

Population growth – fertility and mortality

Fertility

Crude birth rate – the number of births in a given year divided by the population and multiplied by 1000

$$BR = N_B/P * 1000 (\%)$$

Total fertility rate – the number of children born to 1000 women passing through child-bearing ages
A fertility rate of 2.1 births per woman indicates *replacement level* (stable population)

$$F_t = N_B/W_{15-45} * 1000 (\%)$$

The value of children

- *Economic:*
 - help
 - financial contribution
 - old-age security
- *Social:*
 - Love and happiness
 - Marital bonds strengthened
 - Continuation of a family name
- *Psychological:*
 - Fulfilment

Factors influencing the fertility:

- Availability of family planning (including government policy)
- Education and literacy => the pattern:
- Better health care and fewer child deaths
- Later marriages
- Migration to towns and cities => the pattern:
- More employment opportunities

Mortality

- Life expectancy at birth – the average number of years a person can expect to live => the pattern:

Countries >70:

Countries 50-70:

Countries <50:

Crude death rate – the number of deaths in a specific period of per 1000 of population

$$DR = N_D/P * 1000 (\%)$$

Age-specific mortality rate – the number of deaths of people of a certain age per 1000

$$M_{age} = N_D/P_{age} * 1000 (\%)$$

Factors influencing the mortality:

- Environmental factors – droughts, floods, hot/humid climates, pollution
- Economic factors – housing conditions, sanitation, access to clean water, social class?
- Diseases – AIDS, tropical illnesses, stress-related diseases (brain stroke, heart attack)

Keywords

fertility, mortality, crude birth/death rate, total fertility rate, life expectancy, age-specific mortality rate, replacement level,