Chapter 9 – Comparing Global Health

HH330 – Unit 4 – AoS1
Developed and Developing Countries
• **Developed Countries** – also known as industrialised countries, are countries with well developed industry, mining or agricultural sectors and which, therefore, enjoy a healthy economy based on trade.

• **Developing Countries** – Countries that generally have a low Gross Domestic Product (GDP). Being less developed means these countries have less access to technology and have poor industry and limited trade arrangements.
Gross Domestic Product

- The total value of goods and services produced by a country in a year.
- Used as one indicator that a country is industrialised.
Characteristics of Developed Countries

- High standard of living
- High life expectancy
- High GDP per capita
- High literacy rates
- Safe water
- Adequate sanitation
- Accessible healthcare
- High participation in education
- Social security system
- Low under-5 mortality
- Adequate food supply
- Well-developed industry
- Adequate shelter
- Slow population growth
- Technically developed
- High rates of lifestyle caused by affluence
## Definitions of developed and developing countries

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Developing countries</th>
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<tbody>
<tr>
<td>• low child and adult mortality</td>
<td>• high mortality</td>
</tr>
<tr>
<td>• longer life expectancy</td>
<td>• low life expectancy</td>
</tr>
<tr>
<td>• well developed industry</td>
<td>• poor industry, limited trade</td>
</tr>
<tr>
<td>• high GDP</td>
<td>• low GDP, high rates of poverty</td>
</tr>
<tr>
<td>• established healthcare and education systems</td>
<td>• limited healthcare and education facilities</td>
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</tbody>
</table>
WHO stratum

WHO has divided the member states into five mortality strata...

A
Very low child mortality, low adult mortality
Australia, Japan, Germany, United States of America, United Kingdom

B
Low child mortality, low adult mortality
Mexico, Indonesia, Turkey, China

C
Low child mortality, high adult mortality
Estonia, Hungary, Latvia
WHO stratum

D
High child mortality, high adult mortality
Guatemala, Peru, Afghanistan

E
High child mortality, very high adult mortality
Botswana, Zimbabwe, Mozambique

Countries classified as strata level A are developed, while those in strata D and E are considered developing.

It is more difficult to label the countries in strata B and C as they have low mortality but still face a number of barriers to their health status and economic development.
WHO Regions

6 WHO Regions

[Map showing the 6 WHO regions: Americas, African, Eastern Mediterranean, Western Pacific, European, South-East Asian]
Influences of Colonisation, Trade and Debt.

- **Colonisation:**
  - Exploited raw materials and resources – mining (gold), planted cash crops, cheap labour...
  - Decreased self-sufficiency and led to food shortages, urbanisation and disease.

- **Trade**
  - Market controlled by wealthier nations
  - Poor weather, crop disease, trade restrictions, taxes and global market price fluctuations can limit profits.

- **Debt**
  - Some developing countries have borrowed large amounts from agencies such as the World Bank.
  - Leaders did not spend money wisely on infrastructure (eg weapons and building).
  - Now many pay more on “repayments” than essential services.
Comparing Australia to Developing Countries
Similarities and differences in health between developing countries & Australia

When comparing the health status between Australia and developing countries you will need to consider the following:

- Life expectancy
- Mortality
- Morbidity
- Burden of disease
- Human development index
- **Life expectancy** – how long a person can expect to live.
- **Infant Mortality** – The number of deaths that occur in the first year of life. Reported by actual number of deaths per 1000 births.
- **Under-5 Mortality rates (U5MR)** – The number of deaths of children under 5 years of age per 1000 live births.
- **Maternal Mortality** – The number of deaths of woman due to pregnancy or childbirth-related complications.
- **Morbidity** – Ill health of an individual and the levels of ill health in a population group.
- **Burden of disease** – A measure of the impact of diseases and injuries, measured in DALY.
- **Human development index** – A measurement of human development that combines indicators of life expectancy, educational levels and income. Provides a single statistic that can be used as a reference for both social and economic development.
10 Most Developed Countries

- Can you guess?
- Write a list.
<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>Cambodia</th>
<th>Guatemala</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy (2007) at birth:</td>
<td>81</td>
<td>59</td>
<td>70</td>
<td>42</td>
</tr>
<tr>
<td>Under 5 mortality rate (2007) per 1000 live births:</td>
<td>6</td>
<td>91</td>
<td>39</td>
<td>168</td>
</tr>
<tr>
<td>Infant mortality (2007) per 1000 live births:</td>
<td>5</td>
<td>70</td>
<td>29</td>
<td>115</td>
</tr>
<tr>
<td>Maternal mortality (2007) 1 in:</td>
<td>13 000</td>
<td>48</td>
<td>71</td>
<td>45</td>
</tr>
<tr>
<td>HDI (2006)</td>
<td>Rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value</td>
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Source: UNICEF *The state of the world’s children (2009)*
UN Human Development Indices: A statistical update (2008)
Q: What changes are expected in relation to causes of mortality and disease burden over the next 30 years?

A: The WHO has predicted that by 2030 developing countries will be further exposed to the double burden of disease.

While HIV/AIDS is predicted to be the leading cause of global disease burden, diseases such as heart disease and depression are set to have an increasing impact due to changes in lifestyle behaviours, such as changes in diet, and an increase in the number of people smoking and consuming alcohol in developing countries.
Causes of death

Q: What are the leading causes of death in Australia?
A: Non-communicable diseases, including cardiovascular disease, cancer and injuries.

Q: What are the leading causes of death in developing countries?
A: Communicable disease, including AIDS.
Discussion Questions 1

i. Can you name 5 developing and 5 developed countries?

ii. How does Australia compare to developing countries in relation to the following measures:
   - mortality
   - morbidity
   - life expectancy
   - burden of disease
   - Human Development Index.
Summary Questions

Chapter 9
1. Define developing and developed countries and provide examples of each.

- Developing countries generally have a low gross domestic product, less access to technology, poor industry, limited trade agreements and weak business and finance systems.

- Developed countries are industrialised, with well developed industrial, mining or agricultural sectors, a lower adult and child mortality rate, higher income, established health care and education systems.
2. Identify factors that are significant in causing the inequality between developing and developing countries.

- Debt and trade arrangements are 2 factors that cause inequality. Climate, agriculture, food security and conflict also cause inequality.
3. Identify the WHO mortality strata.

The most recent definitions of the WHO mortality strata are:

- **A** = very low child mortality, very low adult mortality
- **B** = low child mortality, low adult mortality
- **C** = low child mortality, high adult mortality
- **D** = high child mortality, high adult mortality
- **E** = high child mortality, very high adult mortality
4. Explain the effects that trade, colonialism and debt have on developing countries.

The effects that trade, colonialism and debt have on developing countries are:

- **Trade**
  - Can’t afford to compete on the world trade market
  - Less variety of products for export
  - Developing countries can’t afford to negotiate prices
  - Weather and disease force down prices
  - Trade restrictions
  - Unaffordable taxes imposed by wealthier nations
4. Explain the effects that trade, colonialism and debt have on developing countries.

- **Colonialism**
  - Took away their self-reliance and self-sufficiency as their resources were removed and sold
  - Cash crops
  - Working for the Europeans rather than themselves
  - Low wages
  - High taxes
  - Locals lost the ability to trade independently and locally

- **Debt**
  - Large loans were made to poor nations by other countries
  - Encouraged to borrow to improve infrastructure, then misused on weapons or expensive buildings they can’t afford
5. Identify the measures that can be used to compare the health status of different countries.

Measures that can be used to compare the health status of different countries are:

- Life expectancy
- Mortality rates (under-5, infant and maternal)
- Morbidity
- Burden of disease
- Human development index
6. Identify the leading causes of mortality and disease burden in developing countries and how these compare with Australia.

- The leading cause of mortality and disease burden in developing countries is malnutrition. Communicable disease such as AIDS/HIV, Malaria,....
- Australia’s top four causes are Ischaemic heart disease, cerebrovascular disease, lower respiratory infections, COPD.

The ways in which HIV/AIDS impacts on health include the following:

- it caused damage to the body’s immune system
- there is a higher risk of the person infecting others
- there is inadequate healthcare
- more susceptible to respiratory infection
- causes diarrhoea
- causes fever
- causes weight loss
- susceptibility to cancer
- inability to earn income
- inability to afford medical attention
- difficulty providing for families
8. Identify the leading causes of disease burden in each region and explain how the regions compare.

- Regions with more people living in developing countries, such as the South-East Asian and African regions.
- Regions with fewer people living in developing countries, such as the European and Western Pacific regions have higher rates on non-communicable causes such as Ischaemic heart disease.
9. Outline the changes that are expected in relation to burden of disease over the next 20 years.

The changes that are expected in relation to the burden of disease over the next 20 years include:

- heart disease
- depression
- increased use of tobacco
- increased misuse of alcohol
- improvements in education
- wider immunisation
- increased access to safe water and sanitation
- increased road traffic accidents
- increase in diabetes
10. Identify the factors that are contributing to these changes.

- The factors that are contributing to these changes are changes in life style behaviours such as diet modification and increase in the number of people smoking and consuming alcohol in developing countries.
Key Revision Questions

Chapter 9
Key Skill Question 1

i. Name 2 developing and 2 developed countries?

ii. How does Australia compare to developing countries in relation to the following measures:
   - mortality
   - morbidity
   - life expectancy
   - burden of disease
   - Human Development Index.

Write your response in paragraph or point form