Projects and Outcomes

Evaluating the Impact of the Fitness In Nutrition and Exercise (FINE) Program within Shared Medical Appointments (SMA) on Reducing Childhood Obesity in a Community-Based Clinic (2009)

Student Investigator: Rebecca Teng

In this study, we measured the clinical effectiveness of four pediatric SMAs on a Latino population and assessed parents’ perceptions of the SMA for childhood overweight and obesity. Participants were Spanish-speaking overweight pediatric patients (7-14 years) participating in at least 4 Fitness in Nutrition and Exercise (FINE) shared medical appointments (SMAs). A retrospective review of electronic medical records was conducted to report changes in body mass index (BMI), systolic blood pressure (SBP) and diastolic blood pressure (DBP) among pediatric patients attending the SMAs. Post-SMA, parents were contacted by direct mail and telephone to examine self-reported changes in diet and physical activity of children after participation in the FINE SMA. We found statistically significant improvements in BMI (student’s t-test, p=0.0276) and DBP (student’s t-test, p=0.0013) between the first and second visits. Parents reported overall program satisfaction and increases in their child’s exercise participation, sport participation, duration of exercise per activity and the number of fruits and vegetables consumed per day (p<.05).

Although we found limited improvements in patient BMI and blood pressure per SMA, parents’ perceptions of the program were favorable. Parents found that the FINE SMA positively influenced physical activity, diet, and health for the patient and their families. In collaboration with health education efforts in schools and communities, SMAs can be an effective tool for eliminating the rising rates of childhood overweight (Citation: Texas Journal of Public Health. Spring 2010, Vol. 62 (2), 28-31).

Development of an International Spanish Elective for Medical Students (2009)

Student Investigator: Benjamin Mouser

The purpose of this project was to develop an international Spanish elective for medical students. The goal of the elective was to provide students with the opportunity to improve their Spanish language skills through an immersion experience in a foreign country that will also facilitate the exploration and experience of a different culture. Students will learn of the importance a group’s culture has on healthcare and medicine. This will lead to greater cultural understanding and better healthcare in domestic practice. The elective is flexible and can be tailored to suit the specific knowledge-level and goals of the student. The elective will include both didactic and clinical training and experiences. Four (4) elective objectives include: 1) improve student Spanish language skills; 2) provide a cultural immersion experience to aid in
the student’s understanding of the Hispanic culture and its impact on medicine and health care; 3) expose students to the practice of medicine in a limited-resource environment and 4) provide feedback and evaluation of Spanish skills as well as the opportunity to translate in a local health care setting supervised by bilingual faculty or interpreters.

Quantitative analysis to determine the impact of Non-Governmental Organizations (NGOs) in assisting people living with HIV/AIDS (PLWHA) in Ghana (2010)

Student Investigators: Sarah Ashitey & Sherri Khatami

The purpose of this study was two-fold: (1) determine the services provided by non-governmental organizations funded by the Ghana AIDS Commission (GAC) in addressing objectives set forth by the commission and (2) determine program recipient satisfaction levels of services received. Face-to-face interviews were conducted with program directors at NGOs (N=18) to determine services provided to achieve GAC objectives. Frequencies and percents were used to report goal adherence. Program recipients evaluated services using a Likert scale ranging from 0 (poor) to 10 (excellent). Percents were used to report program participant demographics and arithmetic means for Likert scale responses. We interviewed 18 program directors. Preventive care goals were met by condom distribution (N=12) and condom-use skills (N=7). Treatment care and support goals were met by supplying and paying for medications (N=12), distributing food (N=11) and home visits (N=7). The majority of organizations (83%) reported funding as the largest barrier to achieving their goals. We interviewed 103 program recipients: 68% were female, 86% had a high school education or less and 90% were tested for HIV. Program recipients reported highest favorable ratings for preventive care activities (mean=8.25) and voluntary counseling and testing (mean=8.62). The majority of organizations are addressing GAC objectives; however, organizations perceive that additional funding is needed in order to adequately serve their populations. Although program recipients reported high levels of satisfaction for services received, further research is needed to determine the impact of these services on reducing the burden of HIV/AIDS in Ghana.

Focus group analysis to determine the impact of Non-Governmental Organizations (NGOs) in assisting people living with HIV/AIDS (PLWHA) in Ghana (2010)

Student Investigator: Nana Quartey

The purpose of this study was to determine the services provided by the non-governmental organizations funded by the Ghana AIDS Commission (GAC) in addressing objectives set forth by the commission and determine program recipient
satisfaction levels of services received. Cross-sectional data was collected using focus groups at 8 NGOs. The goals of the focus groups were to create dialogue and identify the NGOs strengths, weaknesses and areas of improvement. Each group consisted of 8-9 adult participants (85% female). Participants were asked their perspectives and problems faced due to HIV/AIDS, strengths and weaknesses of their NGO and suggestions for improvement. Most focus groups were conducted in Twi and tape recorded for translation and transcription in English. Data analysis was performed using the long table approach with categories and themes developed by the investigators. Across all groups, recipients reported improved HIV knowledge, obtaining a sense of hope and improved health outcomes after joining their NGO. Common strengths identified were access to medications, food and assistance with transportation. Weaknesses included a limited supply of resources and modest funding. Outside of monetary support, more public education and protection of PLWHA from discrimination and stigmatization were identified as key areas of improvement. We found that NGOs had a positive impact on PLWHA. GAC and NGO leaders will be able to use the results of this study to address these concerns. Longitudinal studies and comparisons with non-NGO affiliated PLWHA can further assess NGO impacts and modalities that can help decrease burden of HIV/AIDS.

The Efficacy of Educating Medical Students and Residents in Pediatric Immunization (2010)

Student Investigator: Rania Hanna, fourth year medical student

The purpose of this project was to assess the knowledge of medical students on pediatric immunizations and the impact of an educational intervention designed to equip students with the knowledge and skills to assess vaccine needs and administer vaccines to children. Participant satisfaction after the training session was also measured. Medical students or residents (N=15) from the UT Southwestern Medical Center participated in two training sessions focused on equipping them with the knowledge and skills required to deliver childhood immunizations. Participants attended a 3-hour session on 1 day in which they will be given a series of interactive lectures and handouts over childhood immunizations. Prior to this training, learners were asked to participate in the study. Participants were asked to complete a knowledge test assessing their knowledge of childhood immunizations before attending the teaching sessions. Following the teaching sessions, participants were asked to complete a post-test composed of the same questions as the initial pre-test assessing their knowledge in pediatric immunizations. Participants were also asked to complete a satisfaction survey. Pre- and posttest results were compared. Results of these surveys will be used to further enhance and replicate this training session for other medical students and learners and will be disseminated at national professional meetings and by peer-reviewed publication.
Evaluating the Efficacy of a Student-Run Childhood Obesity Intervention Program (2010)

Student Investigator: Emily Smitherman

This project examines the efficacy of F.I.T. (Families in Training) for Health, a brief medical student-organized childhood obesity intervention program that focuses on education in nutrition and physical activity for primarily low-income Hispanic families. F.I.T. for Health is a community-based collaboration in Irving, TX, formed in response to a city needs-assessment. Targeted families must have at least one child aged 8-10 with a BMI in the 85th percentile or higher for their age. The program consists of 8 weekly classes, and at least one parent and one child are required to attend every class for successful completion. Outcomes include pre to post changes in knowledge, attitudes, and behaviors in nutrition and physical activity measured with valid and reliable self-report surveys. Dependent t-tests were used to examine pre to post changes in 14 parents (mean age 37; 78% female; 83% Hispanic, 11% African American, 6% Caucasian; mean BMI 30.7) and 17 children (mean age 8.8; 61% female; 90% Hispanic, 5% African American; mean BMI 23.52) enrolled in our pilot study cohort in the summer of 2010. Statistically significant improvements were observed in the parents’ self-concept for diet (p<0.01) and physical activity (p=0.05), fruit and vegetable intake (p=0.026), perceived responsibility (p=0.014) and monitoring (p<0.01) of children’s diet, physical activity role modeling (p<0.01), monitoring television viewing and physical activity (p<0.01), and limiting television viewing (p<0.01). Statistically significant improvements were observed in the children’s nutrition attitudes (p<0.01), moderate activity (p<0.01), and vegetable intake (p=0.029). These results provide preliminary evidence that significant lifestyle changes can be observed in parents and children after participating in a brief, medical student-led, education-focused childhood obesity intervention program. Inclusion of behavioral skill-building may produce greater changes as well as promote reductions in BMI.