

Statewide initiative promotes wellness and careers in health

A collaborative team of researchers and educators at the University of South Carolina (USC) and the Medical University of South Carolina (MUSC) have spent the last three years refining the Junior Doctors of Health (JDOH) Program, a comprehensive program designed to promote healthy eating and physical activity behaviors among underserved elementary and high school students, teachers, and parents through Interprofessional Education (IPE).

IPE is defined as an education experience that involves educators and learners from two or more health professions and their foundational disciplines who jointly create and foster a collaborative learning environment¹.

Dr. Scotty Buff is Director and Principle Investigator of the program and an instructor in the Department of Library Sciences and College of Nursing at MUSC.

Dr. Christine Blake leads the program evaluation for JDOH and is an Assistant Professor in the Arnold School of Public in the Department of Health Promotion, Education, and Behavior and an Affiliated Scholar of the Center for Research in Nutrition and Health Disparities.

The Junior Doctors of Health (JDOH) program was started by Dr. Buff in 2004 as part the Presidential Scholars program. In 2008, she obtained funding from The Duke Endowment to expand the JDOH program, and in early 2009 formed a collaboration with Dr. Blake to enhance the nutrition behavior change component, develop a plan for program evaluation, and enhance the technical and theoretical conceptualization of the program objectives and implementation.

The JDOH program aims to provide learning opportunities at multiple levels of influence and utilize existing networks to deliver program messages. MUSC students are referred to as mentors, which are comprised of students from a variety of disciplines, including medicine, pharmacy, health administration, physical therapy, physician assistant, nursing, and dietetics. Mentors lead parent and teacher workshops in Charleston. They also implement the JDOH curriculum statewide to elementary schools located in communities with high rates of poverty and childhood obesity. Mentors work in teams using hands on learning to promote healthy nutrition and physical activity behaviors. Through the JDOH program, mentors introduce students to various health professions, and charge them with promoting healthy eating in their family, school, and community. Upon completion of the program, elementary students receive the title, "Junior Doctors of Health" and are encouraged to continue to spread the program's healthy messages.

Dr. Blake reported that elementary students that were exposed to the program two or more times over the course of their time in elementary school had lower self-reported intake of sugar-sweetened beverages and higher perceived behavioral control for vegetable and fruit consumption.

Key Points

- Junior Doctors of Health (JDOH) is a comprehensive program that promotes healthy nutrition and physical activity behaviors in school aged children and encourages them to consider careers in a health profession.
- MUSC health professional students currently implement the JDOH program to elementary students in underserved communities across the state as part of an Interprofessional Education program.
- Recent funding will allow the JDOH program to expand to include high school students, parents, and teachers.
- USC students in the health sciences will soon have the opportunity to become involved with the JDOH program in the midlands region.

Dr. Blake states, “These results are important because they suggest that exposure to the JDOH program leads to changes in both self-reported behaviors and self-efficacy for targeted behaviors. We hope to show similar impact on other diet and physical activity behaviors in children as well as changes in other levels of influence in our next wave of data collection and are encouraged by findings thus far.”

MUSC student mentors also benefit from participation, as the program aims to increase their understanding of how environmental contexts impact obesity; increase their cultural sensitivity delivering health education in underserved communities; and provide experiences working in inter-professional health teams.

“The Junior Doctors of Health program is a win-win situation for everyone involved. Elementary student participants receive an enhanced health curriculum and have an opportunity to learn more about careers in the health field, and University health sciences students are gaining a greater awareness of the barriers to health in underserved communities, while learning to work in a diverse professional team setting,” said Blake.

Recently, additional funding has been obtained through MUSC and is made possible by a cooperative agreement that was awarded and administered by the U.S. Army Medical Research and Materiel Command (USAMRMC) and the Telemedicine & Advanced Technology Research Center (TATRC) to enhance program delivery and development to include middle and high school students, as well as activities that target parents, teachers, and school administrators.

The expanded version of the program will also include development and evaluation of parent and teacher health education workshops and a teacher exercise program. The exercise program will provide teachers with access to sports trainers, nutrition sessions, and wellness teams. Furthermore, efforts are currently underway to strengthen collaborations between the MUSC and USC partners and to expand this service learning opportunity to USC students and elementary students in the Columbia area through an IPE available to students in multiple health science programs at USC.

Dr. Blake explains that the full impact of the JDOH program has yet to be demonstrated. She said, “The JDOH program uses a novel approach to obesity prevention that capitalizes on a renewable and dynamic resource, health professionals from various disciplines who are in the formative years of their training. While the direct impact of the program in the short-term may be modest, by targeting multiple levels, including future health professionals, there is great potential for long-term changes at multiple levels of influence that can reduce rates of obesity in these communities.”

¹Buring, S. et al. (2009). Interprofessional education: definitions, student competencies and guidelines for implementation. *American Journal of Pharmaceutical Education*, 73 (4):59