Physician-Assisted Suicide and Euthanasia: A Comprehensive Review For Pharmacists

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Disclosures

I have no relevant financial or non financial relationships to disclose in relation to the content of this presentation

Objectives

- Define the practice of execution, euthanasia and assisted suicide as they apply to healthcare
- Describe the medications used in execution, euthanasia and assisted suicide as well as discuss the shortages that face these medications
- Explain the current federal and state laws pertaining to execution, assisted suicide and euthanasia as well as outline the pharmacist’s role in these activities
Background

- Euthanasia remains a significant and heavily debated topic in healthcare.
- State laws are constantly changing and pharmacists need to have a comprehensive understanding of the current laws affecting their state.

Definitions

Execution
- The act of putting an individual to death especially as a legal penalty.

Euthanasia
- The act or practice of killing or permitting the death of hopelessly sick or injured individuals (as persons or domestic animals) in a relatively painless way for reasons of mercy.

Physician assisted suicide
- The suicide of a patient suffering from an incurable disease, effected by the taking of lethal drugs provided by a doctor for this purpose.

What medications are used in execution?
Medications commonly used in execution

A three drug series is commonly used in lethal injections across the country. These agents are as follows:

- Sodium Thiopental
- Pancuronium Bromide
- Potassium Chloride

Sodium Thiopental

The first medication used in the lethal injection series is sodium thiopental.

**Mechanism of Action:**

- The primary mechanism of action of this short-acting barbiturate is inhibition of the central nervous system.
  - The drug rapidly reaches the brain and causes unconsciousness within 30–45 seconds.

**Dosing:**

- 20 mg/kg in a small volume of 10 mL normal saline.
Assessment of Anesthetic

Appropriate assurance that the individual has been adequately anesthetized before proceeding with the painful parts of the execution process is essential.

Pancuronium Bromide

The second medication used in the lethal injection series is pancuronium bromide, a neuromuscular blocking agent.

Pancuronium Bromide

Mechanism of Action:

- Act presynaptically via the inhibition of acetylcholine synthesis or release or act postsynaptically at the acetylcholine receptors to induce skeletal muscle paralysis.

Dose:

20 mg intravenously.
The third and final medication used in the lethal injection series is potassium chloride.

Mechanism of Action:
This medication is ultimately responsible for stopping the heart and causing death by cardiac arrest.

Dose:
100 mEq

Summary of Execution Process
- Sodium thiopental
  - Induction of general anesthesia
- Pancuronium bromide
  - Paralysis
- Potassium chloride
  - Cardiac Arrest
Are the same medications used for physician assisted suicide as for execution?

Medications Commonly Used in Euthanasia

Oral Pentobarbital or Secobarbital

- In veterinary euthanasia and in physician assisted suicides in Oregon, a single lethal dose of a long acting barbiturate is typically used

Mechanism of Action:
- Barbiturate with sedative, hypnotic, and anticonvulsant properties
- Depresses CNS activity by binding to barbiturate site at GABA-receptor complex

Dose:
- Pentobarbital -10 gram
- Secobarbital- 1.5 gram
Drug Shortages

Manufacturer Issues

- Hospira is the sole manufacturer of sodium thiopental in the United States
- Hospira recently announced they will no longer produce sodium thiopental
  - This is a result of a global campaign by death penalty opponents to stop production of the medications used in lethal injections
    - Hospira’s attempt to shift production of the drug to a European plant were further prohibited by Italian government officials

Additional Shortages

- Oral Pentobarbital
- Oral Secobarbital
- Pancuronium
Impact of Shortages

The nationwide shortage of sodium thiopental from 2011 resulted in many unfortunate consequences including:

- **Delayed executions**
  - Half of the 17 prisoners condemned to death in the US in January 2014 received a temporary reprieve

- **Forced changes in execution protocols in several states**
  - Six states have utilized alternative execution protocols with varying success

- **Increased financial burden**
  - Delays can increase financial burden by close to $1,000,000 per inmate per month

**Hydromorphone and Midazolam**
- Jan 2015 - Controversial results in Ohio execution

**Nitrogen Gas** (exclusively for execution)
- There are currently studies evaluating the use of nitrogen gas in place of sodium thiopental, pancuronium, and potassium chloride for prisoners being executed

**Injectable Pentobarbital**
- Not as convenient as oral dosage forms and additionally brings up a variety of ethical concerns
Question 1

- True or False:
  - Moral obligations are a major reason for the shortage of medications used in assisted suicide and euthanasia.

Brief History of Execution
First Documented Execution

The first death sentence historically recorded occurred in 16th Century BC Egypt.

British Influence

- Britain has the longest history of capital punishment. The death penalty was often enforced in a number of different ways including:
  - Hanging from gallows (most frequent execution method)
  - Drowning in a pit
  - Beheading (accepted for the upper classes)

Fun Fact

Most of the executions taking place prior to the 1700’s were due to crimes that did not include murder.
Changes to the Death Penalty

- The first reforms of the death penalty occurred between 1776-1800
- Thomas Jefferson and four others, authorized a complete revision of Virginia's laws, proposed a law that recommended the death penalty for only treason and murder

“Let there be light”

- Electrocution as a method of execution came onto the scene in an unlikely manner
  - Edison Company with its DC (direct current) vs. Westinghouse Company and its AC (alternating current) electrical systems

Gas Chambers

- In 1924, the first execution by cyanide gas took place in Nevada
  - The state wanted to secretly pump cyanide gas into the inmates cell at night while he was asleep
First Lethal Injection

Oklahoma passed the first death by lethal injection law, based on economics as much as humanitarian reasons.

Execution Statistics

DEATH SENTENCING

The number of death sentences per year has dropped dramatically since 1990.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sentences</th>
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<tbody>
<tr>
<td>1987</td>
<td>266</td>
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<td>1988</td>
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<td>2001</td>
<td>65</td>
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</table>


EXECUTIONS SINCE 1976 BY METHOD USED

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
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<tbody>
<tr>
<td>Lethal Injection</td>
<td>1247</td>
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<tr>
<td>Electrocution</td>
<td>158</td>
</tr>
<tr>
<td>Gas Chamber</td>
<td>11</td>
</tr>
<tr>
<td>Hanging</td>
<td>3</td>
</tr>
<tr>
<td>Firing Squad</td>
<td>3</td>
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34 states plus the US government use lethal injection as their primary method. Some states utilizing lethal injection have other methods available as backups. Though New Mexico and Connecticut have abolished the death penalty, their laws were not retroactive, leaving prisoners on the states' death rows and their lethal injection protocols intact.
Florida Execution Laws

Capital punishment is legal in the state of Florida

(1) A death sentence shall be executed by lethal injection, unless the person sentenced to death affirmatively elects to be executed by electrocution.

Timely Justice Act 2013

This Florida law was designed to overhaul and speed up the capital punishment process.

History of Physician Assisted Suicide
Supreme Court Ruling

- June 1997
  - The U.S. Supreme Court rules that state laws banning physician-assisted suicide do not violate the Constitution
  - The court leaves the matter of the right to a physician's aid in dying to the states

Oregon Death with Dignity Act

- October 27, 1997
  - This is the first ruling of its kind (51% of voters in favor) and paved the way for other states to advocate for physician-assisted suicide
  - Several attempts were made to delay the implementation of this law, however they were unsuccessful

National Benchmark

- The Oregon Death with Dignity Act has been used as a standard strategy for other states looking to adopt physician-assisted suicide practices
  - The Oregon program requires that the Oregon Health Authority collect information pertaining to program compliance
    - An annual statistical report of the program is made available to the public
The Rise of Dr. Death

- Dr. Jack Kevorkian is an American pathologist and long time assisted suicide advocate
  - Dr. Kevorkian is well known for videotaping the assisted suicide of Thomas Youk, a patient with Lou Gehrig's disease

VIDEO

Criminal Charges

- The CBS video prompted murder charges against Kevorkian and drew national attention
  - Kevorkian was ultimately convicted of second degree murder
    - Kevorkian was sentenced to a 10-25 year sentence
Washington

- November 4, 2008
  Washington’s initiative, the Death with Dignity Act, is passed

Montana

- December 31, 2009
  A Montana Supreme Court ruling rules that the Terminally Ill Act protects a physician who prescribes aid from liability but leaves the decision of physician assisted suicide to the court

Vermont

- May 20, 2013
  - Vermont signs the Patient Choice and Control at End of Life Act into law.
  - Vermont is the only state to define the role of the pharmacist
    - (a) A physician, nurse, pharmacist, or other person shall not be under any duty, by law or contract, to participate in the provision of a lethal dose of medication to a patient
New Mexico

January 13, 2014
- New Mexico rules in favor of an individual’s right to die.
  - An appeal overturned this decision
- However the ruling remains in effect for only Bernalillo County

Revival of the Physician-Assisted Suicide Campaign

November 1, 2014
- Brittany Maynard, a 29 year-old with terminal brain cancer, garnered a national following advocating for physician-assisted suicide
  - Her advocacy led to a major social media campaign as well as heightened political debates

End of Life Option Act

October 5, 2015
- Jerry Brown (the governor of California) signs into law the End of Life Option Act
  - This law legalizes physician-assisted suicide for Californians with terminal illnesses
Question 2

True or False:

As of October 2015, in the United States assisted suicide is only legal in the states of Oregon, Vermont, and Washington.

How does this effect healthcare in the state of Florida?

Elderly Population

Florida has one of the largest elderly populations in the nation, making the issue of euthanasia a relevant healthcare concern.
Review of Florida Law

Health Care Advance Directives
765.309: Mercy killing or euthanasia not authorized; suicide distinguished.

Nothing in this chapter shall be construed to condone, authorize, or approve mercy killing or euthanasia, or to permit any affirmative or deliberate act or omission to end life other than to permit the natural process of dying.

The withholding or withdrawal of life-prolonging procedures from a patient in accordance with any provision of this chapter does not, for any purpose, constitute a suicide.

Revising State Laws

- State laws are constantly changing as a result of the patients-right-to-die movement
- Pharmacists need to be aware of all of the laws that directly impact their practice

Major Florida Movements

<table>
<thead>
<tr>
<th>Proponents</th>
<th>Opponents</th>
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<tr>
<td>Right to Die Movement</td>
<td>Pro-Life Movement</td>
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<tr>
<td>Hemlock Society (renamed Compassion and Choices)</td>
<td>Various Religious Organizations</td>
</tr>
<tr>
<td></td>
<td>National Disability Rights Groups</td>
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Right to Die Movement (For)
Most commonly known advocacy group for physician assisted suicide. Advocacy is conducted on the national, state and local level.

Compassion and Choices (For)
- Compassion and Choices (formerly known as Hemlock Society) is one of the world’s largest and most active physician-assisted suicide support groups.

Pro Life Movement (Against)
- The Pro-Life Movement is primarily focused on anti-abortion activities
  - Increased efforts towards stopping the legalization of euthanasia and impeding the progress of many laws.
Religious Organizations (Against)

- There are opponents who outright condemn all types of euthanasia due to religious reasons
  - Most religions are in agreement with the belief that human life was God’s gift and only God has the ability to take it away

National Disability Rights Groups (Against)

- A number of well respected disability organizations have all adopted positions opposing legalization of suicide including:
  - The National Council on Disability
  - The American Association of People with Disabilities (AAPD)
  - The National Council on Independent Living (NCIL)
- Many of these groups have been teaming up with local independent living centers and state-level advocacy coalitions

Choosing a stance on physician assisted suicide and euthanasia
Review of Pros and Cons

<table>
<thead>
<tr>
<th>Pro’s</th>
<th>Con’s</th>
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<tbody>
<tr>
<td>Patients can die with dignity rather than a shell of their former selves.</td>
<td>Beliefs of decreased value of human life</td>
</tr>
<tr>
<td>Healthcare costs can be reduced</td>
<td>Open the floodgate to non-critical patient suicides and other abuses</td>
</tr>
<tr>
<td>Vital organs can be saved and used to save other patients</td>
<td>Doctors could be given too much power</td>
</tr>
<tr>
<td>Without physician assistance people may commit suicide in messy, horrifying or traumatic ways</td>
<td>Government and insurance companies may put undue pressure on doctors to avoid heroic measures or recommend the physician assisted suicide alternative</td>
</tr>
</tbody>
</table>

What is the role of the pharmacist in physician assisted suicide?
Defining the Role of the Pharmacist

- Pharmacists play a major role in dispensing and counseling patients on the medications used to end their lives.

Issues Facing Pharmacists

- Physician assisted suicide places an increased burden on pharmacists by requiring pharmacists to:
  - Evaluate their opinion on the concept of death with dignity and clinical appropriateness
  - Choose whether or not they want to participate in physician assisted suicide
  - Comfort and counsel patients regarding the use of these medications

American Pharmacists Association

- APhA supports informed decision making based upon the professional judgment of pharmacists, rather than endorsing a particular moral stance on the issue of physician-assisted suicide
  - APhA opposes laws and regulations which mandate or prohibit the participation of pharmacists in physician-assisted suicide
American Society of Health System Pharmacists

ASHP supports the right of a pharmacist to participate or not in morally, religiously, or ethically troubling therapies such as physician assisted suicide.

Question 3

True or False

The American Pharmacists Association encourages pharmacist participation in execution/assisted suicide on the basis that such activities are fundamental to the role of pharmacists as providers of health care.

Conclusion

- Many practitioners, particularly those in the fields of oncology and palliative care, will be faced with patients requesting assistance in dying.
  - Laws regarding physician assisted suicide are constantly changing across the country and will continue to evolve.
- Pharmacists play an essential role in this process and need to be aware of these practices in order to provide optimal pharmaceutical care to our patients.
References


References (Cont.)


Questions

ANY questions?