A Guided Web-Based Yoga Series for Pediatric Cancer Survivors

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Background

- Yoga is an increasingly utilized modality in both pediatric and adult oncology, but regular practice can be challenging due to infection precautions or lack of access to formal classes.

- The purpose of this project was to provide safe and intensity level-appropriate videos for children to utilize remotely.
Background

- Yoga is a low-impact exercise that is incorporated for strength, balance, pain control, and quality of life.\(^1,\!^2\)
- Frequently reported symptoms of pediatric cancer survivors include fatigue, pain, decreased cardiovascular functioning, decreased functional mobility and overall decreased quality of life.\(^3,\!^4\)
- National Comprehensive Cancer Network cancer related fatigue guidelines include yoga as an effective intervention recommendation.\(^5\)
- Furthermore, age-appropriate parameters for pediatric yoga have been previously established and will be incorporated into our design.\(^6\)
- Studies have indicated scheduling conflicts and treatment-related symptoms, as limitations to participation in scheduled yoga classes.\(^3,\!^7\)
Patient Safety

- A retrospective study by Gilchrist and Tanner\textsuperscript{4} reviewed the use of symptoms to guide physical therapy (PT) interventions in pediatric oncology patients.

- Chart review of 406 PT sessions using the symptom-based approach, only two concerning events were documented.

- Less than 25% of the patients presented with normal hemoglobin levels leading to support of using a symptom-based approach when recommending physical activity interventions, such as yoga, for pediatric cancer survivors.\textsuperscript{4}
Methods

1. Grant funding was secured from NNECOS
2. Literature review was completed
3. Collaborated with oncology physical therapists with expertise in yoga and pediatric cancer survivorship to determine safe, effective parameters, and with parents of pediatric cancer survivors to gain their perspective and understand potential concerns
4. A certified child yoga instructor was recruited to ensure appropriate instruction and videographer to produce the videos
5. Recruited four child models, ranging in age from 5-14 and representing both genders and different races to participate in the videos to broaden relatability
Results

● Two Videos:
  ○ Yoga for Pediatric Cancer Survivors: Young Children
  ○ Yoga for Pediatric Cancer Survivors: Kids-Teens
● Each video had four progressive sequences, each focusing on flexibility, strength, and balance
● Distribution is planned to pediatric oncology specialists through email, flash drives, and secure web-posting by the American Physical Therapy Association.
Younger Children

Bridge Pose

Downward Dog

Airplane Pose
Teenagers

Boat Pose

Warrior I Pose

Tree Pose
Conclusion/Future Direction

- We would like to thank NNECOS for the funding of this project. Without their support this would not have been possible.
- These videos may allow children to utilize yoga more regularly and conveniently.
- These videos allow for potential future research to determine efficacy of this form of yoga as an intervention and analyze the utilization across multiple settings.
We would like to acknowledge the contributions of:

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- Mary Lou Galantino, PT, MS, PhD, MSCE, Professor of Physical Therapy, Holistic Health Minor Coordinator, Stockton University

- Bobby Cochrane, PT, DPT, Parent

- Missy Kemp, Parent

Left to Right: Cayce Lannon, RYT200, Certified Children’s Yoga Instructor, Alyssa Deardoff, DPT student, Michael D’Apice, videographer, and Andrew Chongaway, DPT student
References


