/longer lifespan
2. Cause of death transition to NCDs
3. Global shift to disability (vs. mortality)
4. Changing risk factors; now behavioral
5. Health systems facing enormous changes

However, countries which have not achieved transition still face higher infant, child, and maternal mortality and lower life expectancy.
Four Major NCDs

1. Cardiovascular Disease
2. Diabetes
3. Chronic Respiratory Diseases
4. Cancers (most)
Four Behavioral Risk Factors

1. Tobacco
2. Harmful use of alcohol
3. Insufficient physical activity
4. Unhealthy diet (Overweight/Obesity)
Why is it Important to Address NCD Risk Factors?

- Large young populations across Africa today
  - By 2050, population age 45+ will grow three-fold
Why is it Important to Address NCD Risk Factors Among the Young Now in Africa?

- Large young populations across Africa today
  - By 2050, population age 45+ to grow three-fold

- Rapidly growing NCD burden
  - Increasing prevalence due to urbanization, aging populations, globalization
  - By 2030, NCDs will be the leading causes of death even in sub-Saharan Africa
Tobacco Use: Cigarettes VS. Other Tobacco Products — Boys

% OF BOYS 13-15 USING TOBACCO IN LAST 30 DAYS

SOURCE: Global Youth Tobacco Survey 2006/2011
Tobacco Use: Cigarettes VS. Other Tobacco Products — Girls

% OF GIRLS 13-15 USING TOBACCO IN LAST 30 DAYS

- Other products only
- Cigarettes

Source: Global Youth Tobacco Survey 2005/2011
Overweight Status: Dual Burden with Undernutrition

% of girls 15-19 who are overweight/obese or underweight

Source: Demographic and Health Survey 2007/2012
Alcohol Use

% OF BOYS/GIRLS 13-15 WHO HAD 1+ ALCOHOLIC DRINK IN LAST 30 DAYS

SOURCE: Global School-based Student Health Survey 2003/2013
Why is it Important to Address NCD Risk Factors Among the Young Now in Africa?

- Productivity loss
- Lack of robust health systems to address needs
- NCD-related healthcare costs high and increasing
1. Global and Regional Population Change
2. Demographic Dividend (lost)
3. Disease Burden and Noncommunicable diseases (NCDs)