# Mirth is God's Medicine

Coping with Cancer, as a Physician and

Lessons learned from the other side of the stethoscope

Heather Thompson Buum, MD



#### About me

Dr. Heather Thompson Buum is an Associate Professor at the University of Minnesota in the Division of General Internal Medicine. She graduated from Hamline University in 1993 with a BA in Biology, then went on to complete both medical school and residency at the University of Minnesota. She joined the faculty in 2002 and devotes half her time to patient care, practicing both outpatient primary care and inpatient hospital medicine. The remaining time she spends in various teaching roles. In her free time, Dr. Thompson enjoys running, cooking, and an occasional round of golf. She lives with her husband and two children in St. Paul



### Then, in 2016, my own health issue arose...



### The early weeks

- --What is the exact tumor type and stage? What about hormone receptor status? HER2 positivity?
- --What is my prognosis?
- --What is the treatment plan?

#### Million Dollar Questions

What type of surgery should I have? Do I opt for reconstruction? What about contralateral prophylactic mastectomy? If I want to keep the left, am I going to be kicking myself down the road, going through the same thing on the opposite side?

How do I tell my children? Do I let them know right away, or wait until we have more of a plan?

Is this genetic? If so, what about my kids? How can I help them, protect them? What should I do if testing is positive?

Will I need chemo? Radiation? If so, will I feel like death warmed over, or will I be able to work? To function? I am a mom and a full time physician...

#### Later, More Million Dollar Questions

What type of imaging should I have? Is 3D mammography really almost as good as MRI?

How long should I stay on Tamoxifen? When is the peak risk of recurrence; am I ever "out of the woods"?

I haven't had a period in almost a year; am I technically in menopause? Or is this somehow different? What about bone density testing?

I've read about increased risk of a second malignancy; does this affect other screening? My radiologist was a 54 year old woman who shared with me that she had metastatic disease at her first colonoscopy...

### And, survivor guilt is "a thing..."

- --HR positive, premenopausal: I can take tamoxifen
- --Sentinel nodes negative: I didn't need radiation
- --Chose not to reconstruct after simple mastectomy: quick recovery
- --Low oncotype score: Chemotherapy not recommended

### Coping mechanisms that worked for me

- --Exercise
- --Music
- --Faith
- --Writing
- --Humor

### Audience poll

- 1. How many of you have engaged in the creative writing process? Poems, essays, short stories, journaling, etc
- 2. How many of you have written about your diagnosis?
- 3. How many have published creative writing pieces?



## Therapeutic aspects of writing: supportive studies

- --Positive Affect Journaling in the Improvement of Mental Distress and Well-Being in General Medical Patients With Elevated Anxiety Symptoms: A Preliminary Randomized Controlled Trial. *J Ment Health 2018 Dec 10;5(4):e11290. doi: 10.2196/11290.*
- --Efficacy of expressive writing intervention in reducing psychiatric symptoms among patients with first-time cancer diagnosis: a randomized clinical trial. Support Care Cancer 2019 May;27(5):1801-1809

### Therapeutic aspects of writing: equivocal

- --Expressive writing intervention and self-reported physical health outcomes: Results from a nationwide randomized controlled trial with breast cancer patients. *PLoS One 2018 Feb 23;13(2):e0192729*
- --The effect of expressive writing intervention on psychological and physical health outcomes in cancer patients—a systematic review and meta-analysis. *Psycho Oncology. 2015;24(11):1349–59*
- --But, authors note that certain subgroups did demonstrate benefit:
  - Patients writing about their own cancer
  - Patients with relative lack of social support



Mirth is God's medicine.
Everybody ought to bathe in it. Grim care, moroseness, anxiety-all this rust of life-ought to be scoured off by the oil of mirth.

Henry Ward Beecher

WHEN PROBLEMENT OF

- Humor and physical health: small/limited studies, but generally show positive physiologic effects
  - Decreasing stress hormones epinephrine and cortisol while increasing the activation of the mesolimbic dopaminergic reward system (Berk, 1989 and 2001)
  - Boost immunity via increased NK cell activity (Hayaski, 2007)
  - Reduced rates of recurrent MI, arrhythmias in cardiac rehab patients (Tan, 2007)
  - Anti-inflammatory effect: Decreased levels of IL-6 (Matsuzaki, 2006)
  - Improved glycemic control (Hirosaki, 2013)
  - Increased pain tolerance (Zweyer, 2004 and Dunbar, 2012)

- Humor and mental health:
  - Improved depression and mood (Foley, 2002 and Hirsch, 2010)
  - Improved mood and coping capacity (Falkenberg, 2011)
- Laughter-inducing therapies: Systematic review and meta-analysis, van der Wal and Kok, Social
   Science and Medicine 2019. Most common outcomes measured: depression, anxiety, stress
  - o In 26 studies, depression significantly decreased due to laughter-inducing therapy.
  - In 14 studies, anxiety significantly decreased after laughter-inducing therapy.
  - In 19 studies, stress significantly decreased due to laughter-inducing therapy.
    - Measured subjectively as perceived stress (10)
    - Objectively as a cortisol level (9)
- Conclusions:
  - Laughter-inducing therapies may improve depression, anxiety, and perceived stress.

- Humor and learning:
  - Humor and laughter promote learning and retention by reducing stress, anxiety, and tension, while sustaining attention, increasing self-esteem, alertness, creativity, motivation, and memory/recall.
    - Teslow 1995, Wanzer 2010, Claus 2012, Lugan 2016
  - Ziv and colleagues (1981) assigned two groups of students enrolled in a statistics course to a humor vs nonhumor group.
    - Each group was taught by the same professor, and the humor used was relevant to the class material and delivered in an "optimal" dosage of three to four humorous activities per lesson.
    - The humor group outperformed the nonhumor group on the final exam by 10%.
    - He replicated these results using a different teacher, a different subject, and a different set of students and obtained similar results.

### "Think-Pair-Share" = Think, Write down, Share

1. What challenges do you encounter finding time to write? What solutions have worked well for you?

OR

 Have you found the use of humor (in everyday coping, writing, or teaching) effective?

### Doctor as patient: Lessons learned

- -- The importance of choosing the right "team"
- -- The impact of primary care/continuity of care
- --Doctor/patient communication
- --Leveraging technology to benefit patient care
- --Being a patient is DIFFICULT...even for medically savvy people

### Picking the right team

- -- Don't limit your choices based on insurance
- --Choose a surgeon whose practice style and philosophy "fits"
- --Find an Oncologist with the best expertise for your type of cancer
- --Those "top docs" list do mean something!

### Primary Care and Continuity of Care

- --You need a primary MD (even when healthy!)...for when the unexpected happens
- --Continuity of care improves health outcomes

#### Doctor/Patient Communication

- -- The importance of eye contact and minimizing the computer
- --Writing things down!
- --Alternative methods of communication
- --Ability to contact the team, even after hours

### Leveraging technology

- --Sending texts, digital photos to expedite care
- --Technology as time saver
- --Improving efficiency and access to care
- -- Avoiding burnout

### Being a patient is difficult

- --Showing empathy
- --Helping to expedite care
- --"It's the little things"

### "Happy Doctor, Happy Patient"

--Healthcare workers satisfaction and patient satisfaction – where is the linkage? Journal Hippokratia 2013.

Surveys from 18,642 healthcare workers and 9,283 patients

There is a slight but statistically significant correlation between healthcare worker satisfaction and patient satisfaction with the results of treatment and their general satisfaction with services provided

--Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-analysis. JAMA Internal Med 2018

Physician burnout was associated with an increased risk of patient safety incidents, poorer quality of care due to low professionalism, and reduced patient satisfaction

## A journey...from doctor to patient and back



#### For more information

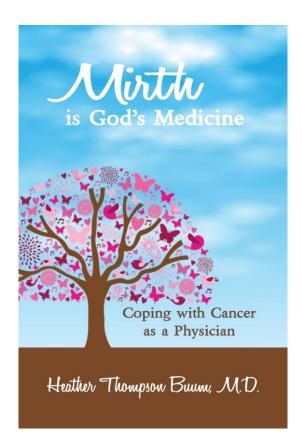
#### Books available:

Prize drawing today! Personally autographed copy, "Mirth is God's Medicine: Coping with Cancer as a Physician"

Online: Amazon, Barnes and Noble

To read a chapter excerpt or my blog:

www.doctor-heather.com



### Questions? Thoughts? Insights?

--Please write them down and forward to our moderators!