

## Opioid consumption in Egypt

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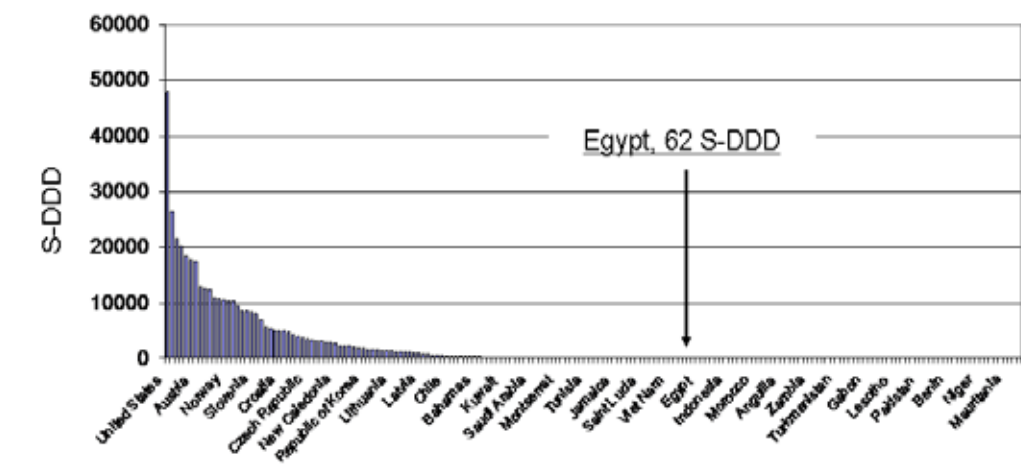
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Pain treatment is a human right and all countries should ensure the availability of and accessibility to opioids, especially morphine, for the control of cancer pain whatever the resources are<sup>1</sup>. Cancer pain can be effectively controlled in the majority of cancer patients using cheap medications, like morphine, and following simple guidelines like those adapted by the World Health Organization decades ago<sup>2</sup>. However, cancer pain control remains inadequate worldwide mainly in lower-income countries<sup>3</sup>.

Opioid consumption in countries is considered by the World Health Organization as an indicator for cancer pain control and accessibility to palliative care<sup>4</sup>. In response to efforts aiming at improving cancer pain control, opioid consumption is increasing worldwide. For example, the global morphine consumption increased from 7.2 tons in 1990 to 41 tons in 2010<sup>5</sup>. However, this increase in morphine

consumption is mainly due to the increasing consumption in higher-income countries. The United States, Canada, Europe, Australia, New Zealand and Japan representing 20% of the world population consumed 90% of the global morphine consumption in 2010 while the rest of countries including lower-income countries with 80% of the world population consumed only 10% of the global morphine consumption<sup>5</sup>.

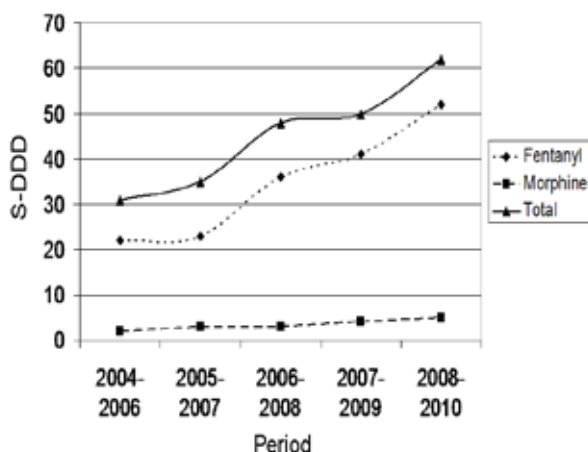
Opioid consumption Figures in Egypt are among the lowest worldwide indicating largely inadequate cancer pain control. Based on the data published in the most recent annual report of the International Narcotics Control Board, the average opioid consumption in Egypt during 2008-2010 was 62 defined daily doses for statistical purposes (S-DDD) per million inhabitants per day<sup>5</sup>. With this Figure Egypt was ranked 115<sup>th</sup> among 184 countries as shown in Figure 1.



**Figure 1:** Average total consumption of narcotic drugs in defined daily doses for statistical purposes (S-DDD) per million inhabitants per day, All countries 2008-2010.

A recent report released by Human Rights Watch classified countries based on the availability of medicines necessary to control moderate to severe pain<sup>3</sup>. Egypt was classified as a country where there is “very limited availability” where “few patients in pain are able to access treatment”. Further, according to the report, all strong opioids in Egypt are enough to control the pain of only 31% of terminal cancer and AIDS patients<sup>3</sup>.

Over the last years, opioid consumption in Egypt increased (Figure 2) and its ranking improved from 129th for the period 2004-2006 to 115th for the period 2008-2010<sup>5-9</sup>. This indicates that there are efforts to improve cancer pain control, but still very much inadequate as compared to other countries. For example, the average consumption was above 1000 S-DDD for the same period in 54 countries<sup>5</sup>.



**Figure 2:** Average consumption of narcotic drugs in defined daily doses for statistical purposes (S-DDD) per million inhabitants per day, excluding preparations listed in Schedule iii (Source: International Narcotics control Board annual report for the years 2008-2012).

The consumption increase in Egypt is mainly due to the increase in fentanyl consumption, not morphine as shown in Figure 2<sup>5-9</sup>. This may be due to many factors like the less restrictive regulations for fentanyl prescription compared to morphine<sup>10</sup>. It is disappointing that the expensive fentanyl formulations are registered and available in Egypt, but not the cheap essential immediate release oral morphine<sup>10</sup>.

Many reasons are behind the poor cancer pain control in Egypt. The most important barrier may be the current stringent restrictive regulations that limit accessibility of patients to opioids especially morphine<sup>10-12</sup>. In addition to limited drug availability, education and policy related barriers exist<sup>10,11</sup>.

In order to improve opioids availability and accessibility for cancer pain control in Egypt, there is a need to implement the WHO strategy in three directions, education, drug availability and government policy<sup>2</sup>. The initiation and advancement of palliative care in health care facilities looking after cancer patients is another way to improve cancer pain control in Egypt. In a recent report, the initiation of a specialized Palliative Medicine Unit in an Egyptian cancer center (Kasr Al-Ainy Center of Clinical Oncology and Nuclear Medicine, Kasr Al-Ainy School of Medicine, Cairo University) was associated with a significant increase in opioid consumption which indicates an improvement in cancer pain control<sup>13</sup>. In that study, the annual opioid consumption expressed in grams of oral morphine equivalent (g OME), increased by 644% from 233 g OME/1000 new patients during the year before PMU establishment to 1,731 g OME/1000 new patients during the 3rd year after. This is further supported by the fact that opioid consumption figures are much higher in countries where palliative care is in a more advanced stage of development like<sup>5,14</sup>.

In conclusion, the current opioid consumption figures in Egypt reflect inadequate cancer pain control. There is an urgent need to identify and overcome barriers to cancer pain control to relieve the suffering of Egyptian patients with cancer.

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