Webinar

UN SDG indicator 3.4.2
Suicide mortality rate

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UN Sustainable Development Goals (SDGs)
Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

• Indicator 3.4.2: Suicide mortality rate

WHO General Programme of Work (GPW 2019-2023)

• Indicator 28: Reduce suicide mortality rate by 15%

WHO Mental Health Action Plan 2013-2030

Objective 3: To implement strategies for promotion and prevention in mental health

• Target 3.2: Rates of suicide in countries will be reduced by one third by the year 2030
More than 700,000 people die by suicide every year.
Third leading cause of death for 15-19 and 15-29 year old girls, and fourth for boys (fourth for both).
One in every 100 deaths (1.3%) due to suicide.
Suicides by age and income level, 2019

Global suicides, by age and country income level (thousands), 2019

Suicide rates over time

Age-standardized suicide rates (per 100 000) over time by WHO region, both sexes
Suicide rates and data quality in ESCWA countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Data quality</th>
<th>WHO Region</th>
<th>Income Group</th>
<th>Number of suicides</th>
<th>Crude suicide rates*</th>
<th>ASDR suicide rates*</th>
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</table>

*per 100,000 population

1 = Multiple years of national death registration data with high completeness and quality of cause-of-death assignment are available. Estimates for these countries may be compared and time series may be used for priority setting and policy evaluation.

2 or 3 = Multiple years of death registration data are available. Data have low completeness and/or issues with cause-of-death assignment which likely affect estimated deaths by cause and time trends. Estimates may be used for priority setting. Use estimates for programme evaluation with caution, as improvements in the vital registration system may affect the estimated trends in cause-specific mortality. Comparisons among countries should be interpreted with caution. 2 denotes moderate quality issues and 3 denotes severe quality issues.

4 = Death registration data are unavailable or unusable due to quality issues. Estimates of mortality by cause should be interpreted with caution. Estimates may be used for priority setting, however, they are not likely to be informative for policy evaluation or comparisons among countries.
WHAT IS LIVE LIFE?

LIVE
cross-cutting foundations

Key effective evidence-based interventions

Situation analysis

Limit access to means of suicide

Multisectoral collaboration

Interact with the media on responsible reporting

Awareness raising

Foster life skills of young people

Capacity building

Early identify everyone affected

Financing

Surveillance, monitoring and evaluation
LIVE LIFE IMPLEMENTATION PLAN

Three-year LIVE LIFE implementation plan for suicide prevention 2021-2023

OUTCOME 1
A LIVE LIFE implementation package contributes to reduced suicide rates

OUTCOME 2
Engagement with and support to countries, depending on the country context, to ensure LIVE LIFE implementation contributes to reduced suicide rates

OUTCOME 3
Better data measure progress towards the target of reducing suicide rates
National suicide prevention strategies

38 countries are known to have a national suicide prevention strategy
Data Quality

- The quality and availability of data on suicide and suicide attempts is poor globally.
- ONLY 60 countries have good-quality vital registration data on suicide mortality.
- ONLY 20 countries are known to have gathered national survey data and 3 have national hospital-based suicide attempt data.
- Improvement of surveillance and dissemination of data is necessary to inform action.

Map 2. Quality of suicide mortality data, 2012
Data Quality (continued)

- The 39 high-income countries with good vital registration data account for 95% of all estimated suicides in high-income countries.

- The 21 low- and middle-income countries with good vital registration data account for only 8% of all estimated suicides in low- and middle-income countries.

- In other countries, estimated suicides are necessarily based on modelling methods.
Mortality statistics

- Mortality statistics, including causes of death, are the foundation of public health planning, monitoring and evaluation of interventions. Yet, the overwhelming majority of low- and middle-income countries do not have reliable mortality statistics.

- This information paradox – where information is lacking where it is needed most – has critically hindered the ability of governments and country programmes to track progress in addressing the serious public health problem of suicide.

- The measurement of cause-specific mortality like suicide becomes even more important when monitoring progress and evaluating interventions. It is critical to know how effective programmes are. One of the clearest indicators of success is a decrease in mortality due to suicide.
Civil registration and vital statistics (CRVS)

- A well-functioning civil registration and vital statistics system (CRVS) is the best way to monitor mortality and causes of death [all causes of death, including suicide]. Civil registration is a core government function. The health sector plays a key role in generating data on births and deaths.

- Alternative methods to collect information on causes of death, including suicide, include sample registration systems, hospital data, burial systems, mortuaries, household surveys, clinical autopsy and others. Many of these efforts can serve as the foundation for civil registration systems, but much work remains to be done.
In 2021, WHO published the **WHO CRVS Strategic Implementation Plan 2021-2025** to accelerate CRVS system strengthening in countries.

- It provides leadership and guidance to strengthen the capacity of the health sector in countries to notify all births and deaths and ensure that all causes of death are comprehensively assigned and correctly certified.
- Without CRVS countries will be unable to reliably monitor trends in the UN SDGs indicators that rely on CRVS data.
- A core mandate of WHO is to request Member States to provide statistics on mortality.
Medical certification

- Proper medical certification of cause of death requires use of the International Classification of Diseases (ICD), currently ICD-10.

- Tools are available for medical certification for deaths (particularly in the case of suicide a coroner or other legal authority is involved), and verbal autopsy when medical certification is absent.

- However, many deaths occur at home without medical certification.

- In addition, suicide is associated with considerable stigma. This may affect the practices of certifiers and data quality.
Misclassification

The problem of poor-quality mortality data is not unique to suicide, but given the sensitivity of suicide – and the illegality of suicidal behaviour in some countries – it is likely that under-reporting and misclassification are greater problems for suicide than for most other causes of death. Suicide registration is a complicated, multilevel procedure that includes medical and legal concerns and involves several responsible authorities that can vary from country to country. Suicides are most commonly found misclassified according to the codes of the 10th edition of the International Classification of Diseases and Related Health Conditions (ICD-10) as “deaths of undetermined intent” (ICD-10 codes Y10-Y34), and also as “accidents” (codes V01-X59), “homicides” (codes X85-Y09) and “unknown cause” (codes R95-R99).
Illegality (criminalization) of suicide

Illegality of suicidal behaviour in some countries:

Qatar
Somalia
Sudan

(Lebanon recently decriminalized)
Alternative methods

❖ **Sample vital registration** (with verbal autopsy), implemented in a nationally representative sample of population clusters, represents an affordable, cost-effective, and sustainable short- and medium-term solution for countries that do not have a well-functioning CRVS system as yet.

❖ **Hospital data** on cause-specific mortality can form a good basis for cause-specific mortality statistics, which can help identify needs for hospital treatment and allow related planning of resources. However, in countries where the majority of deaths take place outside of hospitals, hospital mortality data may not be representative of the mortality burden of the population as a whole.
Overview

Civil registration and vital statistics (CRVS)

Sample vital registration

Hospital data

Fatal injury surveillance in mortuaries and hospitals: a manual for practitioners

Preventing suicide: a resource for suicide case registration
Distinguishing suicide deaths from natural, accidental and homicide deaths
Distinguishing suicide deaths from natural, accidental and homicide deaths

Suicide → Certification of death → Mortality register
Practice manual for establishing and implementing suicide attempt and self-harm surveillance systems

- **Suicide attempt** is the single most important risk factor for suicide, and results in significant social and economic burden for communities
- Monitoring suicide attempts provides important information for development and evaluation of suicide prevention strategies
Sections of the Practice manual

❖ Background (need, benefits)
❖ Development and implementation of a surveillance system on suicide attempts and self-harm
❖ Training of staff involved in data collection
❖ Reporting of surveillance outcomes and dissemination
❖ Maintenance and sustainability over time
❖ Terminology and existing surveillance systems
Sections Development and implementation, Reporting, and Maintenance

❖ **STEP 1** Inform and engage

❖ **STEP 2** Setting up the surveillance system

❖ **STEP 3** Ethics and data protection

❖ **STEP 4** Implementation

❖ **STEP 5** Review and evaluate
Training

- Exclusion and inclusion criteria
- Examples with decisions
- Vignettes for practice
At the **most basic level**, for an individual presenting at the hospital, the questions to ask are the following:

- **Was this injury or poisoning self-inflicted?**
- **If yes, was it intentional or accidental?**
Exclusion and inclusion criteria

Exclusion
❖ Accidental overdose of alcohol
❖ Accidental overdose of illicit drugs
❖ Accidental overdose of prescription or over-the-counter medications

Inclusion
❖ All methods of intentional self-harm (as per ICD-10 coding) where it is clear that the self-harm was intentionally inflicted.
Thank you!