

# THE EFFECT OF INTEGRATIVE THERAPIES ON PEDIATRIC HEMATOLOGY/ONCOLOGY/ HEMATOPOIETIC STEM CELL TRANSPLANT PATIENTS

**Kristen Guilmette, BSN, RN, CPHON<sup>®</sup>, RYT-200, RCY-50, Reiki II**

**Margaret Brill Conway, BSN, RN, CPHON<sup>®</sup>, RYT-500, Reiki Master**

44<sup>th</sup> Annual APHON Conference--September 2020



**Dana-Farber**  
Cancer Institute



**Boston**  
**Children's**

Dana-Farber/Boston Children's Cancer and Blood Disorders Center

# DISCLOSURES

- ▶ There is no commercial support associated with this activity
- ▶ The presenters have declared no conflict of interest

# OBJECTIVES

- ▶ Discuss the principles of integrative nursing as they relate to supportive care of the pediatric hematology/oncology/hematopoietic stem cell transplant patient
- ▶ Identify three nonpharmacological interventions that help manage the side effects of disease and treatments in pediatric hematology/oncology/hematopoietic stem cell transplant patients
- ▶ Recall how nonpharmacological interventions can affect a pediatric patient's vital signs, pain, nausea, anxiety and fatigue

# WHAT IS INTEGRATIVE NURSING?

- ▶ “A way of being-knowing-doing that advances the health and wellbeing of persons, families and communities through caring and healing relationships”
- ▶ A framework based on a set of principles that are consistent and aligned with major nursing theories

(Kreitzer & Koithan, 2019)



# SIX PRINCIPLES OF INTEGRATIVE NURSING

- ▶ Human beings are inseparable from their environments
- ▶ Human beings have the innate capacity for health and well-being
- ▶ Nature has healing and restorative properties that contribute to health and well-being
- ▶ Integrative nursing is person-centered and relationship-based
- ▶ Integrative nursing practice is informed by evidence and uses the full range of therapeutic modalities to support/augment the healing process, moving from least intensive/invasive to more, depending on need and context
- ▶ Integrative nursing focuses on the health and well-being of caregivers as well as those they serve

(Kreitzer & Koithan, 2019)

# WHAT ARE INTEGRATIVE THERAPIES (IT)?

- ▶ Not considered conventional medicine and used outside mainstream medicine
- ▶ Other names
  - ▶ Complementary health approaches
  - ▶ Complementary alternative medicine (CAM)
- ▶ Two groups
  - ▶ Natural products
  - ▶ Mind-body practices



(Kreitzer & Koithan, 2019)

(U.S. Department of Health and Human Services, National Institutes of Health, U.S. National Library of Medicine, 2018)

# PURPOSE FOR USE

## CLINICAL INDICATIONS

- ▶ Anxiety
- ▶ Depressed mood
- ▶ Fatigue
- ▶ Gastrointestinal distress
- ▶ Headache
- ▶ Pain
- ▶ Insomnia

## PATIENT REPORTED

- ▶ Fear / Worry
- ▶ Pain
- ▶ Distraction
- ▶ Stress
- ▶ Sleeplessness
- ▶ Isolation / Loneliness
- ▶ Curiosity
- ▶ Boredom

Often patients and families need to experience Integrative Therapies to understand them!

# CURRENT RESEARCH

- ▶ Integrative therapies are considered safe and have low risk of interference with conventional therapies, but evidence is insufficient (Jacobs, 2014)
- ▶ Between 31%-84% of pediatric oncology patients use CAM, most often as supportive care (Ladas, 2018)
- ▶ Parents and patients report massage provides benefits during cancer treatment including symptom relief (Ladas, 2018)
- ▶ Two small studies showed yoga is safe and feasible in pediatric oncology patients receiving chemotherapy, but further research is needed for efficacy of symptom management (Jacobs, 2014)
- ▶ Reiki is well received by children and adults reporting no adverse effects (Jacobs, 2014)
- ▶ Complementary therapies improve quality of life and reduced symptom distress in adult oncology patients (Stomski, et al., 2018)



# 2018 JOINT COMMISSION ADVISORY

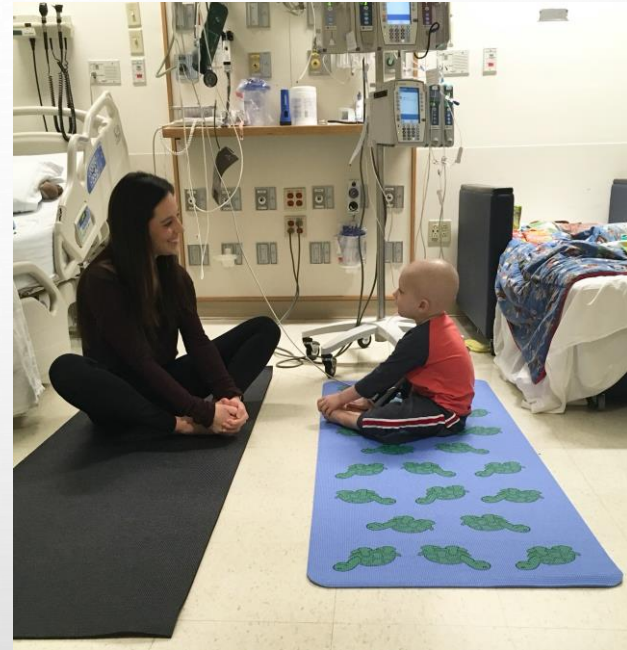
- ▶ Advisory on evidence-based nonpharmacological solutions for pain management
  - ▶ Organizations are required to provide non-pharmacological pain modalities relevant to its patient population
  - ▶ These modalities serve as a complementary approach for pain management and may reduce the need for opioid medication in some circumstances

(The Joint Commission, Division of Healthcare Improvement, 2018)

# BOSTON CHILDREN'S HOSPITAL HEME / ONC / HSCT INTEGRATIVE THERAPIES (IT) PROGRAM



- Nursing led
- Donor funded



- Standard of care
- Enhanced well-being

# BOSTON CHILDREN'S HOSPITAL IT PROGRAM OFFERINGS

- ▶ Patient Reiki
- ▶ Patient Massage
- ▶ Patient Yoga
- ▶ Caregiver Yoga
- ▶ Caregiver Massage
- ▶ Caregiver Reiki
- ▶ Sound Healing
- ▶ Headspace© App















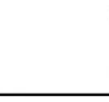
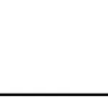
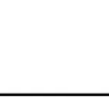









# DATA COLLECTION METHODS

## Pre Integrative Therapies

Pre HR	
Pre RR	

Circle the face that best matches your current level of:

Pain	 0 No Hurt	 2 Hurts Little Bit	 4 Hurts Little More	 6 Hurts Even More	 8 Hurts Whole Lot	 10 Hurts Worst
Nausea	 0	 2	 4	 6	 8	 10
Anxiety						
Fatigue	 0 No Fatigue	 1 2 3 Mild	 4 5 6 Moderate	 7 8 9 Extreme		 10 The Worst Fatigue

Age	Gender	Race	DX	LOS	Treatment

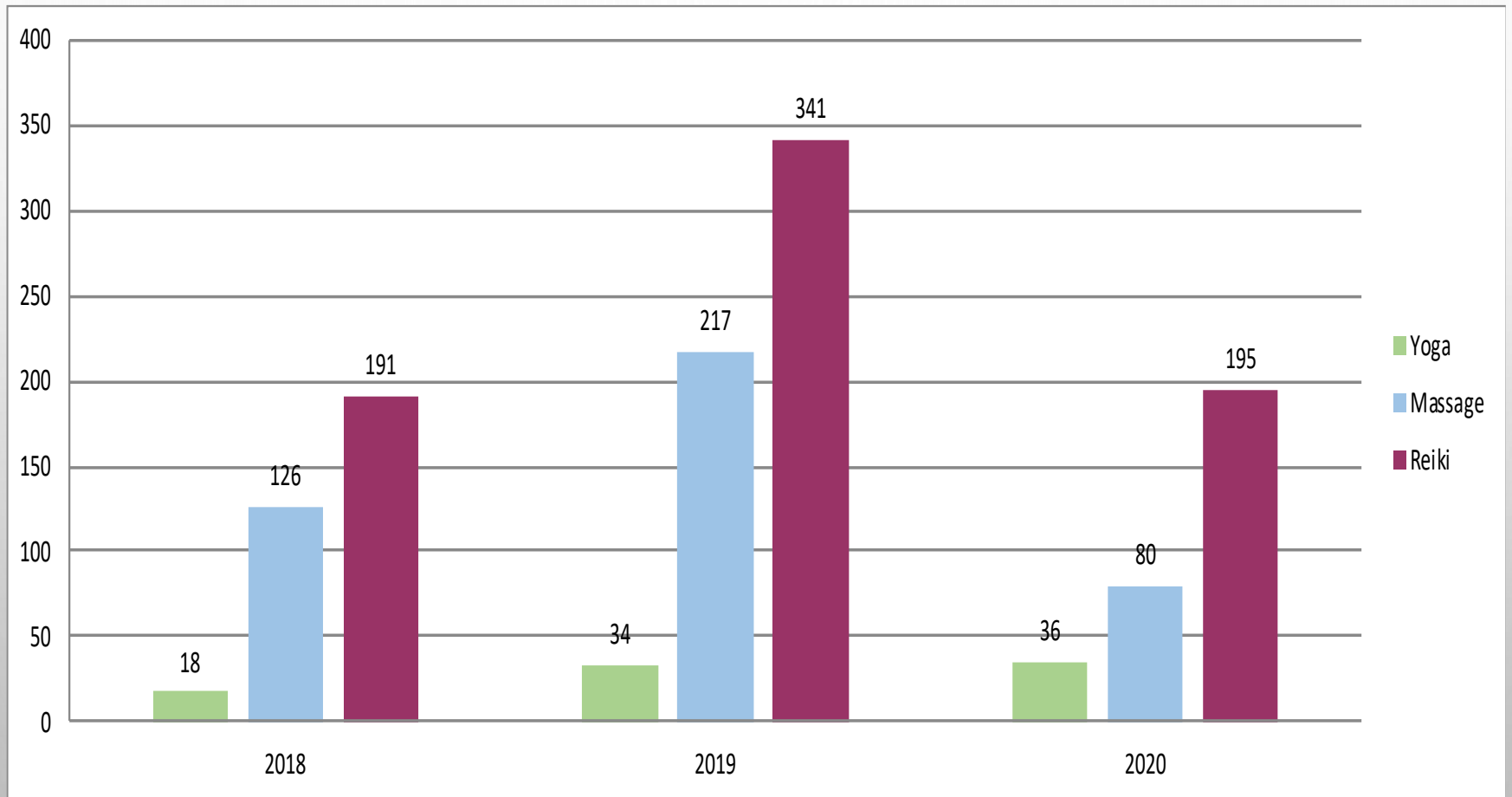
Pain: Wong-Baker FACES® scale

Nausea: Baxter Animated Retching Faces (BARF) scale

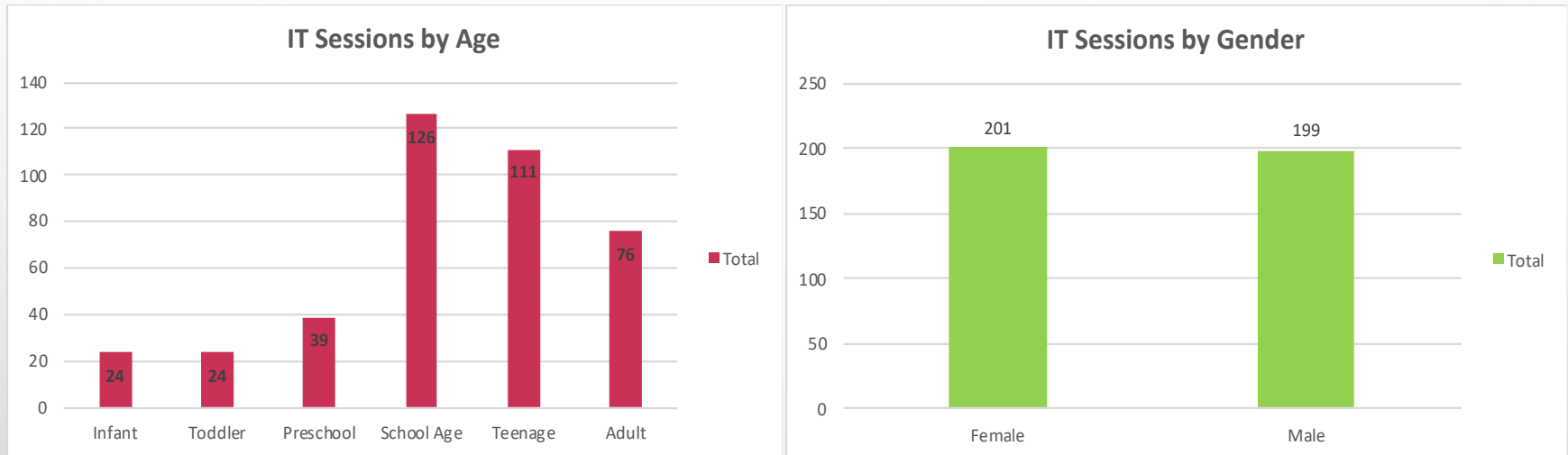
Anxiety: Children's Fear Scale

Fatigue: Oncology Nursing Society® Fatigue Scale

# PATIENT INTEGRATIVE THERAPY SESSIONS



# DEMOGRAPHICS



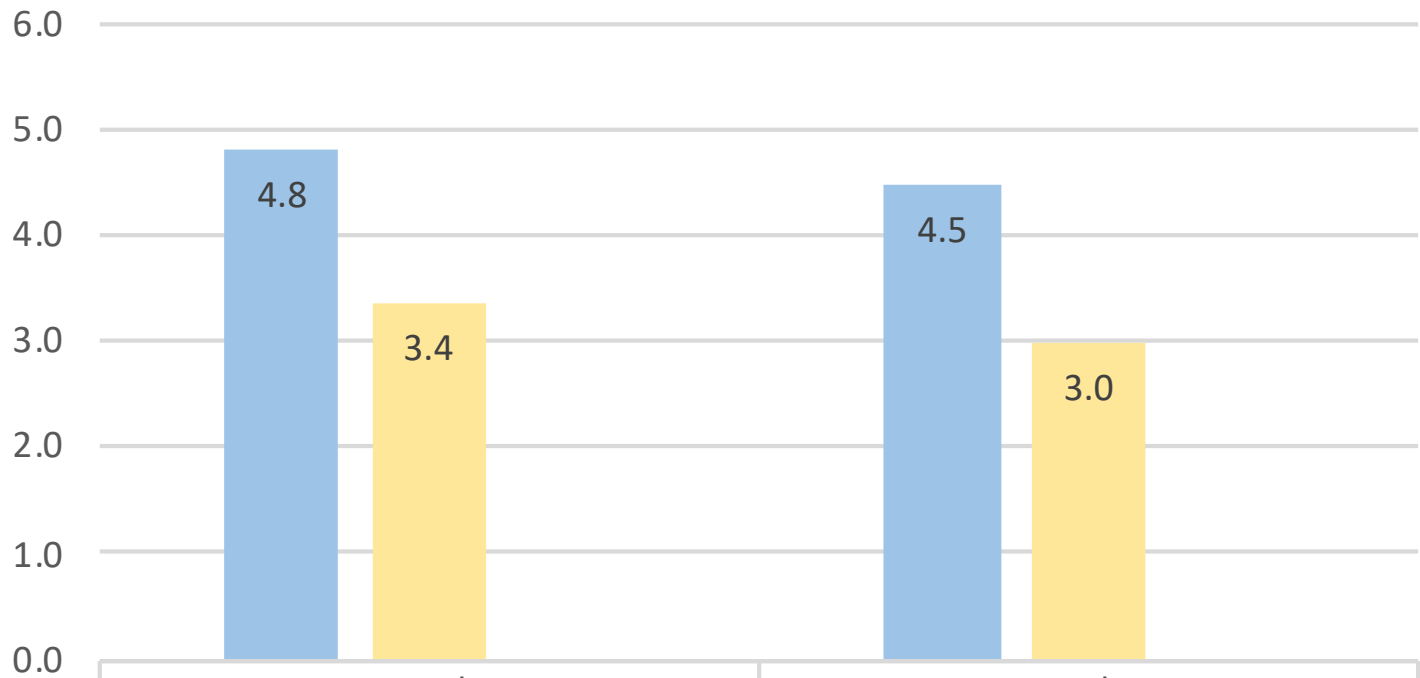
Infant	One year old or younger
Toddler	>1 to 3 years of age
Preschool	>3 to <5 years of age
School Age	5 to <13 years of age
Teenager	13 to <18 years of age
Adult	18 and older

# SURVEY STATISTICS

## 381 Surveys

- ▶ 72% of pre-surveys completed (n=275)
- ▶ 39% of post surveys completed (n=149)
- ▶ 60% of post surveys were not completed (n=227)
  - ▶ 77% of patients were asleep (n= 175)
  - ▶ 22% of patients were too young/developmentally unable (n=50)

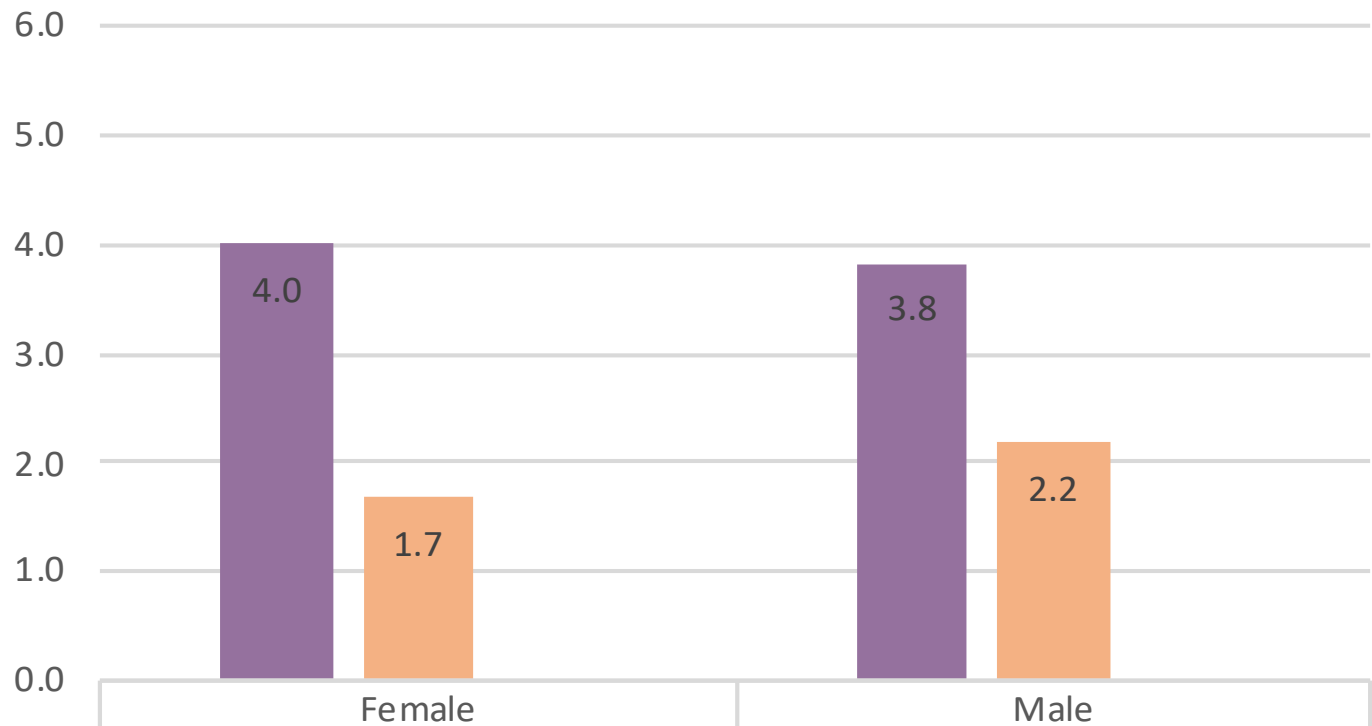
# EFFECT OF IT ON PAIN



	Female	Male
■ Avg. Pre-Pain	4.8	4.5
■ Avg. Post-Pain	3.4	3.0
■ Count (N)	41	28

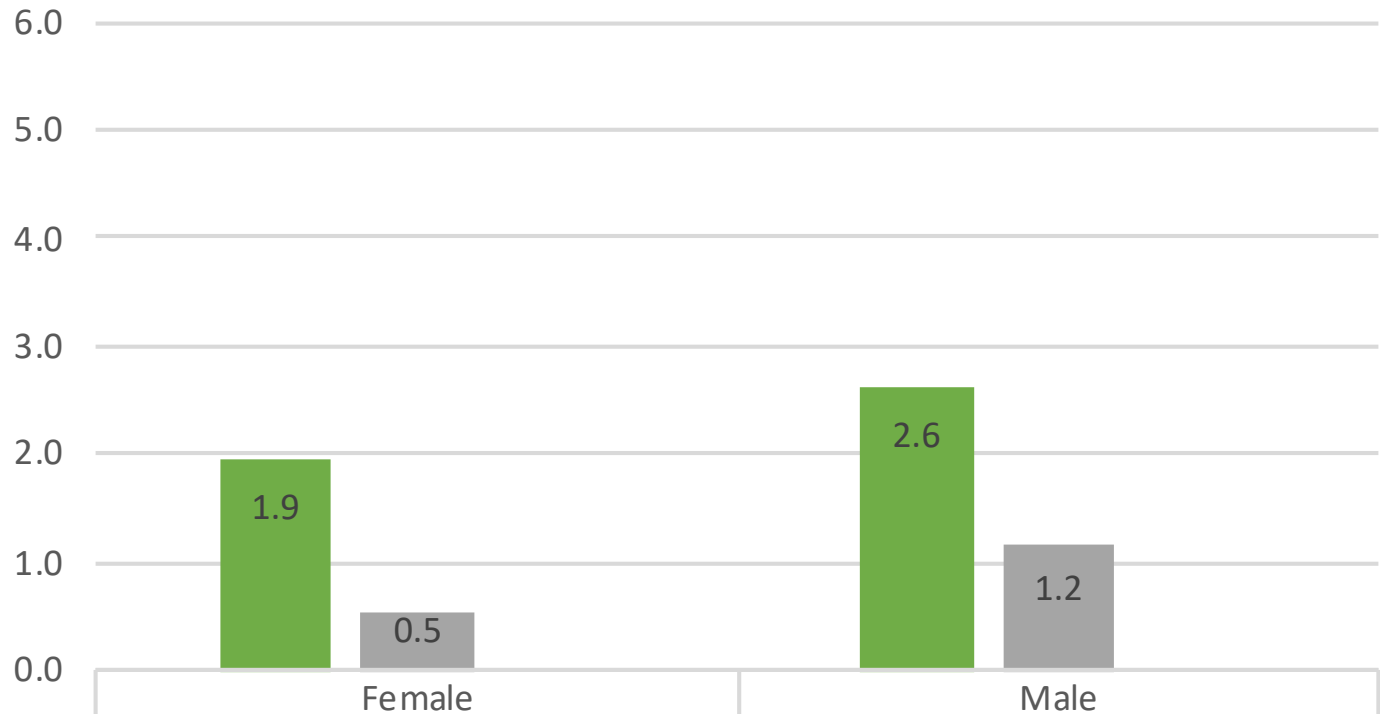


# EFFECT OF IT ON NAUSEA



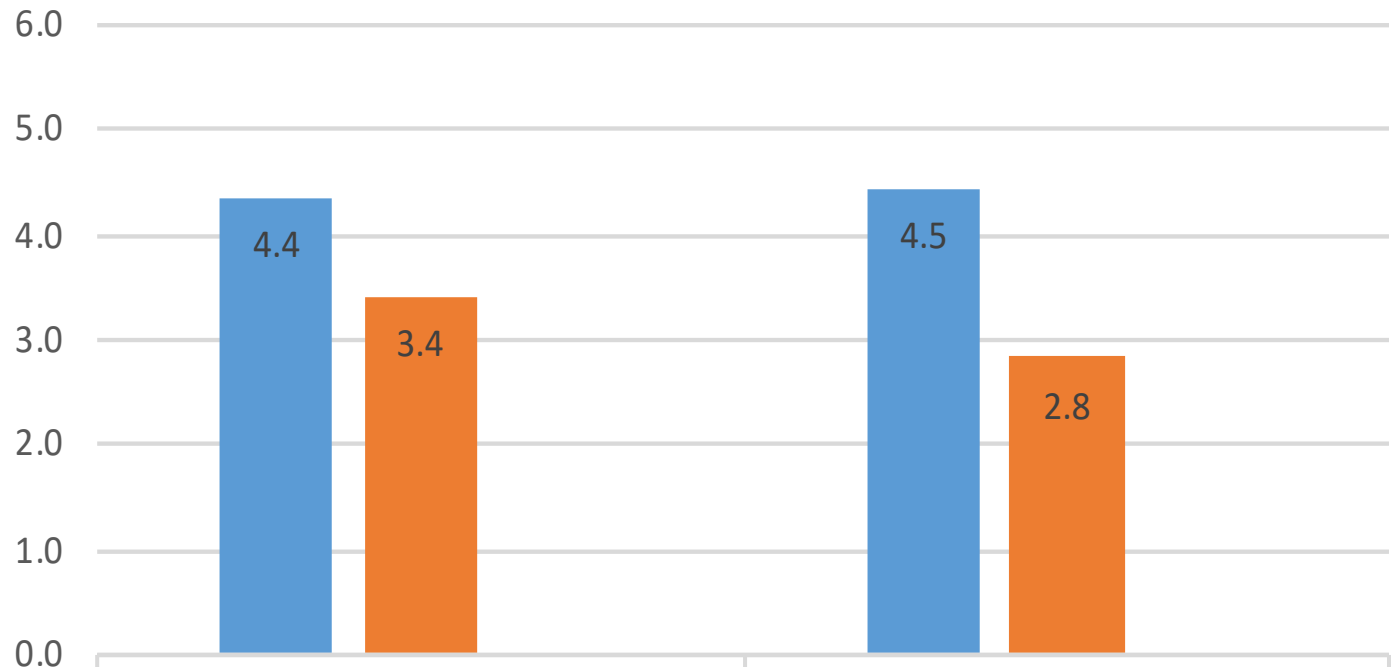
	Female	Male
■ Avg. Pre-Nausea	4.0	3.8
■ Avg. Post-Nausea	1.7	2.2
Count (N)	18	11

# EFFECT OF IT ON ANXIETY



	Female	Male
■ Avg. Pre-Anxiety	1.9	2.6
■ Avg. Post-Anxiety	0.5	1.2
Count (N)	31	23

# EFFECT OF IT ON FATIGUE

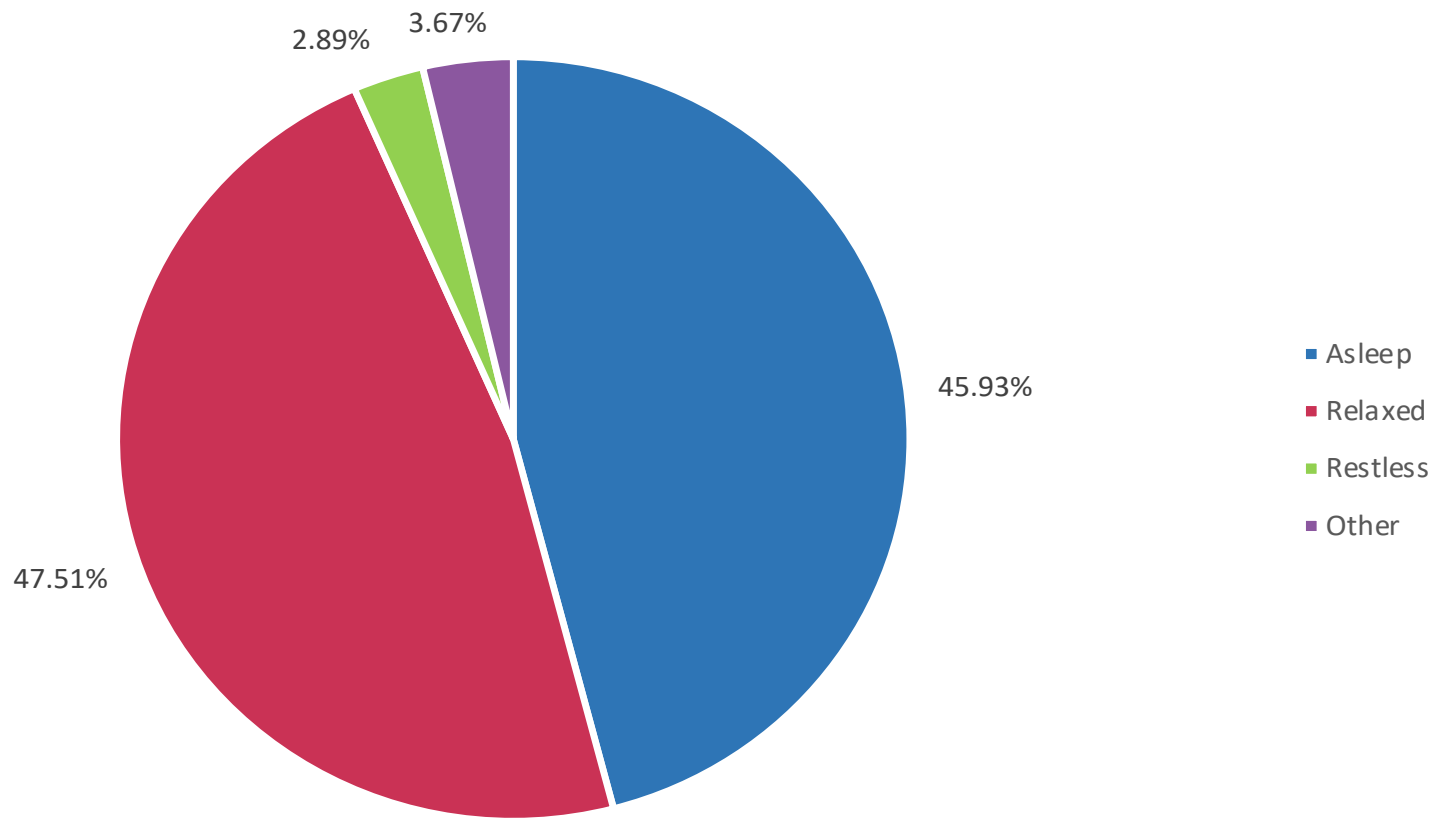


	Female	Male
■ Avg. Pre-Fatigue	4.4	4.5
■ Avg. Post-Fatigue	3.4	2.8
Count (N)	50	42

# SUMMARY OF QUANTITATIVE DATA

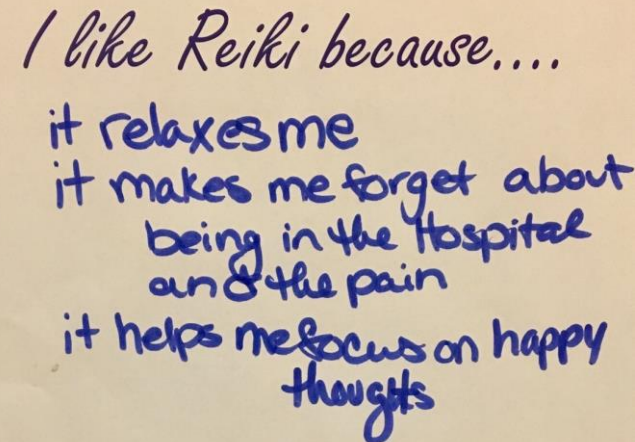
Variable	Completed surveys reporting > 0 on the pre-variable	# of patient reported decreases	% of change from original value
Pain	n=69	37 (54%)	69% ↓
Nausea	n=29	24 (83%)	47% ↓
Anxiety	n=54	43 (80%)	36% ↓
Fatigue	n=94	55 (59%)	71% ↓

# NURSING OBSERVATIONS



# WHAT PATIENTS ARE SAYING

- ▶ “That was delicious, thank you”
- ▶ “I feel **less anxious**”
- ▶ “I feel so **relaxed** and ready to nap”
- ▶ “You should offer this more often. It really helps with my anxiety”
- ▶ “I like reiki.”
- ▶ “I feel way better!”
- ▶ “It helped **calm** me.”



*I like Reiki because....  
it relaxes me  
it makes me forget about  
being in the hospital  
and the pain  
it helps me focus on happy  
thoughts*

# WHAT CAREGIVERS ARE SAYING

- ▶ “There’s **calm** and **relaxed** energy. She’s relaxed and **peaceful** after”
- ▶ “Integrative therapies have been very **healing**. She’s always calmer, **less pain, less stress** 😊”
- ▶ “Thank you for making this service available to your patients.”
- ▶ “Reiki helped him a lot. I noticed my son was more **relaxed**. **Less pain**, discomfort, vital signs improved.”
- ▶ “My daughter loves getting massage to relieve herself from back pain. She feels **content** after massage.”
- ▶ “She receives reiki very well and feels the relaxing and **calming** effect. It's her means to **relax** and be **more herself**.”
- ▶ “My daughter needs the therapies. She always looks forward to the next session.”
- ▶ “He is playing, he is **happy**, thank you.”
- ▶ “She asks for reiki every morning. It helps her **relax** and be **comfortable**. She always takes a restful nap during and after.”

# IMPLICATIONS/NEXT STEPS

- ▶ Value to patient care
  - ▶ Statistical significance
- ▶ Standard error with incomplete data sets
  - ▶ Improvements with data collection



# REFERENCES

- ▶ Jacobs, S.S. (2014). Integrative therapy use for management of side effects and toxicities experienced by pediatric oncology patients. *Children*, 1, 424-440.
- ▶ The Joint Commission, Division of Healthcare Improvement. (2018, August). Non-pharmacologic and non-opioid solutions for pain management. *Quick Safety, issue 44*, 1-2. Retrieved from <https://www.jointcommission.org/resources/news-and-multimedia/newsletters/newsletters/quick-safety/quick-safety-44-nonpharmacologic-and-nonopioid-solutions-for-pain-management/>
- ▶ Kreitzer, M.J., & Koithan, M. (2019). *Integrative Nursing, 2<sup>nd</sup> Ed.* New York, NY: Oxford University Press.
- ▶ Ladas, E.J. (2018). Integrative medicine in childhood cancer. *The Journal of Alternative and Complementary Medicine*. 24, 9-10.
- ▶ Rosenbaum, M. & Velde, J. (2016). The effects of yoga, massage, and reiki on patient well-being at a cancer resource center. *Clinical Journal of Oncology Nursing*, 20, E77-E81.
- ▶ Stomski, N.J., Petterson, A., Kristjanson, L., Lobb, E.A., Phillips, M., Williams, A., Morrison, P., Joske, D. (2018). The effect of self-selected complementary therapies on cancer patients' quality of life and symptom distress: A prospective cohort study in an integrative oncology setting. *Complementary Therapies in Medicine*, 37, 1-5.
- ▶ U.S. Department of Health and Human Services, National Institutes of Health, U.S. National Library of Medicine(2018). *Collection Development Manual: Complementary and Alternative Medicine*. Retrieved from <https://www.nlm.nih.gov/tsd/acquisitions/cdm/subjects24.html>

# ACKNOWLEDGEMENTS

Thank you to Lisa Morrissey, Caroline Costello, Mary Poyner Reed and our generous donors for continued support of the Heme/Onc/HSCT Integrative Therapies program. You all make the work we do with patients and families possible!

# THANK YOU!

