

# Cancer Associated Side Effects: Complementary and Alternative Methods for Relief

Don S. Dizon

Associate Professor, OB-Gyn and Medicine

The Warren Alpert Medical School of Brown University

Program In Women's Oncology

Women & Infants' Hospital of Rhode Island

Deputy Editor, Oncology

UpToDate

# Scope

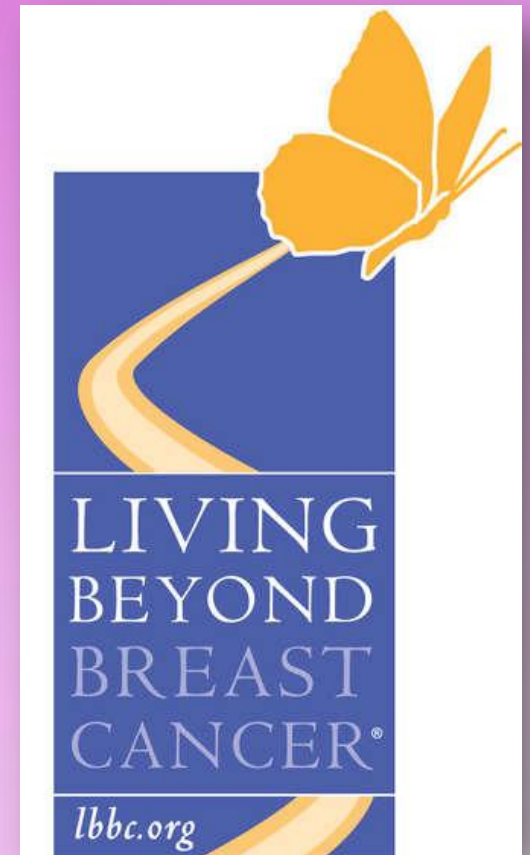
- Living beyond breast cancer:
  - New cases in 2010: Approximately 210,000
  - Living with breast cancer in 2010: Over 1.3 million
- Breast cancer is not one cancer
  - Genomic characterized subtypes
  - Prognosis variable: Approximately 25% with MBC will survive beyond 5 years
- Presentation is variable:
  - 1/3<sup>rd</sup> have locoregional recurrence
  - 2/3<sup>rd</sup> have metastatic disease elsewhere

# Where does breast cancer go?

Organ	Initially involved (%)	Involved at autopsy (%)
Bone	40-75	44-71
Lung	5-15	59-79
Pleura	5-15	23-51
Liver	3-10	56-65
Brain	<5	9-20

# Symptoms- Based on Diagnosis

- Fear of death
- Coping
- Fatigue
- Depression
- Insomnia
- Sexual dysfunction



# Symptoms – Based on site

Site	Symptom(s)
Bone	Pain, loss of mobility
Brain (CNS)	Headache, confusion, weakness, seizures
Skin	Infection, bleeding
Liver	Nausea, pain, shortness of breath, itching
Lung	Shortness of breath, cough
Lymph nodes	loss of function, pain

# Where to turn

- Western medicine
- Psychosocial support
  - Worry tops the most important symptoms
  - This is one of the unmet needs
- Complementary care
- Alternative care



Aranda S, et al. Eur J Cancer Care 2005; 14:211; Kenne Sarenmalm E, et al. J Pain Symptom Mgt 2007;34:24.

Image: [www.mattstone.blogs.com](http://www.mattstone.blogs.com)

# Scope

- CAM therapies in common use
  - 50-70% of breast cancer patients use some form of treatment
- Most patients do not inform MDs
- Complementary versus Alternative:
  - “Complementary” indicates adjunctive treatments used together with traditional (Western or Mainstream) medicine
  - “Alternative” indicates treatment used independent of traditional medicine (often unproven)



# Does it work:

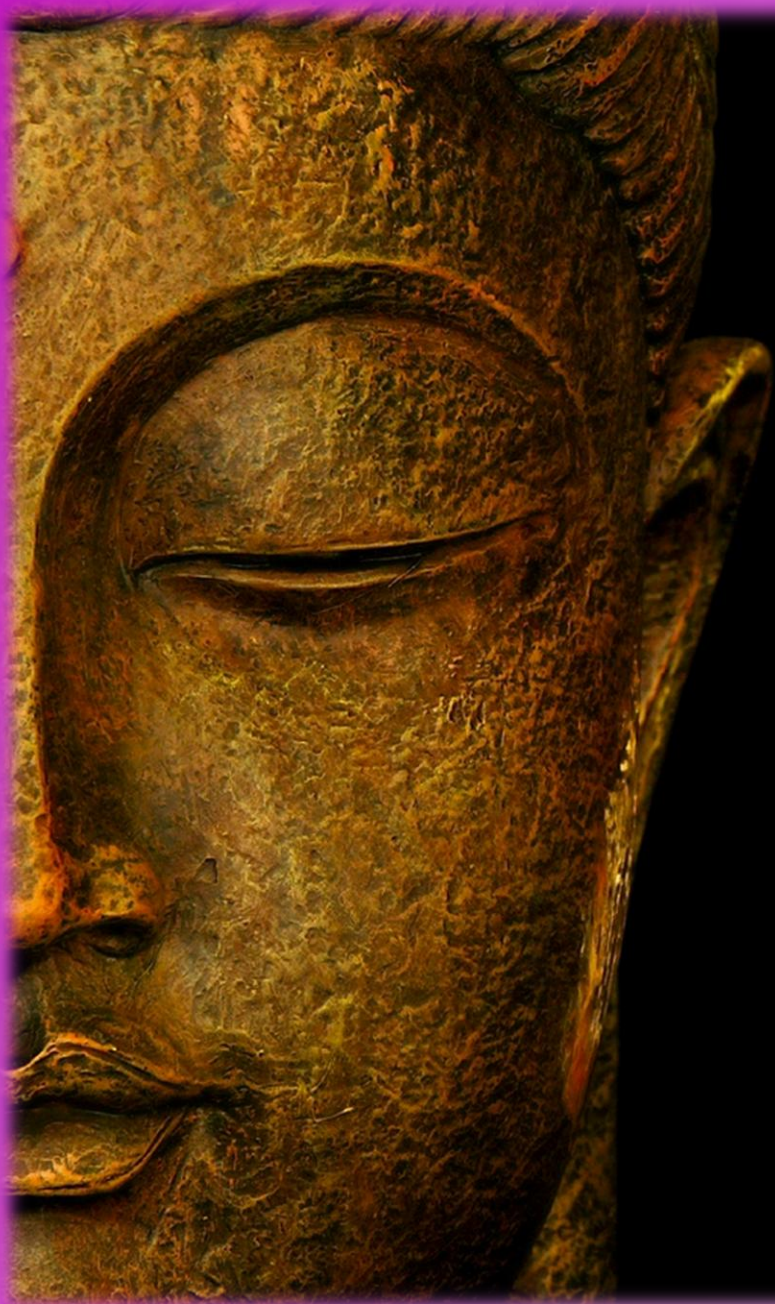
## Questions to ask

- WHY would it work?
  - Interventions informed by theory are more effective than those that lack a theoretical basis
- Is there any evidence it works?
  - Who is judge of the evidence? YOU ARE
- What are the RISKS?
  - Nutrition aides



# Theoretical considerations

- Social Cognitive Theory – Self-Efficacy
  - Informs one's confidence in performing a specific behavior
- Integrative Medicine Theory – Combining therapeutic modalities into a coherent protocol aimed at “healing” the whole



**MODALITIES IN CAM**

# Accupuncture



Needles, pressure, or heat  
at accupuncture points

Traditional Chinese  
medicine

Based on belief in QI (vital  
energy) that travels  
along meridians

QI affects the spiritual,  
emotional, mental and  
physical condition

# Accunpuncture

- What the “evidence” suggests:
  1. Accupuncture can alleviate pain as an adjunct to pain medications
  2. Compared to sham technique, accupuncture helped treat pain associated with Ais
  3. It can help reduce nausea and vomiting due to cancer therapy
  4. It can help reduce hot flashes, improve sleep, and reduce depression



# Nutrition

- Three A's:
  - Anti-inflammatory: Omega 3 fatty acids
  - Anticarcinogenic: tomatoes, saffron
  - Antioxidants: Pomegrante, red grapes, red wine, berries, beans, green and black tea, onions, chives, garlic, cabbage
- Rationale: Food enhances the immune system and helps body fight cancerBlack raspberries, curry, citrus fruits, green tea, pomegrante, nuts



# Nurses Health Study

- Observational study
- 1999 analysis: 1982 women with BC.
  - No effect on outcome based on intake of fruit, red-meat or grain. BUT: Women with MBC had **lower mortality rate** with vegetables, carotenoids, fiber intake
- 2005 analysis: 2619 women with BC.
  - No effect on mortality

# Women's Healthy Eating and Living Study

- 2005 report: 205 women with Recurrent BC
  - Increased risk of BC with lowest intake of carotenoids
- 2007 report: Compared to intervention to observational groups followed for 7 years:
  - No change in risk of BCE (17% in each, HR 0.96)
  - No change in death (10% in each, HR 0.91)

# Women's Interventional Nutrition Study

- Postmenopausal women with newly dx BC (n=2437)
- Intervention: reduction of fat intake to 15% of energy
- Results:
  - Lowering fat intake associated with lower risk of BCE (10 versus 12%, HR 0.76, 95% 0.60-0.98)
    - ER negative cancer: HR 0.58, 95% CI 0.37-0.91
    - ER positive cancer: HR 0.85, 95% CI 0.63-1.14
  - No difference in Overall survival



# Exercise and Fitness

- Improves QOL
- Systematic review:
  - + General QOL
  - + Breast cancer-specific QOL
  - + Improved cardiorespiratory fitness
  - + Improved physical functioning
  - + Improved fatigue
  - ? Improvement in survival



# Mind-Spirit Interaction

- Meditation, Yoga, Tai-Chi, Biofeedback
- Rationale: The mind can be used to influence health
- Impact on survival? Maybe...
  - Block Center for Integrative Care:
    - Profiled 90 patients (Median age, 46)
    - Treatment: Nutrition, fitness, and mind-spirit instruction
    - Median survival 38 mos (95% CI, 27-48)
    - 5-year SR: 27% (Control patients, 17%)



**APPROACHING SYMPTOMS**

# Cancer-Related Fatigue

- Definition: Unrelenting sensation of tiredness
  - Disproportionate to level of activity
  - Unrelieved by sleep or rest
  - Physically debilitating
- Most prevalent symptom related to Cancer
  - Affects 30-90%+ during treatment
  - 20-40% still affected after treatment

# Cancer-Related Fatigue

- Medical interventions are limited:
  - Methylphenidate
  - Erythropoietin stimulating agents
- CAM:
  - Exercise
  - Acupuncture
  - Acupressure
  - Massage





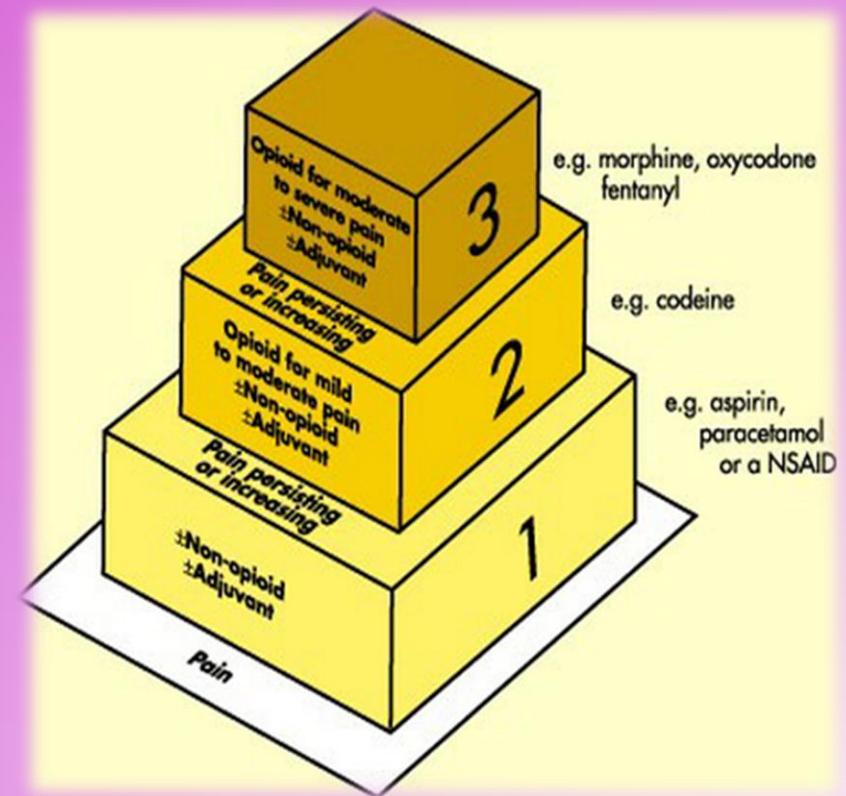
# Pain

- Affects over 70% of people living with advanced disease
- Different forms:
  - Nociceptive
  - Neuropathic
  - Visceral
- Treatment must be multidisciplinary



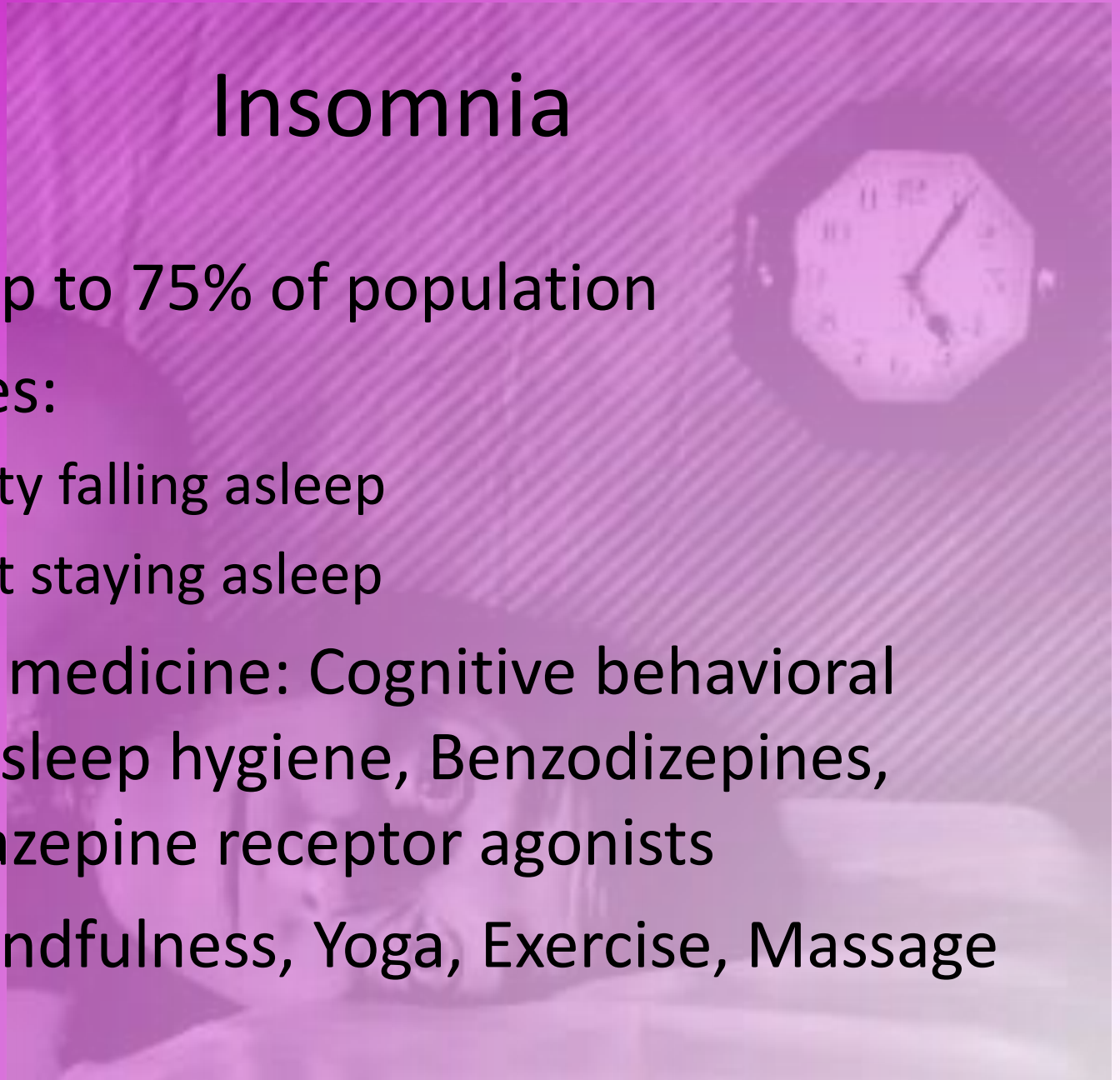
# Managing Pain

- Western medicine:
  - Neuropathic pain: Tricyclic antidepressants, Anticonvulsants (ie, gabapentin), topical anesthetics, Opioids
  - Nociceptive pain: Anti-inflammatory agents, Opioids, Bisphosphonates (bone)
  - Opioids are important but are NOT an answer by themselves



# Insomnia

- Affects up to 75% of population
- Two types:
  - Difficulty falling asleep
  - Difficult staying asleep
- Western medicine: Cognitive behavioral therapy, sleep hygiene, Benzodizepines, Benzodiazepine receptor agonists
- CAM: Mindfulness, Yoga, Exercise, Massage





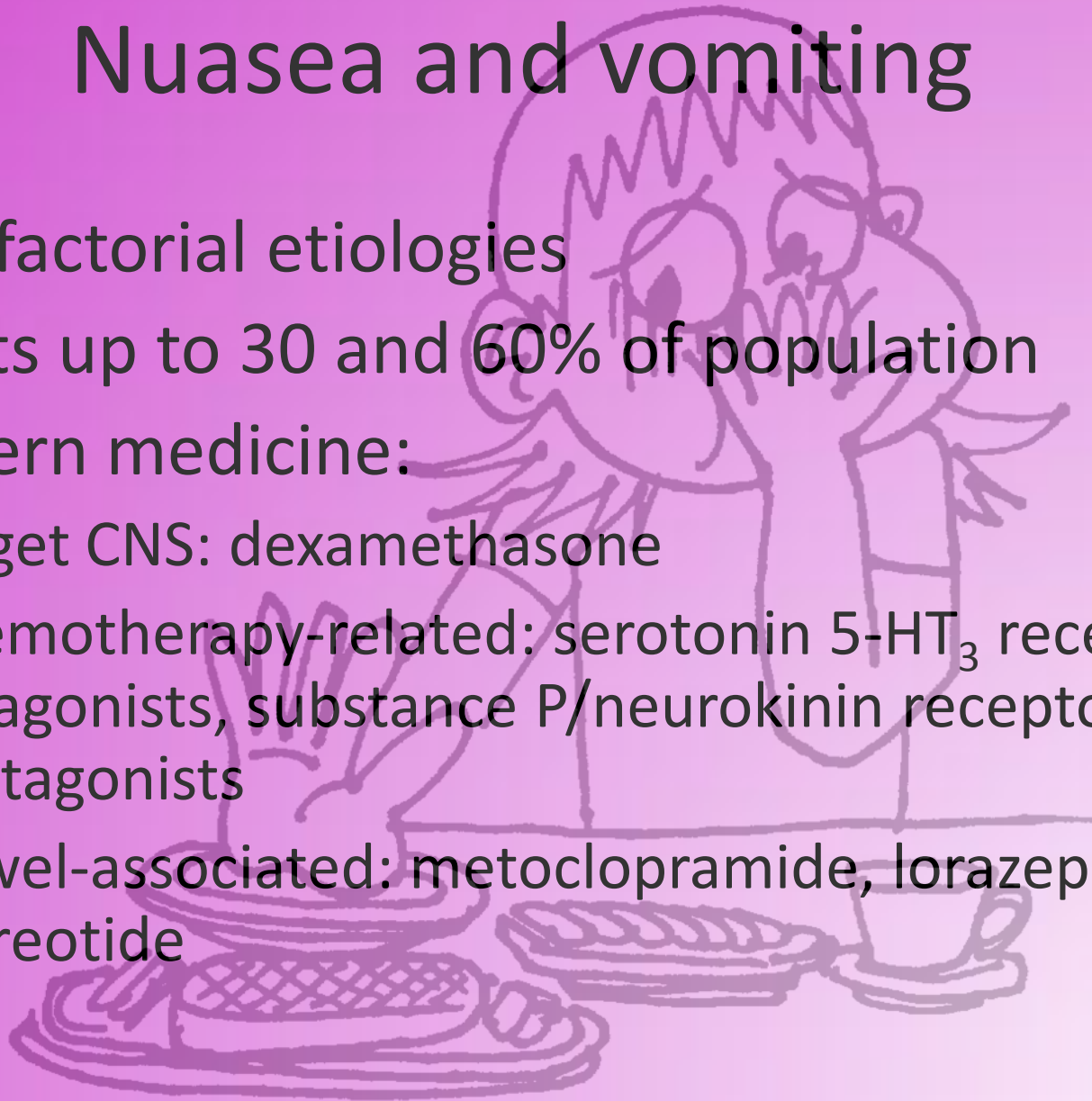
# Dyspnea



- Usually not a symptom of lung metastases
- Dyspnea = shortness of breath (as perceived)
  - Chest tightness, Air hunger, suffocations, breathlessness
- Cancer involving pleura or lymphatic channels can cause dyspnea
- Western medicine: Opioids (relieves dyspnea)
  - Oxygen?
- CAM: Relaxation, Breathing retraining

# Nausea and vomiting

- Multifactorial etiologies
- Affects up to 30 and 60% of population
- Western medicine:
  - Target CNS: dexamethasone
  - Chemotherapy-related: serotonin 5-HT<sub>3</sub> receptor antagonists, substance P/neurokinin receptor antagonists
  - Bowel-associated: metoclopramide, lorazepam, octreotide

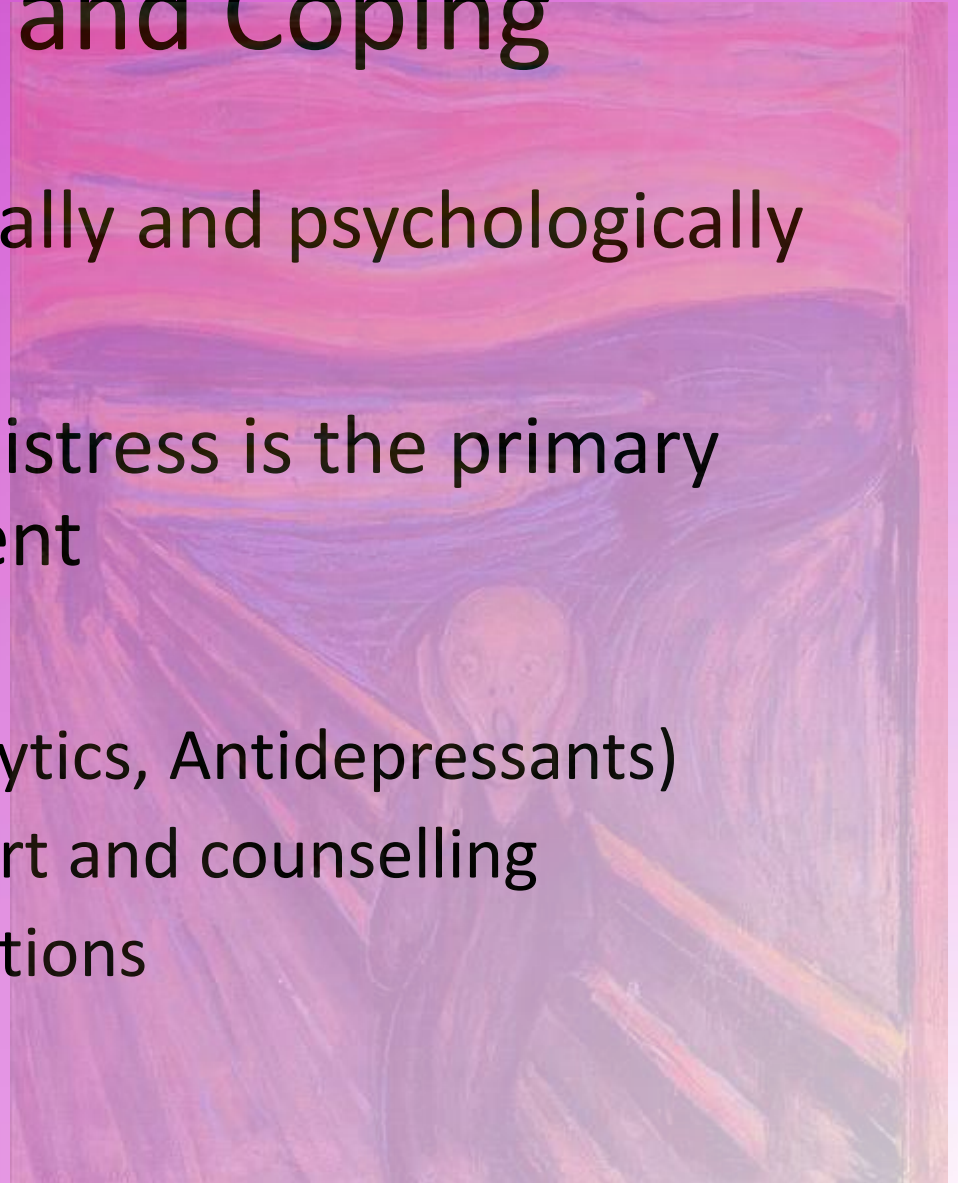


# Anorexia

- Typically affects patients as they approach end of life
- Alteration in physical appearance can be severely disruptive
- Approach: Find what can be fixed
  - For anorexia unrelated to bowel obstruction: Megesterol acetate, marijuana, dronabinol
  - Tube feeding, TPN does not help anorexia or longevity

# Distress and Coping

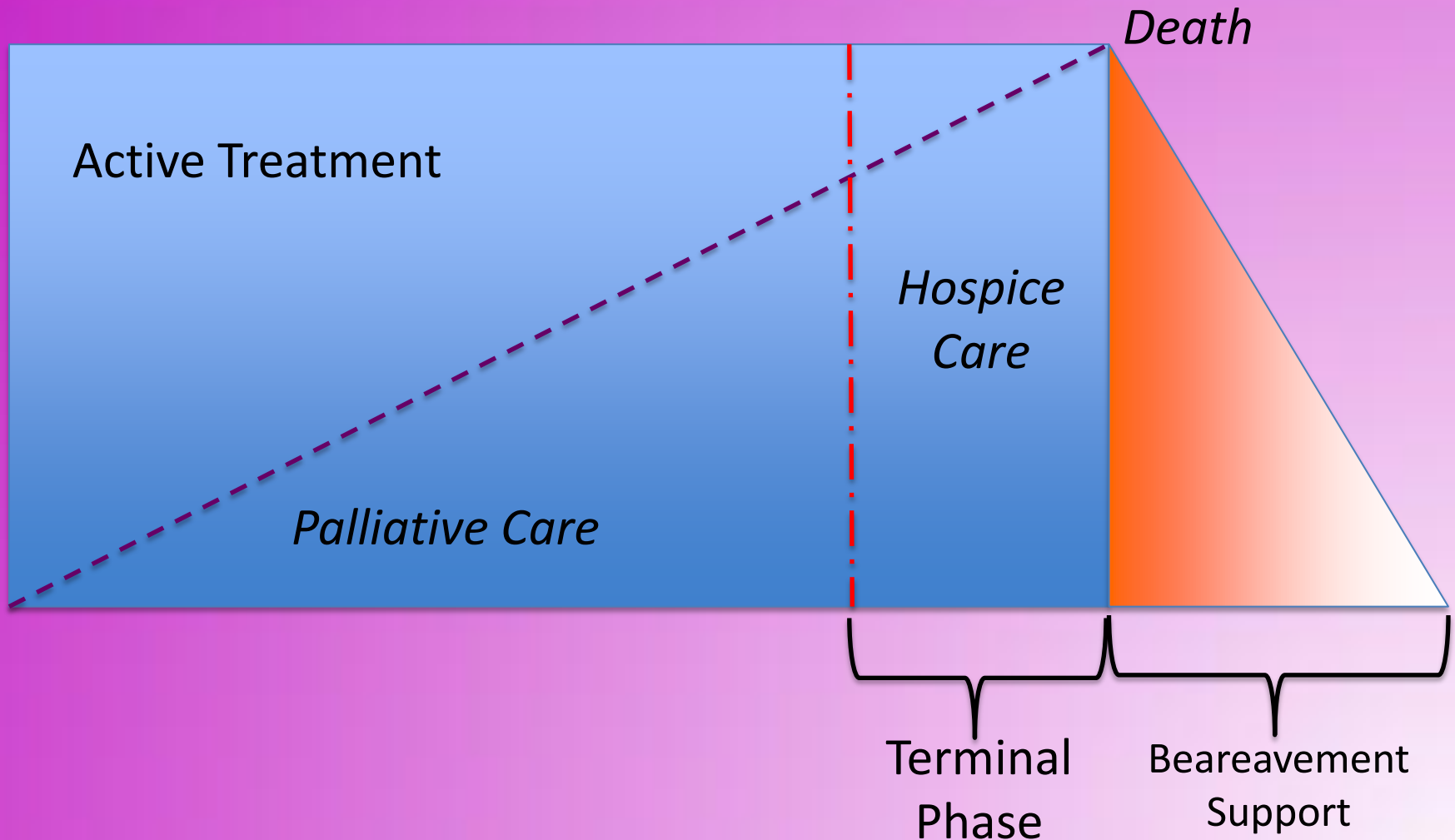
- Can manifest physically and psychologically
- Very much real
- Subjective level of distress is the primary impetus for treatment
- Treatments:
  - Medications (Anxiolytics, Antidepressants)
  - Psychological support and counselling
  - Mind-body interventions
  - Exercise



# Palliative Care

- Term induces anxiety and fear unnecessarily
- Temel J, et al. NEJM 2010:
  - Early initiation of palliative care in patients with advanced/ metastatic NSCLC was associated with improved survival, regardless of treatment received
- Aim: Symptom management to improve quality of life
- Palliative care ≠ Hospice care

# Palliative care versus hospice care



# Conclusions

Metastatic breast cancer is a diagnosis, but it does not define you.

Symptoms can be treated

There is no such thing as patients anymore- we are all partners in this journey.

Bear in mind: Treatment must address the disease, but not at the cost of your own life.

And above all else:

It comes down to one simple choice....



# Conclusions

“Get busy living, or get  
busy dying.

Get busy living...

Or get bu

Andy Duffresne

