**Scope of the problem**

**Untreated deaths in pain in 2013**

Globally, 7.2 million people die of HIV or cancer with moderate to severe pain each year. At least 2.3 million of these deaths in pain were untreated in 2013. These figures are calculated assuming that all methadone consumed is used for pain relief. However, methadone is more often used as opioid substitution therapy than as a pain reliever. If methadone consumption is removed from the calculations, then the total number of untreated deaths in pain worldwide is 3.6 million, which is about 50% of the total deaths in pain.

More than 99% of these untreated deaths in pain are in low and middle-income countries. Ten countries are home to 60% of the untreated deaths in pain in the world.

- India: 23.8%
- Russian Federation: 8.4%
- Nigeria: 7.0%
- Indonesia: 3.8%
- China: 3.5%
- Pakistan: 3.5%
- Bangladesh: 2.9%
- Ethiopia: 2.5%
- South Africa: 2.5%
- United Republic of Tanzania: 2.4%

Sub-Saharan Africa has the greatest unmet need for pain relief, with 837,000 untreated deaths in pain from HIV or cancer (36% of the world’s total untreated deaths in pain).

There is a great disparity in access to pain relief by income level. Low and middle-income countries are home to 74% of the deaths in pain from cancer or HIV, but they consume just 7% of the medicinal opioids.
Frequently asked questions

What is the prevalence of moderate to severe pain among people with HIV or cancer?

Studies suggest that approximately 50% of people dying of HIV and 80% of people dying of cancer experience moderate to severe pain (1). Prevalence of pain among people living with less advanced disease is more variable.

What other indications require opioids for pain treatment?

Other indications include trauma and burns, myocardial infarction, sickle cell disease, and childbirth. However, these indications are not routinely and standardly collected across countries and duration of treatment is generally shorter for these indications relative to HIV and cancer.

What does morphine-equivalent or non-methadone morphine-equivalent mean?

Morphine-equivalent is a metric to standardize amounts of opioids by potency and allow combination and comparison of different medicinal opioids. It is calculated by combining morphine, fentanyl, hydromorphone, oxycodone, pethidine, and methadone and standardizing each to the equivalent amount of morphine.

Methadone is more likely to be used as an opioid substitution therapy than as a pain reliever in many countries, so calculations that exclude methadone, called the non-methadone morphine-equivalent may provide a better estimate of pain relief consumed in a country.

How costly are opioids like morphine?

Morphine is actually very inexpensive and is not under patent. In Uganda for instance, locally produced oral liquid morphine costs about 3.30 USD for a week’s supply and in Nigeria it is about 5.00 USD. Imported tablets or injectable formulations can be more expensive. Mark-ups along the supply chain can result in higher prices for patients in some settings.

Is there a limited supply of opioids like morphine?

Morphine and other opioids are produced from poppy. The global supply is sufficient to meet the need and there is no problem with supply of the raw materials (2).

Is pain treatment complex?

As in all clinical care, there are challenging cases. However, the World Health Organization has developed the three-step analgesic ladder, which provides a simple algorithm for treating pain. This approach is effective for 80-90% of cancer patients (3).

Is morphine an essential medicine?

Yes. It is on the World Health Organization’s model essential medicines list and on most national essential medicines lists. Countries that have signed the 1961 Convention are obligated to make narcotics available for medical and scientific purposes (4).

Why is access to pain relief limited in low and middle-income countries?

The situation is different in different countries, but the key challenges include legal and regulatory limitations, inadequate training of health workers, weak health systems, and misperceptions about pain and its treatment among clinicians and patients.

Where can I learn more?

Visit our website: www.TreatThePain.org to learn more.
References


