

# Analysing Health Deprivation

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# Overview

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- health deprivation and health disparity
- scope of health deprivation
- significance of health deprivation
- measurement of health deprivation

# health deprivation and health disparity

- **500,000 women die each year from complications of pregnancy and childbirth, mainly in Asia and Africa**

lifetime mortality risk for women from maternity related causes is

- 1 in 16 for sub-Saharan Africa
- 1 in 3500 for North America

- **10 million developing country children die each year from preventable diseases**

chance of dying before fifth birthday is

- one in 10 for developing countries
- one in 143 for high-income countries. §

# health deprivation and health disparity

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- **Life expectancy continues to grow in most countries**
  - more than 78 years in most OECD countries
  - 81.5 years in Japan
  - but less than 40 years in many sub-Saharan African countries, reduced by more than 20 years since 1987
  - 32.7 years in Zambia; 33.9 years in Zimbabwe
- **Life expectancy disparities remain within countries**
  - 77 years for the total male population in Australia
  - 56 years for the indigenous male population in Australia

# health deprivation and health disparity

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- **More than 700,000 people commit suicide each year**
- China accounts for 21% of world population, but 44% of suicides
- China accounts for more than 50% of female suicides (the only country in which more women commit suicide than men)
- 90% of Chinese suicides occur in rural areas (female suicide rate in rural areas in China is three times the urban rate)

# scope of health deprivation

## definition of health

- a dynamic state ranging from chronic illness or disability to optimum levels of functioning in all aspects of life
- soundness of body or mind and **freedom** from disease or abnormality
- complete physical, mental and **social** well-being and not merely the absence of disease or infirmity (WHO)
- the absence of illness and the **ability to cope** with everyday activities

# scope of health deprivation

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## definition of health

- multidimensional
  - physical
  - psychological
  - social (?)
- encompasses
  - the ability to engage in normal activities
  - physical disability (eg. blindness)
  - the ability to cope with abnormal, events (eg minor emergencies)

# significance of health deprivation

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## health is special

- intrinsic value, because ill health
  - reduces pleasure or enjoyment of life
  - increases cost of living
- productive or instrumental value
- basic right (Article 25 of the Universal Declaration of Human Rights)
- public good (eg externalities of contagious diseases)



# significance of health deprivation

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## Inequality

- little concern with inequality of health outcomes across individuals
- concern with horizontal inequality (eg variations across regions, social groups)
- concern with health opportunities (eg access to health treatment)
- social insurance policies improve equality of access and offer little risk of moral hazard

# Categorizing Health Deprivation

condition	impact on			
	personal productivity	living costs	personal well-being	economy or society
HIV/AIDS	***	***	***	***
blindness	**	**	-	*
breast cancer	***	*	***	-
child terminal disease	-	-	***	-
major contagious disease	***	***	***	***
depression	*	-	**	-

# measurement of health deprivation

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- **Health Deprivation Measure**

- proportion of time affected weighted by severity of condition
- minimum threshold value?
- productivity/welfare measures different?
- instantaneous individual measure

- **Aggregation**

- expected lifetime value?
- weight by live population?
- no need to treat high deprivation disproportionately

# Measures of health

## For Countries (UNDP HDR)

- life expectancy
- probability of survival to age 40/65
- infant/child mortality rate (%)
- maternal mortality ratio (per 100,000 live births)
- children under height for age (%)
- infants with low birth-weight / underweight children (%)
- undernourished people (%)
- adults living with HIV/AIDS (%)
- malaria/ tuberculosis cases (per 100,000 people)
- population with access to affordable essential drugs (%)
- infants fully immunized against tuberculosis/ measles (%)
- physicians (per 100,000 people)
- births attended by skilled health staff (%)
- cigarette consumption per adult (annual average)

# Measures of health

## For individuals (from BHPS)

- health hinders climbing the stairs/ getting dressed/ walking more than 10 mins/ doing the housework
- health limits daily activities/limits some types of work
- health problems with arms, legs, hands, etc/ skin conditions or allergy/ chest or breathing/ heart or blood pressure/ stomach or digestion/ migraine/ hearing
- visits to GP/ physiotherapist/ hospital
- health over last 12 months/ satisfaction with health

# Measures of health

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## **other measures: countries**

- disability adjusted life years
- quality adjusted life years
- happy life years

## **other measures: individuals**

- self assessed health status (1-7 scale)