

# LESSONS LEARNED: THE ROLE OF MULTI-LINGUISTIC STUDENTS IN THE DISSEMINATION OF INFORMATION RELATED TO HEALTH DISPARITIES

N. Primus, MPA; M. Fraser-White, MD; H. Brown, MA; C. Roberts, PhD; K. Henry, MPH; M. Valmont, PhD; M. Black, MA; T. Wilson, PhD; G. Jean-Louis, PhD; C. Brown, MD; R. Browne, ScD.

Brooklyn Health Disparities Center (a partnership between the Arthur Ashe Institute for Urban Health, SUNY Downstate Medical Center and the Office of the Brooklyn Borough President)

### NIH Grant No: 1P20MD005092-01

# **ABSTRACT**

BACKGROUND: The Arthur Ashe Institute for Urban Health (AAIUH), recognizing that culture impacts health outcomes, trains lay health advocates to deliver health messages. Transfer of knowledge is often conducted within comparable generations. Reverse mentoring as a business model has shown tremendous success, but is rarely deliberately employed in the healthcare field.

METHOD: In 2011, 49 students completed the Health Disparities Summer Internship Program hosted by the Brooklyn Health Disparities Center (BHDC), where they developed skills such as public speaking and peer advocacy. Post-program completion, an online survey was administered to the parents of students who participated in the program.

RESULTS: There was a 95.9% response rate, with 100% of the respondents indicating that their child had shared information regarding what they learned and/or did, with them/ other friends or relatives. Furthermore, their child had shared information specifically on (i) health disparities (n=95.7%), (ii) health policy (n=91.5%) and (iii) community health (n=93.6%).

CONCLUSION: Minority communities, where English might not be the primary language spoken, encounter challenges in accessing quality healthcare. Parents often rely on their children, with a demonstrated higher proficiency in English, to translate messages. Youth educators can be engaged to deliver culturally-competent messages on general health as demonstrated by the students in this program.

# INTRODUCTION

The Brooklyn Health Disparities Center (BHDC), a partnership between the Arthur Ashe Institute for Urban Health, SUNY Downstate Medical Center and the Office of the Brooklyn Borough President, "develops and implements models to reduce health disparities in minority and new immigrant populations in Brooklyn through basic, clinical, behavioral and community participatory research, community education and outreach, and health professional training" (http://www.downstate.edu/healthdisparities/ 2012). In 2010, the Center's Community Engagement core, implemented the first of two internship programs with funding provided by the National Institutes of Health (NIH). The four-week, Health Disparities Summer Internship Program (HDSIP), exposed 51 high school students to a curriculum focused on health disparities, social determinants of health and advocacy, and provided training in research methodology, and exposure to community engaged research.

In 2011, the BHDC implemented the second HDSIP and recruited 49 high school students to participate. Both years, the students were recruited through the AAIUH's Health Science Academy (*HSA*), a three-year science enrichment afterschool program for high school students interested in pursuing careers related to the health sciences.

# **METHODS**

The forty-nine participants of the HDSIP (2011) comprised of students in grades 10-12, from eleven Brooklyn-based high schools, and who were actively enrolled in the HSA. The curriculum facilitated during the summer internship program was developed with input from various organizations represented on the Community Advisory Board of the Center's Community Engagement core.

The curriculum was originally implemented in 2010 and revised based on students' feedback before being re-implemented in 2011. Core courses and training provided over the four weeks of the program included an overview of health disparities and social determinants of health, and topics such as HIV/AIDS, cardiovascular disease, mental health and environmental justice, viewed through the lens of social determinants of health.

# **METHODS (CONTINUED)**

Three days per week, students participated in morning didactic and skill-building sessions at the SUNY Downstate Medical Center and, on afternoons, engaged in research projects of interest to, and

supported by participating community-based Organizations (CBOs).

Pre and post-surveys were administered to the students participating in the program to measure changes in knowledge and/or awareness of health disparities, interest in advocacy and in pursuing a career related to health and specifically, minority health. In 2011, an additional assessment tool was developed to gauge parents' perception of the program and their children's exposure to the health disparities curriculum. This assessment tool was developed as an

online survey, to be completed anonymously (to ensure confidentiality) and distributed electronically via Survey Monkey.

The post-assessment was distributed after students had completed the program, and remained open for data collection for nine weeks after program completion. Parents of students participating in the program were asked to provide an active e-mail address and were followed-up weekly by program staff.



HDSIP interns (2011) conducting blood pressure readings and providing health information to East New York (Brooklyn, NY) residents under supervision of the Mister B project staff.

# CHART 1: HDSIP students perceive themselves as more inclined to make healthy choices regarding diet and exercise and to encourage family members to do the same 90 80 80 Absolutely Moderately absolutely Not encourage family members to exercise members to exercise members to eat healthy/healthier

# RESULTS

The 2011 HDSIP pre-survey was completed by 41 students and the post-survey by 48 students. Of the 48 students completing the post survey, the majority were U.S born citizens; however, 24.4% were immigrants to the U.S, having migrated between one month-12 years from the date of participation in the program. This was similar to post-survey results from 2010 that indicated 35.5% of the students were immigrants to the U.S., which reflects the demographics of East Flatbush/Flatbush, Brooklyn, NY.

Participants of the program were also asked to indicate the primary language spoken in their households. 58.5% of the students responding to the post-survey in 2011 indicated English as the primary language spoken at home; however, 24.2% indicated English was NOT the primary language spoken in their household. Instead, they listed Haitian Creole (Kreyol), Punjabi and Chinese, among others, as the primary language in their households. This finding was also consistent with data from post-survey conducted in 2010, where 25.2% of the students in HDSIP indicated English was NOT the primary language spoken in their household.

In the HDSIP post-survey (2011), students were also asked whether attending the program resulted in their being more inclined to exercise, eat healthier and/or encourage their family members to do the same (CHART 1).

Parents of the 49 students enrolled in the HDSIP (2011) program were asked whether their child had shared any information (*what they learned, learning activities*) with them or others, and all of the respondents (n=47) indicated sharing information. Furthermore, 95.7% of parents who responded had received information from their children on health disparities, 91.5% on health policy and 93.6% on community health. Parents were asked to cite examples of such information and their responses included: "I learned about the struggles diabetes patients go through (dialysis);" "she told me about patient care and patient-doctor relationships;" "I learned that people need to be tested for HIV so they could know their status;" "my daughter and I joined the health disparities website in order to understand what the disparities were;" and "cardiovascular disease and awareness amongst African American women."

# DISCUSSION AND CONCLUSION

There was a strong response rate (95.9%) to the survey distributed to parents of students who participated in the program. This may be attributed to the length of time provided to complete the survey (*nine weeks to submit*), and to the rapport established between program staff and the parents (*via weekly e-mail communication*).

Under-represented communities, where English may not be the primary language spoken, encounter challenges to accessing quality healthcare. Parents may rely on their children, often born or formally educated in the U.S, with a demonstrated higher proficiency in English, to translate messages. Lay health advocates play a similar role in disseminating health messages to their constituents in a culturally competent manner. Many of the students shared information with their parents as was related by the parents. Therefore, youth can be engaged as "lay health advocates" to deliver culturally-competent messages on general health to family members who may otherwise experience linguistic barriers to accessing such health information and services.

## REFERENCES

Wilson.T, Fraser-White. M, Browne. R (2008). Hair salon stylist as breast cancer prevention lay health advisors for African American and Afro-Caribbean women. Journal of Health Care for the Poor and Underserved,19: 216-226

Barr. D, Stanley, S.F. Wanat (2005). Listening to patients: Cultural and linguistic barriers to health care access, 37 (3) 199-204

Coleman K.J, Clark A.Y, Shordon M .et al (2011). Teen peer educators and diabetes knowledge of low-income fifth grade students. Journal of Community Health, 36 (1): 23-26





