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Healthy Life Expectancy

BPS-Statistics Indonesia

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HEALTHY LIFE EXPECTANCY AT BIRTH

Brief Definition: The average equivalent number of years of **full health that a newborn could expect to live**, if he or she were to pass through life subject to the **age-specific death rates and ill-health rates** of a given period.

Unit of Measurement: Years of life.

Purpose: Measures how many equivalent years of full health on average a new-born baby is expected to have, given current age-specific **mortality, morbidity and disability risks**.

Healthy life expectancy at birth is an indicator of health conditions, including the **impacts of mortality and morbidity**



HEALTHY LIFE EXPECTANCY and SDGs

Healthy life expectancy (HALE) provides a summary of overall health conditions for a population, which are in turn an integral part of development.

The ICPD (international conference on population and development) Programme of Action highlights the need to **reduce disparities in mortality and morbidity** among countries and between socio-economic and ethnic groups.

It identifies the health effects of environmental degradation and exposure to hazardous substances in the work-place as issues of increasing concern.



HEALTHY LIFE EXPECTANCY and SDGs

While communicable diseases such as HIV/AIDS, tuberculosis and malaria continue to cause substantial loss of health and mortality in developing countries, particularly African countries, non-communicable diseases and injuries are responsible for **more than half of all lost years of healthy life** in developing as well as developed countries.

HALE thus provides **a more complete picture** of the impact of morbidity and mortality on populations, than simple life expectancy alone.



This indicator reflects **many social, economic, and environmental influences.**

It is closely related to other demographic variables, particularly life expectancy at birth, and it is related to human health and the **environment as well as economic indicators.**



**Linkages
to Other
Indicators:**

METHODOLOGICAL DESCRIPTION



- **Underlying Definitions and Concepts:**
Calculation of healthy life expectancy at birth is based on age-specific death rates for a particular calendar period

METHODOLOGICAL DESCRIPTION



- **Measurement Methods:** The WHO has developed methods for calculation of HALE that combine standard life table information on mortality together with **age-sex-specific prevalence data for health states** using Sullivan's method .

METHODOLOGICAL DESCRIPTION



Since comparable **health state prevalence data** are not available for all countries, strategy has been used by WHO:

1. Data from the WHO Global Burden of Disease (GBD) study are used to estimate **severity-adjusted prevalence** by age and sex for all countries.
2. Data from the WHO Multi-Country Survey Study (MCSS) are used to make independent estimates of **severity-adjusted prevalence** by age and sex for survey countries.
3. Life tables constructed by WHO are used with Sullivan's method to compute HALE for countries



Limitations of the Indicator:

- Health expectancy estimates based on self-reported health status information are generally **not comparable across countries due to differences in survey instruments and cultural differences in reporting of** .
- comparability problems with self-report health status data relate not only to differences in survey design and methods, but more fundamentally to **unmeasured differences in expectations and norms for health** .



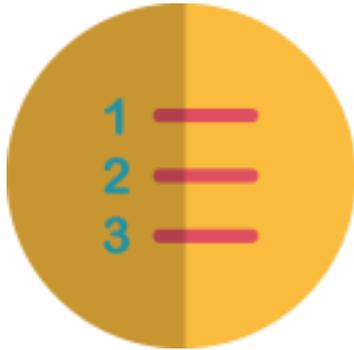
Limitations of the Indicator:

- Even when reliability and within population validity have reached acceptable levels, the meaning that different populations attach to the labels used for each of the response categories, *such as mild, moderate or severe*, in self-reported questions **can vary greatly**



Ways out to overcome limitation:

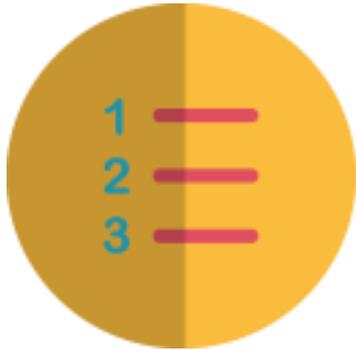
- Healthy life expectancy estimates for all countries are based on a mix of survey data for some countries (with its own uncertainty due to sampling and systematic biases) and analyses of disability prevalence in the Global Burden of Disease project, which draws **on a wide range of epidemiological and demographic data** of varying degrees of uncertainty.
- These methods are not easily replicated for single national estimates.



ASSESSMENT OF DATA

1 - Data Needed to Compile the Indicator:

Mortality data as required for calculation of period life expectancy together with **comprehensive prevalence estimates for health states** in the population and **a health state valuation function** to enable computation of equivalent years of full health lived at each age.

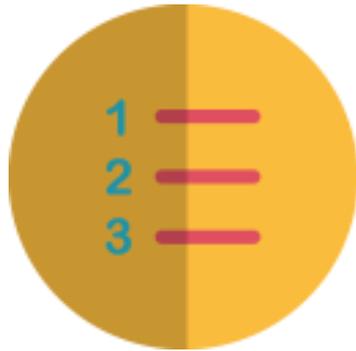


ASSESSMENT OF DATA

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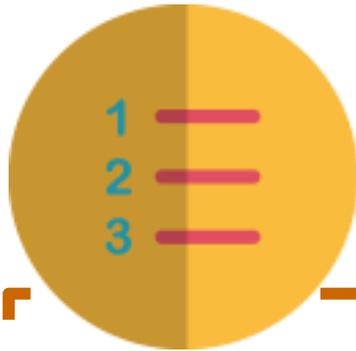
Alternately, HALE may be calculated from DALY (Disability Adjusted Life years) estimates for burden of disease by cause, age and sex.

A prevalence-based analysis is normally required for the calculation of prevalence YLD (Years Lived with Disability) and a method for dealing with morbidity.



2 - National and International Data Availability and Sources

Data on health states in populations have been collected by the World Health Organization in its Multi country Study and in the World Health Survey in 2003-2004.



3 - Data References

Estimates of healthy life expectancy at birth have been prepared for all WHO Member States and appear in the World Health Reports for years 2000 to 2004.



Thank you
Dhanyawaad
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