

LIVE  
WEBINAR  
SERIES

End of Life  
SYMPOSIUM

# **Aid in Dying Medications & the Clinical Competencies of Prescribing**



**Chandana Banerjee, MD, HMDC**

*Director & Designated Institutional Official*

*Graduate Medical Education*

*Assistant Clinical Professor, Supportive Medicine*

*Course Director & Chair, End of Life Symposium*

*City of Hope*

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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

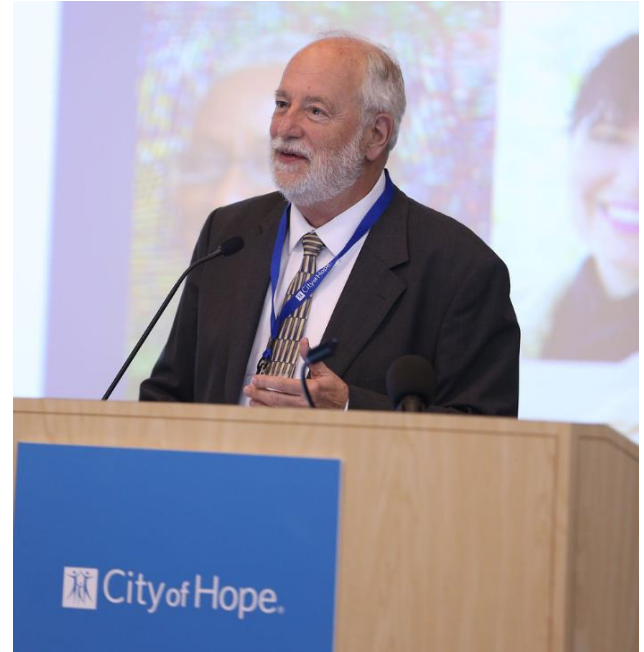
# David R. Grube, MD

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**



# 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**

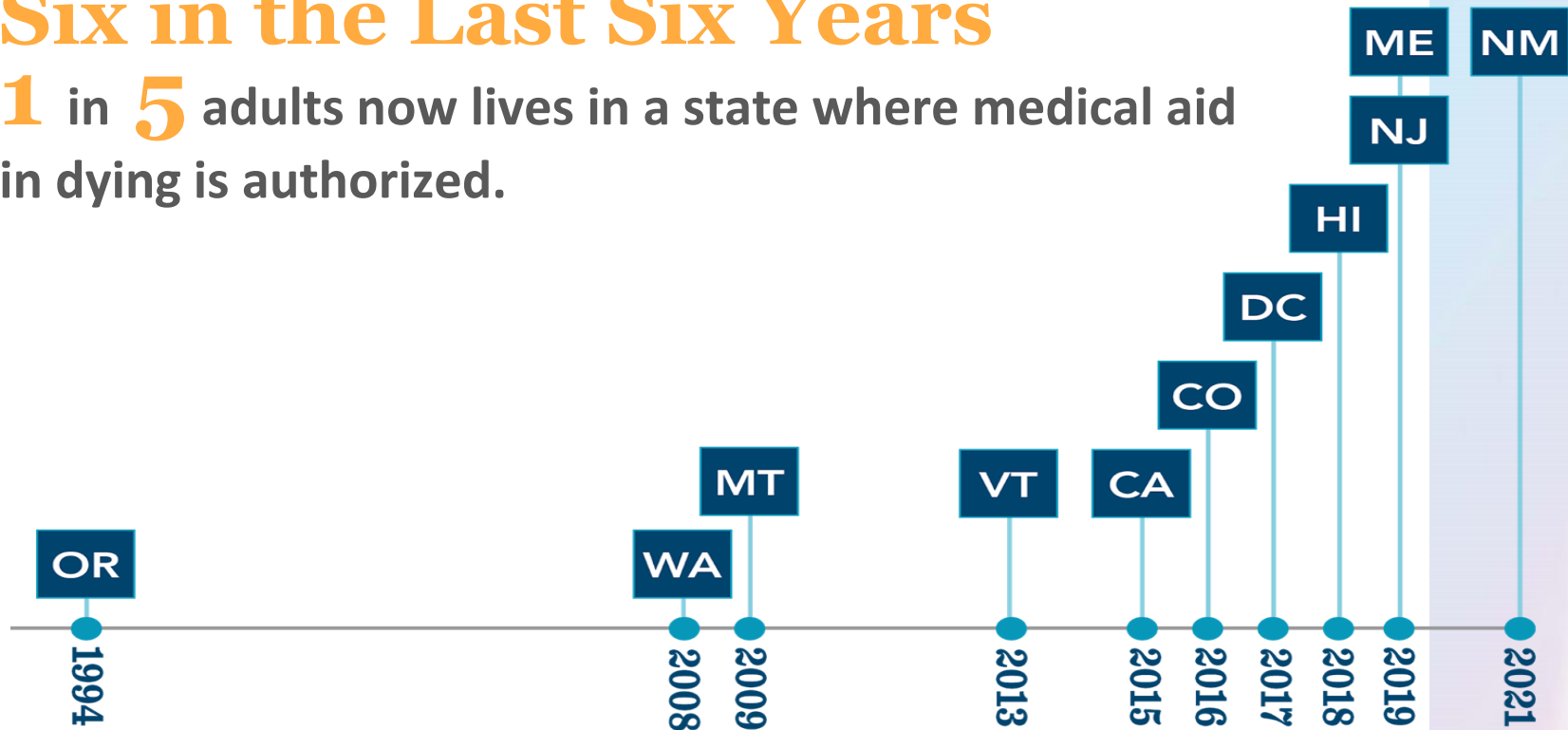
# Medical Aid in Dying

**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

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# 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 within 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

One Hour Prior	● Ondansetron	8
	mg	
One Hour Prior	● Metoclopramide	20
	mg	
	● Ondansetron	8
Ingestion	mg	
	● Metoclopramide	
	● Diazepam	1
	Gm	
	● Morphine Sulfate	15 Gm
	● Amitriptyline	8
	Gm	

# 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)

<https://www.acamaid.org/wp-content/uploads/2021/01/Adding-Phenobarbital-to-the-D-DMA-and-DDMA-Medication-Protocols-for-Medical-Aid-in-Dying-1-1.pdf>

# 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**

A photograph of a herd of elephants in a savanna setting at sunset. The elephants are standing near a watering hole, and the scene is bathed in the warm, golden light of the setting sun. The background shows a line of trees and a clear sky.

# Pharmacist Consultation Medical Aid in Dying

Susan Gess, PharmD, APh

# — A little context . . .

- 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

Online guidance: <https://endoflifewa.org/wp-content/uploads/2020/02/Preparations-for-the-Last-Day-Feb-2020.pdf>

- Are you drawn to work in this setting? – not for everyone



## Timeline For Preparing and Taking the Medication



12 hours  
before

Patient should stop any medications, **except those used for comfort.**



5 hours  
before

Patient should finish their last large meal 5 hours before taking the life-ending medication.



1 hour  
before

Patient should take 2 tablets of metoclopramide (Reglan) and haloperidol (Haldol - tablet or liquid) by mouth.



Immediately  
before

Caregivers should start mixing DDMA powder (life-ending medication) with liquid.



Patient takes  
DDMA

Patient takes DDMA.



# 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

	Timeline	Notes
Sleep	2 to 40 minutes after taking the medication	After taking the medication, drowsiness occurs. This is soon followed by a deep sleep (loss of consciousness).
Coma	Minutes to hours after taking the medication	Deep sleep progresses to coma. Breathing slows and often becomes irregular. Periods of shallow and deep breathing may occur.
Death	Within 8 min to hours after taking the medication	Average time to death ~2 hours Range: 6min – 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

## PROVIDE THE “WHY “

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

# 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