Proposed indicator to measure progress on palliative care in political declaration on Non-Communicable Diseases

Indicator
Morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer or HIV.

Description
This indicator gives a proxy measurement to the number of people living without access to essential treatment for moderate to severe pain.

The indicator uses a measurement of morphine equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer or HIV, which are the two most prevalent causes of chronic moderate to severe pain. The indicator therefore is a ratio of consumed strong analgesics to treatment need and accounts for variations in HIV and cancer burden in countries. For more information on the methodology, please see appendix 1.

The indicator should not be limited to a certain age bracket, e.g. under 60s, but should cover all ages.

Data sources
The International Narcotics Control Board annually publishes consumption data for narcotic drugs, including strong opioid analgesics, as reported by countries.

The World Health Organization (WHO) produces estimates of the number of deaths from HIV and number of deaths from cancer. The most recent mortality rates are applied to updated population figures to produce annual estimates of the number of deaths.

Rationale for using this indicator
The Political Declaration on NCDs agreed at the High Level Meeting repeatedly refers to the need for palliative care for people with Non-Communicable Diseases (see paragraph 45b, 45c, 45l and 55). Moreover, the WHO Action Plan for the Global Strategy for the Prevention and Control on Non-Communicable Diseases includes a commitment to measure the availability of palliative care. However, at present, the availability of palliative care is not systematically monitored by any UN agency or by member states. This indicator therefore fills a significant need.

At present, no universally accepted indicator has been developed for measuring palliative care services. The proposed indicator measures the availability of treatment for moderate to severe pain, a cornerstone of effective palliative care, per death from cancer or HIV. The Pain and Policy Studies Group, a WHO collaborating centre and the Union for International Cancer Control use a similar indicator.[1] The measurement of this concrete outcome serves as a proxy for the availability of palliative care services more generally. The indicator currently shows a wide disparity in access to these essential medicines between countries, suggesting significant gaps in quality of care that is available for people living with all life-threatening illnesses including NCDs.

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[1] Treat the Pain Campaign, Global Access to Pain Relief Initiative (GAPRI, UICC) http://www.treatthepain.com/worldwide-picture-untreated-pain

Morphine-equivalent consumption per death from cancer or HIV is an indicator that uses three inputs or components that are routinely collected in a standard manner by the United Nations and World Health Organization. Data are published annually for almost all countries, providing an indicator that will reflect changes without a lengthy lag time. The ratio of morphine-equivalent consumption to deaths from HIV or cancer takes into account the differing epidemiology of the two most prevalent indications for treatment of chronic moderate to severe pain. This indicator is constructed with a minimum number of assumptions.

WHO staff have recently published another measure for adequacy of availability of opioid analgesics. However, this measure concerns a broader spectrum of pain control, including not just patients needing palliative care but also acute pain (post-operative, trauma) and other chronic pain management needs. It is our belief that an indicator which compares consumption of strong opioid analgesics with cancer and HIV mortality is a better proxy for palliative care availability and development.

This indicator has a number of limitations. First, as mentioned above, the indicator covers only access to treatment for moderate to severe pain. It does not measure other aspects of palliative care, such as treatment of other physical symptoms or psychosocial and spiritual support. Second, it does not provide an exact measure of what consumption of strong opioid analgesics per cancer or HIV death is adequate. Rather, it allows for cross-country comparison and is sensitive to changes in opioid availability enabling effective tracking of progress in the near and mid-term as well as over the long term. Finally, the indicator is restricted to moderate to severe pain related to HIV and cancer mortality, whereas non-terminal cancer and HIV, as well as many other life-limiting health conditions, can also cause such pain.

Although other palliative care indicators could be proposed palliative care experts agree that this indicator is an effective proxy measurement for palliative care development for all life-threatening illnesses, including NCDs. Furthermore, as all the data required is already collected annually, this indicator does not impose an additional burden on countries.

Appendix 1

Methodology on indicator

Morphine equivalent is a metric[2] to standardize doses of strong opioids and allow combination and comparison of different medicinal opioids. This equation is taken from the ratios of the defined daily dose (oral dosing for all except fentanyl, which is transdermal) as described by the WHO Collaborating Centre for Drug Statistics Methodology. [3] It is calculated as:

Mor Eq=(1*morphine)+(83.3*fentanyl)+(5*hydromorphone)+(1.33*oxycodone)+(0.25*pethidine)+(4*methadone)

Because of methadone's widespread use in opioid substitution therapy and its relatively rare use to treat moderate to severe pain, non-methadone morphine equivalent is also used in some instances and is calculated as:

Non-meth Mor Eq=(1*morphine)+(83.3*fentanyl)+(5*hydromorphone)+(1.33*oxycodone)+(0.25*pethidine)

It is proposed to use the non-methadone morphine equivalent value to avoid consumption of methadone for drug treatment distorting the calculations.

Opioid consumption data are taken from the International Narcotics Control Board annual report for narcotics consumption in 2008 that was published in 2009[4]. Where data are missing in the 2009 report, values are taken from the International Narcotics Control Board report for 2007 that was published in 2008[5]. For estimates that are reported as below ½ of the unit of measure, a value that is 0.25 of the unit of measure is used.

For each drug, the average of non-missing consumption data over the last 3 years (2006-2008) is used to allow for variation between the years.

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[2] Developed by the Pain and Policy Studies Group, University of Wisconsin

[3] WHO Collaborating Centre for Drug Statistics Methodology. ATC/DDD Index [Internet]. 2011 [cited 2011 Sep 16]. Available from: http://www.whocc.no/atc_ddd_index/

[4] United Nations International Narcotics Control Board. Narcotic Drugs: Estimated World Requirements for 2010; Statistics for 2008 (E/INCB/2009/2) [Internet]. 2009; Available from: http://www.incb.org/pdf/technical-reports/narcotic-drugs/2009/Narcotic_drugs_publication_2009.pdf

[5] United Nations International Narcotics Control Board. Narcotic Drugs: Estimated World Requirements for 2009; Statistics for 2007 (E/INCB/2008/2) [Internet]. Available from: http://www.incb.org/pdf/technical-reports/narcotic-drugs/2008/narcotics_drugs_2008.pdf