INTENDED VS. UNINTENDED CONSEQUENCES

- Primary intent dictates ethical medical practice

Many physicians believe that medications used to manage symptoms have an unusually or unacceptably high risk of an adverse event that may shorten a patient’s life, particularly when he or she is frail or close to the end of his or her life. Instead of fully understanding and discussing the potential benefits and risks of these therapies with their patients, taking into account their goals for care, this fear of an adverse unintended consequence often leads clinicians to withhold treatment or dose inadequately, thus leaving their patients suffering unnecessarily. Many physicians inappropriately call this risk of a potentially adverse event, a double effect, when it is in fact a secondary, unintended consequence. When offering a therapy, it is the intent in offering a treatment that dictates whether it is ethical medical practice:

- If the intent in offering a treatment is desirable or helpful to the patient and the potential outcome good (such as relief of suffering), but a potentially adverse secondary effect is undesired and the potential outcome bad (such as death), then the treatment is considered ethical
- If the intent is not desirable or will harm the patient and the potential outcome bad, the treatment is considered unethical
- Concerns about intended vs. unintended consequences are most commonly invoked around such issues as the treatment of pain or dyspnea with opioids. However, all medical treatments have both intended effects and the risk of unintended, potentially adverse, secondary consequences.

Some examples are listed in the following table:

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Intent</th>
<th>Potential Adverse, Secondary Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPN for short gut syndrome</td>
<td>Improved nutritional status</td>
<td>Sepsis, death</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>Cure or reduce the burden of cancer</td>
<td>Immune suppression, cytopenias, death</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>Prevent arrhythmia</td>
<td>Promote arrhythmia, death</td>
</tr>
<tr>
<td>Epidural administration of analgesia</td>
<td>Reduce pain</td>
<td>Sepsis, death</td>
</tr>
<tr>
<td>Stopping all lab tests</td>
<td>Reduce burden of investigation for patient</td>
<td>Electrolyte imbalance, death</td>
</tr>
<tr>
<td>Operation to repair broken hip</td>
<td>Reduce pain, improve function</td>
<td>Cardiac arrest, death during surgery</td>
</tr>
</tbody>
</table>

Principle of Double Effect

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 (e.g., relief of a symptom), knowing that there will be an undesired secondary effect (such as death). Although this principle of "double effect" is commonly cited in symptom control, in fact, it does not apply, as the secondary adverse consequences are more likely not to occur. Euthanasia is not an example of "double effect." The intent in offering the treatment is to end the patient's life through an active medication (see Module 5: Physician-Assisted Suicide).
Concerns about Symptom Management

Concerns that the principle of double effect may be an issue when managing symptoms are raised by the fact that, like other medical treatments, there is a risk that treatments to control symptoms could produce adverse consequences including death, either when improperly used or, very rarely, when properly used. In suffering states of life-threatening illness, death may seem appealing and what is ordinarily intuitive may become complex. For many interventions, such as chemotherapy, TPN for short gut syndrome, surgery, and non-interventions such as stopping all lab tests or avoiding surgery, we make decisions knowing there is a risk of adverse events, in particular, death. As long as (a) the intent is to relieve suffering and not hasten death, (b) death is a possible and not inevitable outcome of the interventions, and (c) there is fully informed consent, there is no ethical concern. In contrast, if symptom control involves treatments that are intended to cause death, as the means to relieve suffering, then there is ethical concern. If the patient seeks hastened death by physician-assisted suicide or euthanasia, the clinical and ethical issues are different. In no case should physicians hypocritically and untruthfully call their ministrations palliative or comfort care when, in fact, the intention is to cause death. Fortunately, these difficult circumstances need not occur. Adequate symptom management can be achieved without causing death. If the intent in offering a medication such as an opioid is to relieve suffering (e.g., pain, breathlessness) and not cause death, and accepted dosing guidelines are followed:

- The treatment is considered ethical
- The risk of a potentially dangerous adverse secondary effects is minimal
- The risk of respiratory depression is vastly over-estimated. Patients will become drowsy, confused and lose consciousness long before their respiratory rate is compromised.
- Symptoms can be well controlled with the interventions outlined in this module and those in Module 4: Pain Management, Module 6: Anxiety, Delirium, Depression, and Module 12: Last Hours of Living. None of these recommendations, properly used, will cause death. In this, they are like all other medical interventions; concerns about unintended consequences are no greater than normal and concerns about double effect do not apply.

Providing Palliative Treatment That Might Hasten Death

- It is the physician’s responsibility to understand to the best of his/her ability the cause of the patient’s suffering, the underlying pathophysiology and psychosocial-spiritual issues, and the possible therapies and pharmacology that could benefit the patient, as well as their potential risks
- It is the patient’s decision, in consultation with her or his physician(s), to decide either to risk the adverse effects of a particular treatment, or forgo the treatment
- Likewise, it is the patient’s decision, in consultation with his/her physician(s), to terminate a course of treatment
- For many patients, the consequences of unrelieved symptoms are worse than the possibility of dying
- The administration of a medication necessary to ease the pain of a patient who is life-threateningly ill and suffering excruciating pain may be appropriate medical treatment even though the effect of the medication may shorten life

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- When physicians provide palliative treatments in an appropriate manner to relieve pain and suffering, they provide a concrete benefit to their patients. For those with advanced illness, the relief will be worth more than the possible risk of death
- If the patient is not capable of making this decision, efforts should be taken to determine through other means a "substituted judgment" or determination of the "best interests" of the patient

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