

**FAST FACTS AND CONCEPTS #8
MORPHINE AND HASTENED DEATH**

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Question: What is the distinction between the use of morphine at the end of life to control symptoms and euthanasia/assisted suicide?

Case Scenario: An 83 year old former industrial worker has been hospitalized because of severe pain. He has pancreatic cancer with metastases to liver and lung. He has severe abdominal pain, and opioid therapy with morphine is recommended for pain relief.

Main Teaching Points

1. Many physicians inaccurately believe that morphine has an unusually or unacceptably high risk of an adverse event that may cause death, particularly when the patient is frail or close to the end of his or her life. In fact, a large study of opioid use at the end of life from the US National Hospice Outcomes Project, as well as a systematic review of various other countries, found no difference in survival with absolute opioid dose or change in opioid dose. Furthermore, morphine-related toxicity will be evident in sequential development of drowsiness, confusion, then loss of consciousness before respiratory drive is significantly compromised.
2. Many physicians inappropriately call this risk of a potentially adverse event, a *double effect*, when it is in fact a secondary, *unintended consequence*. The principle of double effect refers to the ethical construct where a physician uses a treatment, or gives medication, for an ethical intended effect where the potential outcome is good (eg, relief of a symptom), knowing that *there will certainly be* an undesired secondary effect (such as death). An example might be the separation of conjoined twins knowing that one twin will die so that the other will live. Although this principle of “double effect” is commonly cited with morphine, in fact, it does not apply, as the secondary adverse consequences are unlikely.
3. When offering a therapy, it is the *intent* in offering a treatment that dictates whether it is ethical medical practice:
 - a. if the *intent* in offering a treatment is *desirable or helpful to the patient* and the *potential outcome good* (such as relief of pain), but a potentially adverse secondary effect is undesired and the potential outcome bad (such as death), then *the treatment is considered ethical*
 - b. If the *intent* is *not desirable or will harm the patient* and the *potential outcome bad*, the *treatment is considered unethical*
4. All medical treatments have both intended effects and the risk of unintended, potentially adverse, secondary consequences, including death. Some examples are total parenteral nutrition, chemotherapy, surgery, amiodarone, etc.
5. Assisted suicide and euthanasia are not examples of “double effect.” The intention in offering the treatment in assisted suicide and euthanasia is to end the patient’s life.
6. If the intent for using morphine in the scenario is to relieve pain and not to cause death, and accepted dosing guidelines are followed:
 - a. the treatment is considered ethical,
 - b. the risk of a potentially dangerous adverse secondary effects particularly hastening death is *minimal*, and
 - c. the risk of respiratory depression is vastly over-estimated.

References

1. Emanuel LL, von Gunten CF, Ferris FD. *The Education for Physicians on End-of-Life Care (EPEC) curriculum*. Chicago, IL: American Medical Association, Chicago; 1999. <http://www.epec.net>.
2. Morita T, et al. Effects of high dose opioids and sedatives on survival in terminally ill cancer patients. *J Pain Sympt Manage*. 2001; 21:282-9.
3. Regnard D. Double effect is a myth leading a double life [letter]. *BMJ*. 2007; 334:440.
4. Portenoy R, Sibirceva U, et al. Opioid use and survival at the end of life: a survey of a hospice population. *J Pain Sympt Manage* 2006; 32:532-40
5. Sykes N, Thorns A. The use of opioids and sedatives at the end of life. *Lancet Oncol* 2003; 4:312-8.

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