

# Medical, social and bioethical assessment of euthanasia.

## Part I. Medical aspects

Any reflection on euthanasia should be made from a medical, social and bioethical perspective. Given the breadth of this approach, we shall address this issue in three separate chapters, in which we will consecutively discuss three aspects listed above. The first ones,

### I - Medical aspects

As has been the case on and off for many years, the call for the legal regulation of euthanasia — defined by the Oxford English Dictionary as "the *painless killing of a patient suffering from an incurable and painful disease or in an irreversible coma*" — has once again entered modern-day political and social discourse.

Euthanasia is based on the *administration of drugs and other substances with the intent to cause the death of a person* at their request or that of their representatives, in order to bring about death using a "theoretically safe, relatively quick and painless method".

#### Euthanasia. Current definition

While the legal definition of euthanasia varies across countries, one Spanish law (1) defines euthanasia as actions that:

- a) cause the death of patients, that is, directly and intentionally by means of a single, immediate cause-effect relationship,
- b) are carried out at the express and informed request, repeated over time, of competent patients,
- c) is carried out in a context of suffering considered unacceptable by the patient due to an incurable disease that has not been successfully mitigated by other means, for example, by palliative care, and
- d) are performed by healthcare professionals who know the patient personally and who have a significant clinical relationship with him/her.

#### Limitation of treatment

Unlike euthanasia, "**limitation of treatment**" (LOT) is defined as: the withdrawal or non-implementation of a life support measure (see [HERE](#) our bioethical approach) or any other intervention which, given the poor prognosis of the person in terms of future quantity and quality of life, constitutes, in the opinion of the healthcare providers involved, something futile, which merely contributes to prolonging a clinical situation that lacks reasonable expectations for improvement.

#### Assisted suicide

It is also important to bear in mind the definition of assisted suicide, which consists of **providing the person who wishes to die with drugs or other substances that may be self-administered to induce his or her death.**

#### Difference between euthanasia, assisted suicide and limitation on treatment - LOT

There are, therefore, important differences between euthanasia, assisted suicide, and LOT. While in euthanasia and assisted suicide, death is deliberately and intentionally caused through the administration of an external agent, in LOT, death occurs as a result of the disease, which is what causes the death of the patient. Only in this latter context (LOT) can the action of the clinician, through palliative care, be considered good clinical practice (following the proper actions), regardless of the time elapsed between taking the decision to limit treatment and death. During this period, the activities of the medical team are aimed at relieving pain and alleviating suffering, and death will occur as a consequence of the disease and not as a result of the administration of drugs or other agents.

### **Medical procedures to produce patient death**

In the Netherlands, there are various procedures to produce death of the patient, none of which are related to symptom relief; instead, they **seek to cause death directly through cardiac arrest**. The most commonly used method is the *administration of high-dose barbiturates to induce coma in the patient, followed by the administration of muscle relaxants that cause respiratory arrest and, consequently, cardiac arrest. On other occasions, intravenous potassium chloride is used to directly induce cardiac arrest.*

In 367 cases of euthanasia investigated by Van de Wal investigations, the most widely used drugs for euthanasia purposes were: neuromuscular relaxants in 55 % of cases, barbiturates in 49%, benzodiazepines in 34%, morphine in 29% and other drugs in 9%. In 23% and 20% of cases, the benzodiazepines and barbiturates, respectively, were combined with a muscle relaxant.

The cause-effect relationship between the administration of drugs to induce euthanasia and the time of death is so evident that in several series on the practice of euthanasia in [Holland](#), the death of the patient occurred within the first hour after administration of the drug in more than 60% of cases.

### **[The reality of the practice of euthanasia globally goes far beyond the very definition of euthanasia](#)**

The reality of the practice of euthanasia globally goes far beyond the very definition of euthanasia insofar as "death occurs in patients in the terminal stages of incurable diseases". Because, although it is true that, on many occasions, euthanasia is applied to terminally ill patients, in other cases it is applied to individuals with irreversible, but not terminal, disease.

One group of diseases that have often been associated with euthanasia are the **neurodegenerative diseases**, most notably amyotrophic lateral sclerosis (ALS), which causes progressive muscle weakness that ends in respiratory failure. Accordingly, in a Dutch study conducted in ALS patients, 20% chose euthanasia or assisted suicide to bring about death. Just as the decision to opt for euthanasia with assisted suicide bore no relationship with the clinical aspects of the disease, it was observed that patients who considered religion to be important in their lives were less inclined to request or want euthanasia.

### **Not terminally ill but have irreversible diseases, not in the terminal stage**

In Belgium (see [HERE](#)), most patients who undergo euthanasia are not terminally ill but have irreversible diseases, although. Thus, in some studies, cancer patients accounted for almost 70% of cases in whom euthanasia or assisted suicide was performed. In contrast, in other studies, such as one that analysed death certificates issued in Flanders (Belgium), the **vast majority of diseases that generated a demand for euthanasia were neurological**: neurological deficit secondary to cerebrovascular disease in 28.2 % of cases and non-vascular neurological

processes in 22.4%. Other diseases accounted for 26.5%, cardiovascular disease 14.4%, and cancer 14.4% (2).



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### References

1. Spanish Law 2/2010, of 8 April, on Personal Rights and Guarantees to Die in Dignity. Official Bulletin of the Junta de Andalucía (Andalusian Regional Government)
2. Kimsma G.K. (2002) Euthanasia Drugs in the Netherlands. In: Thomasma D.C., Kimbrough-Kushner T., Kimsma G.K., Ciesielski-Carlucci C. (eds) Asking to Die: Inside the Dutch Debate about Euthanasia. Springer, Dordrecht



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