Suicide and Mortality of NCDs

The Suicide mortality rate as defined as the number of suicide deaths in a year, divided by the popula tion, and multiplied by 100 000.

Rationale:
- Mental disorders occur in all regions and cultures of the world. The most prevalent of these disorders are
- depression and anxiety, which are estimated to affect nearly 1 in 10 people.
- At its worst, depression can lead to suicide.
- In 2012, there were over 800,000 estimated suicide deaths worldwide.
- Suicide was the second leading cause of deaths among young adults aged 15–29 years, after road traffic injuries.

The complete recording of suicide deaths in death-registration systems requires good linkages with coronial and police systems, but can be seriously impeded by stigma, social and legal considerations, and delays in determining cause of death.

Less than one half of WHO Member States have well-functioning death-registration systems that record causes of death.

Suicide mortality rate (per 100,000 population) = (Number of suicide deaths in a year x 100,000) / Mid-year population for the same calendar year

The methods used for the analysis of causes of death depend on the type of data available from countries:

For countries with a high-quality vital registration system including information on cause of death, the vital registration that member states submit to the WHO Mortality Database were used, with adjustments where necessary, e.g. for under-reporting of deaths.

For countries without high-quality death registration data, cause of death estimates are calculated using other data, including household surveys with verbal autopsy, sample or sentinel registration systems, special studies and surveillance systems. In most cases, these data sources are combined in a modelling framework.

Around 70 countries currently provide WHO with regular high-quality data on mortality by age, sex and causes of death, and another 40 countries submit data of lower quality.

However, comprehensive cause-of-death estimates are calculated by WHO systematically for all of its Member States (with a certain population threshold) every 3 years.

Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

- Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease.

- Probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases, defined as the percent of 30-year-old-people who would die before their 70th birthday from cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other causeof death (e.g., injuries or HIV/AIDS).

- This indicator is calculated using life table methods

Rationale:

- Disease burden from non-communicable diseases (NCDs) among adults is rapidly increasing in developing countries due to ageing.

- Cardiovascular diseases, cancer, diabetes and chronic respiratory diseases are the four main causes of NCD burden.

- Measuring the risk of dying from these four major causes is important to assess the extent of burden from premature mortality due NCDs in a population.

Concepts:

Probability of dying: The likelihood that an individual would die between two ages given current mortality rates at each age, calculated using life table methods.

The probability of death between two ages maybe called a mortality rate.

- Cause of death estimates have large uncertainty ranges for some causes and some regions.
- Data gaps and limitations in high-mortality regions reinforce the need for caution when interpreting global comparative cause of death assessments, as well as the need for increased investment in population health measurement systems.
- The use of verbal autopsy methods in sample registration systems, demographic surveillance systems and household surveys provides some information on causes of death in populations without well-functioning death registration systems, but there remain considerable challenges in the validation and interpretation of such data, and in the assessment of uncertainty associated with diagnoses of underlying cause of death

Computation Method:

There are 4 steps involved in the calculation of this indicator:
1. Estimation of WHO life tables, based on the UN World Population Prospects 2012 revision.
2. Estimation of cause-of-death distributions.
3. Calculation of age-specific mortality rates from the four main NCDs for each five-year age range between 30 and 70.
4. Calculation of the probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases.

The methods used for the analysis of causes of death depend on the type of data available from countries:

- For countries with a high-quality vital registration system including information on cause of death, the vital registration that member states submit to the WHO Mortality Database were used, with
- adjustments where necessary, e.g. for under-reporting of deaths.
- For countries without high-quality death registration data, cause of death estimates are calculated using other data, including household surveys with verbal autopsy, sample or sentinel registration systems, special studies and surveillance systems. In most cases, these data sources are combined in a modelling framework.

- The probability of dying between ages 30 and 70 years from the four main NCDs was estimated using age-specific death rates of the combined four main NCD categories. Using the life table method, the risk of death between the exact ages of 30 and 70, from any of the four causes and in the absence of other causes of death, was calculated using the equation below.
- The ICD codes used are: Cardiovascular disease: I00-I99, Cancer: C00-C97, Diabetes: E10-E14, and Chronic respiratory disease: J30-J98
- Formulas to (1) calculate age-specific mortality rate for each five-year age group between 30 and 70, (2) translate the 5-year death rate into the probability of death in each 5-year age range, and (3) calculate the probability of death from age 30 to age 70, independent of other causes of death, can be found on page 6 of this

BADAN PUSAT STATISTIK

Pelopor
Data Statistik
Terpercaya
Untuk Semua

Terima Kasih

www.bps.go.id

📍 Jl. Dr. Sutomo 6-8 Jakarta 10710

✉️ bpshq@bps.go.id

📞 (021) 3841195, 3842508, 3810291

f Badan Pusat Statistik (Page)

📠 (021) 3857046

🐦 @bps_statistics