A Pilot Academic-Community Partnership to Advance the 

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BACKGROUND

• Optimal nutritional status and physical fitness are associated with improved energy regulation and weight, better academic performance, (1-3) increased stress resilience and an overall enhanced quality of life (4).

• The 2010 DC Healthy Schools Act (HSA), funded in part by a soda sales tax, provides nutritious, free breakfasts and lunches to all school children in need, and aims by 2015 to increase daily physical activity, to enhance health literacy and to expose students to school gardens and environmental education.

• HSA goals align with pediatric evidence-based health promotion, but progress has been slowed by a lack of engagement by students, faculty, and parents, especially in communities at greatest risk for health disparity.

• An innovative plan is needed to catalyze behavior change that encourages DC school children to eat healthy school foods now available to them, promotes physical activity, and helps with curriculum design for meaningful health education and the quantifiable documentation of changes.

• To succeed in the school environment, any program designed to strengthen the school wellness policy should not take hours out of time-limited academic scheduling and should ideally empower school staff to sustainably engage school children in healthful lifestyle change going forward.

• In this pilot spring semester project, rotating volunteer medical students visited 5th grade elementary school classes weekly (Neval Thomas and Kenilworth) in one of the most impoverished neighborhoods of DC, to serve as health educators and mentors who both teach and model healthy behaviors.

PURPOSE

To determine if a unique medical/academic/community partnership, entitled Team KiPOW (Kid POWer), can help DC public and public charter schools reach HSA goals using a mentored health promotion and behavioral change model.

MATERIALS AND METHODS

• Team Kid POWER (KiPOW)™ consists of medical students who all receive Playworks training (5), and commit three hours/month to visit elementary school classrooms midday over the spring semester to teach nine short nutrition and activity lessons, then to play at recess and eat school lunch together.

• Lesson topics: Breakfast, Water, Fruits & Veggies, Whole Grains, Moving Like You Mean It, Healthy Fats, Snack Attacks, The Power of Sleep, Mindful Living

• Parental involvement was encouraged with weekly newsletters, a mid-year dinner and end-of-semester picnic.

• Medical students assisted school nursing and physical education personnel in attainment of pre-post measures of weight, height, blood pressure and Fitnessgram Pacer scores per standard school site protocols.

• Outcomes were evaluated by paired t-test. Cumulative 5th grade scores from standardized DCPS health literacy testing at the end of the semester from 2012 (before KiPOW) were compared with 2013 scores (post KiPOW) by uppaired t-test.

RESULTS

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Acknowledgement- Additional Team KiPOW Pilot Membership


REFERENCES

1. www.VCS.nationalchildrenscenter.org The Role of Sound Nutrition and Physical Activity in Academic Achievement. 2004

LIMITATIONS

• To optimize participation, human subjects waiver of consent necessitated limiting outcomes to measures already obtained by schools, so we do not have objective assessment of change in nutrition or activity habits, but Team KiPOW on-site perception suggests improvement in these health behaviors.

CONCLUSIONS

• Medical students teaching and modeling health-promoting behaviors to 5th grade elementary school children can improve health literacy outcomes for those children and improve health literacy scores on standardized tests.

• Medical students in this program learn about both pediatric health promotion and the challenges of behavioral change.

• An academic-community partnership promoting face-time with trusted medical student mentors may be a feasible adjunct to reinforce school wellness policy in other inner city school districts in proximity to health professional schools.