Aid in Dying Medications & the Clinical Competencies of Prescribing
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Director & Designated Institutional Official
Graduate Medical Education
Assistant Clinical Professor, Supportive Medicine
Course Director & Chair, End of Life Symposium
City of Hope
Thank You!
SAVE THE DATE

End of Life SYMPOSIUM

December 16 to 18, 2021
Waldorf Astoria Las Vegas
Today’s Moderator

Matt Whitaker
C&C National Director
Today’s Speakers

David R. Grube, MD
Family Medicine (Ret.)
National Medical Director
Compassion & Choices

Susan Gess, PharmD, APh
Drug Education Coordinator
Clinical Pharmacy
Kaiser Permanente San Rafael Medical Center
David R. Grube, MD

Family Physician in Philomath, OR 1977 – 2012

Benton Hospice Service – Lumina Hospice
    1980 – Present
    BOD – Chair, Ethics Comm.

Death With Dignity (MAiD)
    First request from patient in 1999
    ~ 30 patients from 1999 – 2012

National Medical Director C&C
    2014 - Present
Susan Gess, PharmD, APh

Over 30 years practice in Clinical Pharmacy

UCSF Medical Center
Kaiser Permanente San Rafael Medical Center

End of Life Option Act
Consulting Pharmacist since 2016 inception
Disclosures

David R. Grube, MD – None

Susan Gess, PharmD - None

Matt Whitaker - None
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by Mark Parisi

ASK ABOUT OUR ANTI-DEPRESSANTS

PHARMACY

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End-of-Life Options

- Pursuing Life-Sustaining Treatment
- Refusing Treatment
- Discontinuing Treatment
- Hospice / Palliative Care
- Voluntarily Stopping Eating and Drinking (VSED)
- Continuous Deep Sedation
- Medical Aid in Dying
Medical aid in dying is a medical practice in which a mentally capable adult with a prognosis of six months or less to live may request a doctor’s prescription for medication which they can choose to self-ingest to peacefully end intolerable terminal suffering.
Authorized in 11 Jurisdictions

Six in the Last Six Years

1 in 5 adults now lives in a state where medical aid in dying is authorized.
Medical Aid in Dying
Eligibility Requirements

• Adult / Resident
• Terminally ill
  (Prognosis of 6 months or less)
• Mentally capable of making informed medical decisions
• Able to self-ingest
How do we respond to a request for medical aid in dying?

Be prepared:
● Education/explore personal beliefs/consults
● Listen…
● Consider context (hospice patient)
● Listen…
● Explore patient’s fears/concerns/wishes/values/beliefs/resources/relationships
● Listen
● (Possibly discuss w/ family)
● Use professional integrity: refer if unable to participate
Provider Components

• **Prescribing Physician ("Attending")**
  • Evaluate patient / document
  • Follow compliance process / complete forms
  • Prescribe medication

• **Consulting Physician**
  • Evaluate patient / document / complete forms

• **Psychiatrist / Psychologist / Lic. Clinical Social Worker**
  • Evaluate mental capacity to make informed medical decision (optional, but required in Hawai‘i)

• **Pharmacist / Nurse / Social Worker / Chaplain**
Important Reminders

Language matters
  Use non-judgmental and kind words
  Medical Aid in Dying is appropriate language
  Medical Aid in Dying is not suicide

Death Certificate
  Public record to establish estate and for epidemiology
  Cause of death is the disease (Lung Cancer, ALS, etc.)

Requests for medical aid in dying do not reflect a failure of palliative care

Mental health evaluations are rarely necessary
Medical Aid-in-Dying Medication

- The type and dosage of aid-in-dying medication prescribed for the terminally ill person can vary with each individual.

- After self-administering the medication, the person usually falls asleep with 20 minutes and dies painlessly and peacefully within an hour or two.

Note: Providers who contact C&C Doc2Doc consultation line can request medication regimens and a list of participating pharmacies.
History

- 10 Gm secobarbital (capsules) or 10 Gm pentobarbital (powder)
- Pentobarbital not available ~ 2013
- Price of secobarbital increased from ~ $200 to $3,000 ~ 2015
- Secobarbital no longer available – 2019
- Varied protocols (chloral hydrate, phenobarbital, amitriptyline, liquid morphine, combinations)
- **DDMP**: Digoxin 50 mg, Diazepam 1 gm, Morphine 15 gm, Propranolol 2 gm.
- **DDMP2**: As above, but Digoxin increased to 100 mg
- **DDMA, D-DMA**
- ? DDMAPh, D-DMAPh, 1/2D-DMA (w/ clarithromycin)
Protocols (5/2021)

- **DDMA**: Digoxin 100 mg, Diazepam 1 gm, Morphine 15 gm, Amitriptyline 8 gm.
- **D-DMA**: As above, but digoxin is given separately, 30 minutes before the other medications.

  ■ Shavelson/Parrot, ACAMAID

- **DDMAPh**: Digoxin 100 mg, Diazepam 1 gm, Morphine 15 gm, Amitriptyline 8gm, Phenobarbital 5 gm.
- **D-DMAPh**: As above, but digoxin is given separately, 30 minutes before the other medications.
**Medications: D-DMA**

- **NPO for 4 – 6 hours (no dairy, no heavy laxatives)**
- **Take usual medications**

<table>
<thead>
<tr>
<th>Time</th>
<th>Medication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Hour Prior</td>
<td>Ondansetron</td>
<td>8 mg</td>
</tr>
<tr>
<td>One Hour Prior</td>
<td>Metoclopramide</td>
<td>20 mg</td>
</tr>
<tr>
<td>One Hour Prior</td>
<td>Ondansetron</td>
<td>8 mg</td>
</tr>
<tr>
<td>One Hour Prior</td>
<td>Diazepam</td>
<td>1 Gm</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Morphine Sulfate</td>
<td>15 Gm</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Amitriptyline</td>
<td>8 Gm</td>
</tr>
</tbody>
</table>
DDMAPh, D-DMAPh

- Addition of 5 Gm of Phenobarbital
- ACA MAID
- 52 Patients
- Shortens average length of time to death
  - 1.2 hours (from 1.5 hours)
- Upper range of times to death also shortened
  - 5.1 hours (compared to 12.5 hours)

Red Flags

- **GI Absorption** issues:
  - GI Malignancy; Swallowing Concerns;
  - Gastroparesis; Cachexia; Bowel Obstruction;
  - Tense Ascites

- **CV Wellness** (Younger patients with ALS)
- **Obesity** (> 300 pounds)
- **Alcoholism**
- **Tolerance** to Opioids/Benzodiazepines
Barriers

- Complexity of MAiD process (variable by jurisdiction)
- Currently MAiD prescriptions must be obtained at a compounding pharmacy
- Cost (lack of Federal/Medicare Insurance)
- Some pharmacies owned by faith-based organizations
- Some pharmacists will not dispense

My Sister Ra Died a Hero, Hazzard W, J Amer Geriatrics Society, 2016, 02-8614

- Waiting periods (KP ~ 30% in CA die during process)
Health Insurance

Federal prohibition:
• Medicare
• VA

Most private insurance and MediCal cover Rx
Pharmacist Consultation
Medical Aid in Dying

Susan Gess, PharmD, APh
• Serve in an integrated health care system
• End of Life program: Physician Leads, Program Coordinator and Patient Coordinators, Pharmacist
• All participation voluntary
• Multiple “Schwartz Rounds” allowed providers to share feelings about the law, nervousness participating, barriers
• Pharmacist appointment with patient coordinated through the Patient Coordinators
• Pre-COVID: Pharmacist hand carried medication set to parent for home visit. Currently: Courier delivers medications prepared at designated pharmacy and pharmacist performs video visit or telephone visit
Support Materials are Critical

- **Patient brochure**
  - Timeline - pictorial version
  - Timeline verbal (opposite page)
  - Helps guide consultation

- **Pharmacist education and information sheet**
  - Time to death summaries
  - Expected phases of death process

- **Standardized note for charting**
  - electronic health record
Comfort Level

• Shadow with an experienced pharmacist (with patient permission)

• Have good supporting materials and feel knowledgeable about drugs, how they work, dying process


• Are you drawn to work in this setting? – not for everyone
Topics Covered in Consultation

- Purpose of the visit/consultation
- Review the medication instructions
- Time sequence for administration
- What to expect
- Safety, storage and disposal
- Patient handout
- Average consultation: 20-30 minutes
Variations in drug regimens / supplies

• **Life ending mixture**
  DDMA, D-DMA, DDMAPh
  Powder for admixture* - 6 month expiration
  Premixed liquid - 2 week expiration

• **Premeds**
  Omeprazole, Haloperidol, Metoclopramide
  Tablets (can be crushed) or liquids

• **Administration supplies**
  Measuring bottle
  Straw
  Syringe

• **Instructions**
  Critical support to verbal instructions

* crushing tablets not recommended - adds a large volume of inert powder and longer time to death
Considerations

- **MD call to pharmacist directly helpful**
  - Let them know prescription on the way
  - Make sure questions are answered up front

- **Ingestion factors to consider**
  - Feeding tube / Rectal catheter administration
  - Liquid versus powder preparation

- **Order 2-3 days in advance of need**
  - May need to get specific medications ordered into stock

- **Cost:** ~$750
Standard kit provided to patient

- Three medication containers (with instructions):
  - 8 oz. glass amber bottle containing DDMA powder
  - 2 tablets of metoclopramide 10 mg
  - 1 tablet of haloperidol 2 mg

- Pharmacy amber 4 oz. bottle (as measuring device)
- Wide bore drinking straw
- Syringe included if G-tube/PEG

- Patient consultation packets (2)
- Self-addressed, postage-paid Take-Away bag (for disposal)
- Medication response card

*DDMA - diazepam 1 gm, digoxin 100 mg, morphine sulfate 15 gm, amitriptyline 8 gm
# What to Expect After Ingestion of DDMA

<table>
<thead>
<tr>
<th></th>
<th>Timeline</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sleep</strong></td>
<td>2 to 40 minutes after taking the medication</td>
<td>After taking the medication, drowsiness occurs. This is soon followed by a deep sleep (loss of consciousness).</td>
</tr>
<tr>
<td><strong>Coma</strong></td>
<td>Minutes to hours after taking the medication</td>
<td>Deep sleep progresses to coma. Breathing slows and often becomes irregular. Periods of shallow and deep breathing may occur.</td>
</tr>
</tbody>
</table>
| **Death** | Within 8 min to hours after taking the medication | Average time to death ~2 hours  
Range: 6 min – 12 hours  
Warn rare cases - chance of extended coma before dying.  
[Noted risk with high opiate doses, impaired gut motility, severely obese. May anticipate and add phenobarbital to regimen] |
COUNSELING POINTS / PATIENT QUESTIONS

DDMA mixture must be ingested within 1-2 minutes

- Will fall asleep quickly – need to get in full dose
- Would not want them to fall asleep before getting the full dose
- Can practice with 3 oz water in advance to test ability

Premedication is an important step 1 hour prior

- Metoclopramide:
  - Helps gut motility to get drug where it needs to be absorbed
  - Help prevent nausea

What is this DDMA mixture and how does it work?

- Diazepam (Valium) - - Slow breathing (respiration)
- Digoxin - - Slows heart rate (used with patients with afib)
- Morphine - - Pain medication that slows breathing and heart rate
- Amitriptyline - - Also affects the heart (causes heart block, etc)

What will the mixture be like and taste like?

- Mix with clear juice
- Will be milky white and a bit gritty
- Can chase with sorbet to mask bitterness
  - Alternative option - Alcohol chaser – assess seizure risk

PROVIDE THE “WHY“
Amitriptyline and “burning”

- Amitriptyline may cause mild symptoms of oropharyngeal ‘burning’
  - Noted as severe in ~10% of patients

- Patient should be warned in advance
  - Calm reassurance and expectation can decrease symptoms

- Pausing or stopping may increase mucosal exposure

- Spoonful of sorbet can resolve symptoms
  - Loving effect when administered by family
  - Cool and soothing
  - Sorbet non-milk containing so no interference with drug absorption
  - Helps with bitter taste of the overall mixture
Other helpful tips for patients / families

• **Positioning**
  Best if sitting or slightly upright - avoid regurgitation
  Place of preference - garden, favorite chair

• **Ensure no interruptions**
  Make sure all goodbyes are said
  Don’t want interruptions during the process

• **Trial run of 3 ounces liquid**
  Reassure that they can drink within 1-2 minutes

• **Peaceful passing for the patient - no pain**

• **Dispose of unused medications safely**
**Varying Experiences**

- **Different Pharmacist styles**
  - matter of fact
  - emotionally supportive

- **Be ready for different patient reactions**
  - straightforward little emotion
  - often a lighter atmosphere than you might think
  - need some time as reality sinks in
    - “It becomes very real when you get the medications in hand.”
  - very emotional
    - “It’s okay. I can wait until you are ready.”

*Note:* You can be professional and still tear up.
The Rewards

• Providing people with a choice
  - more than 30% of patients never ingest, but feel relief just having medication available
  - number one reason patients’ list for choosing MAiD is fear of losing autonomy

• Supporting both the patient and the family
  - Information
  - Emotional support (takes many forms)

• Some of the most meaningful work you might ever do
Patient Case:
Questionable mental clarity at consultation

Wife confirmed patient ready for consult via early am phone call
Pt in hospital bed in entry room/living room - completely unarousable

Can you leave the medications with the wife?
- by law, need to consult the patient directly
- patient needs to submit last consent/attestation

Upon further questioning . . .
- Hospice administered lorazepam night previous and increased pain medication from which patient has not aroused.
- Reason for increased meds → patient disoriented from pain and cornered wife in bathroom doorway with knife