WHY ME?
CONVERSATIONS WITH WOMEN NEWLY DIAGNOSED WITH BREAST CANCER

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Disclosures:

Contents of this talk are based on reflections not rigorous scientific process
What causes breast cancer? A systematic review of causal attributions among breast cancer survivors and how these compare to expert-endorsed risk factors
Relevance:

• Causal thinking associated with adjustment and distress
• Patient voice and research trajectory
Why Me?

MALE BREAST CANCER

- Men have a 1:800 risk while women have a 1:8 risk
- Male breast cancer represents 0.5-1% of all breast cancers
- Risk factors include
  - Family history but still a minority…
  - Hormonal factors: estrogen to androgen ratio
Why me?

“I always knew that I would be diagnosed with breast cancer”
Myths about Hereditary Cancer

• Inevitable if in the family
• Lack of appreciation of autosomal dominant inheritance,
  • 50/50 chance of having gene
• Penetrance not 100%
  • Not everyone who has inherited a mutation gets cancer
Why me?

“Cancer is NOT in my family”

- No appreciation that hereditary cancer genes may be inherited from father
- No appreciation that family history of certain other cancers may be associated with genetic risk
- No appreciation of other risk factors
Why me?

“But I get my mammogram every year...”

- Mammograms do not prevent breast cancer
- Mammograms do allow for detection of smaller tumors
- Mammograms may detect “subclinical” cancer, DCIS potential cancers that may take years or may never cause harm
Why me?

“My mammogram missed the cancer...”

- 20% of cancers are mammographically occult
- Palpable mass needs to be evaluated even if the mammogram is normal
Mammographic Breast Density

- Women understand density makes mammogram harder to interpret
- Lack of awareness of density as a risk factor
- Density is a marker of cumulative estrogen exposure
- Genetic influence
Why me?

“Did this happen because I took hormones?...”

- Complex relationship of risk with post menopausal hormone treatment
  - Estrogen alone no risk
    - WHI JAMA 2013
  - Estrogen plus progesterone increases risk
    - Longer duration and higher doses
    - WHI JAMA 2002
    - JAMA Oncology 2015
Why me?

“I am 79. I thought I was too old to get breast cancer…”

• Age is the most important risk factor for breast cancer second only to female sex
Why me?

“I don’t smoke or drink.
I eat organic foods.
I exercise every day.
I am so healthy, how could this happen?”

• Life style matters but some people may still get cancer
Lifestyle factors influencing likelihood of diagnosis

- Exercise: at all stages of life lowers risk
- Diet: Mediterranean diet
- Alcohol: increased intake associated with higher risk
  - Binge drinking
  - Metabolism
- Smoking: modest increase

Lifestyle factors influencing risk of recurrence

- Exercise: reduces risk by 30%
- Diet: low fat diet
  - WINS study benefit but also experienced weight loss
  - WHEL study no difference
- Alcohol: less evidence for recurrence
- Smoking – risk higher risk of secondary cancers
Why me?

• Because I had radiation treatments for Hodgkin's disease

• Yes- sadly early success led to late failure

• Girls treated in teens and twenties at higher risk of breast cancer 20-30 years later

• Watch more closely with MRI starting at age 30
Why me?

“It’s rampant in my neighborhood...”

- Concern about exposures at home or work
  - Water
  - Soil
  - Air

- Geographic cluster regions exist

- Familial tendency related to an exposure
Why me?

- “I’ve been under so much stress...”

- Stress may effect
  - Sleep
  - Weight
  - Ability to exercise

- Stress and immune function
Stress and breast cancer risk

Self-reported stress and risk of breast cancer
Felicia D. Roberts M.A., Polly A. Newcomb M.P.H., Ph.D., Amy Trentham-Dietz M.S., Barry E. Storer Ph.D.

American Journal of Epidemiology. 160(11):1079-1086, DECEMBER 1ST, 2004
PMID: 15561987
Issn Print: 0002-9262
Publication Date: December 1st, 2004

Job Stress and Breast Cancer Risk: The Nurses’ Health Study
Eva Schernhammer; Susan Hankinson; Bernard Rosner; Candyce Kroenke; Walter Willett; Graham Colditz; Ichiro Kawachi;

Influence of stressors on breast cancer incidence in the Women’s Health Initiative.
By Michael, Yvonne L., Carlson, Nichole E., Chlebowski, Rowan T., Aickin, Mikel, Weihs, Karen L., Ockene, Judith K., Bowen, Deborah J., Ritenbaugh, Cheryl
Health Psychology, Vol 28(2), Mar 2009, 137-146
Why me?

• Only can answer in the minority of newly diagnosed individuals- important to communicate uncertainty

• Important to appreciate that even though healthy lifestyles may not prevent an individual from being diagnosed with cancer, they will have a better prognosis after diagnosis

• Likely multifactorial with contributions based on genetic susceptibility and lifetime exposures

• Many unanswered questions
Why me?

- Chance? Or the unknown…

- We are here to investigate and learn