

Promoting Health, Wellness and Fitness for Children and Adolescents with Disabilities:

Creating Community Partnerships and Programs

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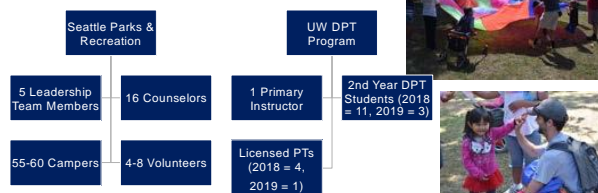
ABSTRACT

Children with disabilities are often more sedentary, involved in fewer social activities, and move less compared to age-matched peers. Additionally, they are at higher risk for other health conditions, which can contribute to a more inactive lifestyle and overall less socialization. Specialized and adaptive community-based fitness programs for children with disabilities exist but are scarce, and they can be limited by multiple factors. Physical therapists (PTs) have the expertise to advise and collaborate with children with disabilities, their families, schools, community members and local organizations on how to adapt, modify or create individualized programs to promote fitness, health and wellness across the lifespan. Community organizations have the expertise to develop camp programs, hire staff and provide scholarship opportunities for children to participate, but are often lacking training on how to work with children with disabilities or inclusive ideas on ways to promote fitness into their camps. The **purpose** of this abstract is to describe and evaluate a collaboration between an academic physical therapy program and a local community organization to create inclusive, community-based fitness activities for children & youth with disabilities.

INTRODUCTION & BACKGROUND

- Children and young adults with disabilities often engage in activities that are sedentary, isolated, at home, and without much variety, resulting in higher rates of obesity compared to their peers.
- Barriers to accessing fitness opportunities for children & adults with disabilities include cost, transportation, attitudes, physical environment (e.g. accessible space), policies and/or training of community staff to work safely with children with disabilities.
- PTs have the training & expertise to create and promote unique, safe & fun fitness opportunities for children with disabilities and to train other community members in appropriate modifications and adaptations for specific children.
- Community programs and organizations offering fitness activities specifically for children & youth with disabilities exist primarily in the United States (US), but continue to be scarce. However, several US standards advocate for increased health, wellness and fitness for all children.
- Partnerships & collaboration PTs, PT students, community organizations, children with disabilities and their families should be capitalized to increase fitness levels and participation of children of all abilities.

PARTICIPANTS



METHODS

An advanced pediatric elective course was designed as part of the **University of Washington Doctorate in Physical Therapy (DPT) program**, with a focus on promoting health, wellness and fitness across the lifespan for children & adolescents with disabilities. **Seattle Parks & Recreation (SPR)** offers a Specialized Summer Day Camp program, a low-cost day camp for youth with disabilities in a local park, and provides inclusion training to their staff and counselors.

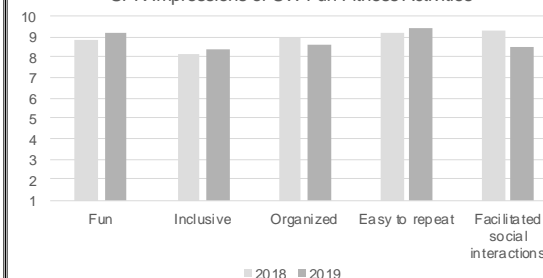
- For the elective course, SPR partnered with the UW DPT faculty member and students to create and implement "UW Fun Fitness" classes as part of their specialized summer day-camp for 2 subsequent years, in 2018 and 2019.
- Under direct supervision of licensed pediatric physical therapists, 3-11 2nd year DPT students researched, designed, and implemented two days of evidence-based inclusive fitness classes (45 minutes) and stations (15 minutes) for children ages 4-21 years with disabilities ("campers").
- The fitness groups were comprised of groups of 8-16 campers, divided based on age and sex, and included children with a wide range of ability levels.
- Training by UW DPT Faculty and students was provided both in advance & during the activities. A handout was provided for counselors so they could implement and modify the activities during other weeks of summer camp.
- Surveys were given to SPR leadership team members, counselors, and campers after the 2nd day of fitness activities.



RESULTS

- In 2018, a total of 19 participants (14 SPR counselors, 2 leaders, and 3 campers) and in 2019, a total of 14 participants (12 SPR counselors, 2 leaders, and 3 campers) filled out the survey and results were averaged across the 2 days of fitness classes & stations. Results are presented in the graph pictured (right) and were rated on a scale of 0-10 (Completely Disagree to Completely Agree).
- They felt like the fitness groups were fun, inclusive, organized, easy to repeat, and facilitated social interactions, with staff and children wanting to collaborate again (8.9/10).
 - The overall experience was "extremely positive" (8.7/10).
 - Suggestions were provided on positive aspects of and ways to improve the fitness groups, which have been and will continue to be integrated into subsequent years of the advanced pediatric elective course.
 - SPR Specialized Day Camp and UW DPT Program plan to continue to develop this on-going partnership.

SPR Impressions of UW Fun Fitness Activities



SUMMARY

Physical therapists have an important role in promoting health, wellness and fitness for all of their patients but especially for children across their lifespan. Physical therapists are knowledgeable about how to make fitness activities inclusive and have expertise on how to modify them based on individual factors including safety, health, age, and ability. Partnership and collaboration between a Doctorate in Physical Therapy Program and local community organization's summer camp program is an innovative, feasible, fun, and effective method to teach physical therapy students leadership & critical thinking skills, and bridge the gap between evidence and clinical practice to promote health, wellness and fitness for children with disabilities. This partnership also provides meaningful education & training to DPT students and community organizations to ultimately work together to create fitness opportunities for children of all abilities.

REFERENCES

- Adair B et al. The effect of interventions promoting participation outcomes for children with disabilities: a systematic review. *Dev Med Child Neuro*. 2015; 57: 1093-1104.
- Haney K, Messiah SE, Arheart KL, Hanson E, Diego A, et al. Park-based afterschool program to improve cardiovascular health and physical fitness in children with disabilities. *Disabil Health J*. 2014; 7: 335-342.
- Rowland JL, Fragala-Pinkham M, Miles C, O'Neil M. The scope of pediatric physical therapy practice in health promotion and fitness for youth with disabilities. *Pediatr Phys Ther*. 2015; 27: 2-15.
- Saitta M, Devan H, Boland P, Perry MA. Park-based physical activity interventions for persons with disabilities: a mixed-methods systematic review. *Disabil Health J*. 2019; 12(1): 11-23.
- Shields N, Synnot A. Perceived barriers and facilitators to participation in physical activity for children with disability: a qualitative study. *BMC Pediatr*. 2016; 16: 9.
- Wiat L, Darrah J, Kelly M, Legg D. Community fitness programs: what is available for children and youth with motor disabilities and what do parents want? *Phys Occ Ther Pediatr*. 2014; 35(1): 73-87.

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Functioning of Physically Active Cancer Survivors in Rural Hawai'i



many adults experience poor health outcomes and don't engage in regular physical activity.

		N	Mean	Standard Deviation	Significance
Weight lbs	Physically Active	15	138.84	25.80	p<.009**
	Physically Inactive	10	171.20	30.43	
BMI kg/m²	Physically Active	15	23.99	4.04	p<.003**
	Physically Inactive	10	30.76	6.22	

**p<.01



		N	Mean	Standard Deviation	Significance
SF-36 Mental Health Summary	Physically Active	13	47.57	8.29	p=.065
	Physically Inactive	10	41.01	7.60	
General Population Norm			50.00	10.00	

		N	Mean	Standard Deviation	Significance
SF-36 Physical Health Summary	Physically Active	13	45.46	2.73	p=.099
	Physically Inactive	10	41.73	7.20	
General Population Norm			50.00	10.00	



MCPHS
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Raising Awareness for Preventable Diseases through a Student-Initiated Intercollegiate Collaborative Effort in the Boston Community

Jiancheng Mo, Thoma Qafko, Doctor of Pharmacy Candidates—2022
School of Pharmacy, MCPHS University, Boston, MA, USA



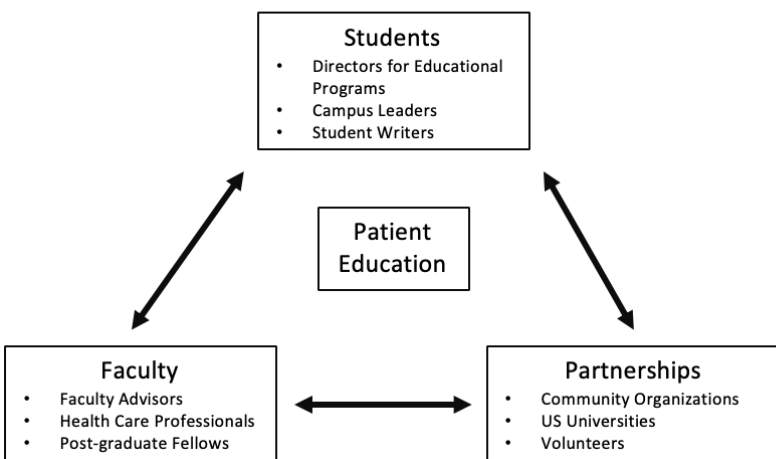
Introduction and Background

- The need for health education has always been advocated by community leaders and public health professionals
- Evidence have suggested a trend in the association between increased health education and improved health management
- College students play an important role in health education by partaking in local and national health initiatives
- Started as a student organization within MCPHS University, Community HealthEd expands into an nonprofit that aims to broadly impact community health education

Objectives of Community HealthEd

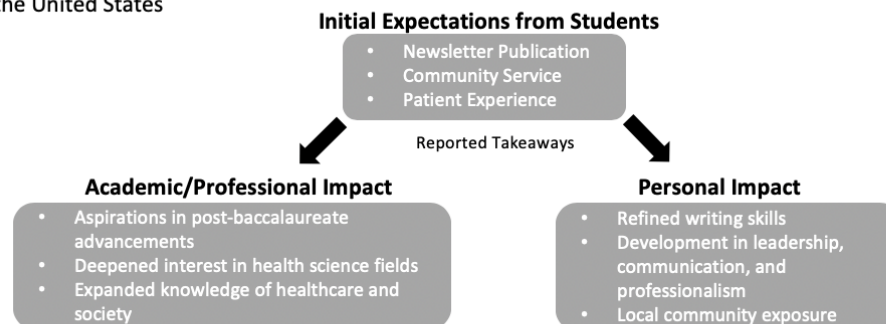
- To encourage the awareness of preventable diseases in the patient population and the general public through faculty-supervised, student-written materials and outreach presentations
- To provide a platform for motivated college students to gain opportunities in medical news writing, community engagement, and leadership development

Frameworks



Outcomes

- Community HealthEd has to date engaged more than 45 student leaders from 15 different universities in the United States



Lessons Learned and Future Directions

- Students gained additional academic/professional and personal skills through service learning in contrast to the traditional didactic model
- Our program coordinators and directors developed ways to begin engaging health care professionals in outreach events. This will improve patient trust in writings and presentations prepared by student leaders
- Future works will focus on developing a quantitative measure of Community HealthEd's impact on students and patients
- Additional educational programs concerning other preventable diseases will be implemented

References

1. Birch DA. Improving schools, improving school health education, improving public health: The role of SOPHE members. *Health Educ Behav.* 2017;44(6):839-844.
2. Lee BJ, Wang SK, So C, et al. A student-led health education initiative addressing health disparities in a Chinatown community. *Am J Pharm Educ.* 2015;79(9):132.

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