

INDICATOR ANALYSIS

PROPORTION OF POPULATION WITH LARGE HOUSEHOLD EXPENDITURE ON HEALTH AS SHARE OF TOTAL HOUSEHOLD EXPENDITURE

ANALYSIS CONDUCTED BY FRANCOIS DAUDELIN & VAL PERCIVAL
FOR THE LANCET-SIGHT COMMISSION ON PEACEFUL SOCIETIES THROUGH HEALTH AND GENDER EQUALITY

<p>How is this indicator calculated?</p>	<p>The proportion of population with large household expenditures on health as a share of total household expenditure or income is the SDG indicator 3.8.2. It was adopted to monitor progress towards target 3.8 of achieving universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all. It is used to monitor catastrophic spending on health. Together, indicators 3.8.1 (coverage of essential health services) and 3.8.2 should be monitored jointly (1).</p> <p>Two thresholds are used to define “large household expenditure on health,” specifically over 10% and over 25% of total expenditure or income (1). Each threshold can be understood as a separate indicator.</p> <p>"Household expenditure on health is defined as any expenditure incurred at the time of service use to get any type of care (promotive, preventive, curative, rehabilitative, palliative or long-term care) including all medicines, vaccines and other pharmaceutical preparations as well as all health products, from any type of provider and for all members of the household" (2).</p> <p>Data estimations are based on nationally representative household surveys (1). Household sample weights are multiplied by household size to obtain representative numbers per person. When data are self-weighted, only the household size is used as the weight.</p>
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<p style="text-align: center;">GLOBAL TRENDS</p>	
<p>What are the global patterns for this indicator? Trends, geographic patterns etc.</p>	<p>In developing contexts such as China, “households without insurance [are] at higher risk of catastrophic health expenditure compared with those covered” by insurance. Wealthier and urban households are generally more protected against these catastrophe expenditures. Larger families and having at least one young family member are also protective factors (4).</p> <p>Moreover, the projected reduction in catastrophic health expenditure incidence from 2013 to 2040 is “about 29% among low-income countries, 37% among lower-middle-income countries and 33% among upper-middle-income countries” (5).</p>

<p style="text-align: center;">UTILITY</p>	
<p>What does the indicator measure?</p>	<p>The indicator measures the proportion of a given population with household expenditures on health that exceed a threshold of total household expenditure or income (1).</p>

What does it NOT measure - what does it miss?	The indicator does not measure the source of funding by a household who is reporting health expenditure since most household surveys do not obtain this information. This becomes problematic when calculating the indicator in countries where there are reimbursements from third-parties (6).
If and how does the indicator relate to interface/relationship among health, gender and fragility/stability?	In developing contexts such as China, “households headed by a female, an unemployed person or a person having little education, and households having at least one member who was elderly, ill from tuberculosis or any chronic non-communicable illness, or hospitalized [are] more likely to experience catastrophic health expenditure” (4).

AVAILABILITY	
Sources for indicator (CRVS, DHS etc. – include links);	Indicator data are available from the following sources: 1. Global SDG Database (country level from 2000-2018): https://unstats.un.org/sdgs/indicators/database/ 2. The WHO global health repository (country level from 1985-2017): https://www.who.int/data/gho/data/indicators/indicator-details/GHO/population-with-household-expenditures-on-health-greater-than-10-of-total-household-expenditure-or-income-(sdg-3-8-2)-(-)
Dates available;	Most data is available from the SDG database and ranges between 2000-2018. Data from the WHO is more limited but ranges from 1985 -2017.
Availability across geographic areas;	Data are available for 248 countries and territories.
Availability in conflict affected settings;	Data availability in conflict affected settings varies by country and year in the SDG database: Yemen (2005 and 2014); South Sudan (2009); Libya (No Data); Somalia (No Data), DRC (2004 and 2012), Afghanistan (2007 and 2013) and Syria (2003 and 2007).

GRANULARITY	
<i>Disaggregation at national level</i>	
Data disaggregated by sex;	No.

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Data disaggregated by identity group (race, ethnicity);	No.
Data disaggregated by income	No. However, in specific cases, data are disaggregated by income, including in countries such as the US, Belgium and the Netherlands (7).
Data disaggregated by citizenship;	No.
Data disaggregated by migration background;	No.
<i>Disaggregation at sub-national level</i>	
Data disaggregated by geographic region;	No.
Data disaggregated by identity group (race, ethnicity);	No.
Data disaggregated by income.	No. While Data are not typically disaggregated by income at the sub-national level, they are in the US (8).

SOURCES OF BIAS	
What bias can exist with these data?	<p><i>Omission bias:</i> Certain groups of people can be omitted from the assessed population, either unintentionally (in cases where civil registration data are inaccessible or incomplete) or intentionally. Moreover, a government can alter or censor datum to achieve an ulterior goal, such as covering up flaws in their country’s health infrastructure. This may also be linked to publication bias, as governments of countries with a high levels of catastrophic health expenditure may give preference to certain datasets over others.</p> <p><i>Reporting bias:</i> Errors can be made and recorded because of the datum (definition of large household expenditure) used in the calculation of the indicator. Additionally, measurement errors can exist due to “both non-sampling errors such as a very short recall period that does not allow the collection of information on health care requiring an overnight stay; or sampling errors such as over-sample of areas with a particularly low burden of disease” (6).</p>

VALIDITY

Indicator: Proportion of population with large household expenditure on health as share of total household expenditure

Clear and accepted international standards for indicator;	There are clear and accepted international standards for this indicator.
Validity of measurement of indicator generally accepted;	The validity of the measurement of the indicator is generally accepted given reliable data.

RELIABILITY

Reliability of indicator generally accepted;	While the reliability of the indicator is generally accepted, caution should be exercised when comparing data from different data sets in order to ensure that the same threshold was used in the calculations.
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COMPLEXITY

Enables analysis across time and location.	Data for this indicator suffer from challenges of timeliness, frequency, data quality and comparability of surveys, making analysis across time and location sometimes problematic (6).
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OTHER REFLECTIONS

Is the Indicator modelled? Other reflections on debate, accuracy, etc.	<p>No values are imputed or modelled at the national level.</p> <p>At the regional level, because survey-based estimates are not available for the reference years of 2000, 2005 or 2010 for every country, all survey-based estimates within a 5-year window of the reference year are “lined-up” via interpolation, extrapolation, econometric modelling and imputation based on median values (6).</p> <p>The indicator data are often disaggregated by different health product or service categories, tenure categories, socio-economic classifications, and ages for various countries such as the UK (9).</p>
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