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ORIGINAL RESEARCH

Applying a Global Perspective to School-Based Health Centers in New York City

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Abstract

BACKGROUND Since the 1960s, school-based health centers (SBHC) in the United States have emerged and grown with the mission of providing primary medical, reproductive, and mental health services, as well as comprehensive health education, to all students who are enrolled in the participating school. SBHCs have demonstrated a unique ability to reduce barriers to medical care for underserved populations in New York City, including undocumented immigrants and those who are of lower income status.

METHODS The Mount Sinai Adolescent Health Center School-Based Health Program (MSAHC SBHP) was established in 1985 in order to increase access to care for New York City teens. After a change of physical location, one particular site of the MSAHC SBHP had a significant decrease in clinic visits and enrollment. Traditional outreach strategies were utilized, but the results of the efforts were disappointing. Applying the Community Health Worker model, as defined by the World Health Organization (WHO), the MSAHC SBHP developed the Student Ambassador Program, a student-organized community-engagement initiative. The program is based on the premise that youth can be effective at outreach and serving as community liaisons to increase awareness and use of the SBHC. The SBH staff provided recruitment, training, and support. The student ambassadors initiated peer-informed outreach projects to appeal to the student body. Upon completion of the Student Ambassador projects, clinic enrollment increased 4.3% and visits increased 32% over the prior year.

CONCLUSIONS School-based health centers in the United States have helped to provide comprehensive, multidisciplinary care to many children who would otherwise not be able to access care, but community engagement is critical to their success. Applying the WHO Community Health Worker Model to utilize school students for outreach to their school community is an effective way to increase utilization.

KEY WORDS adolescent health, community engagement, community health worker, peer education, school-based health center.

SCHOOL-BASED HEALTH CENTERS AS PRIMARY CARE CENTERS IN THE UNITED STATES

The World Health Organization (WHO) describes effective primary care as a system in which we "put people first" to give balanced consideration to health and well-being, as well as the values and capacities of the population and health workers.[1] One system in the United States that is particularly suited to providing model primary care to children is the public education system.

Since the 1960s, school-based health centers (SBHCs) in the United States have emerged and

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grown with the mission of providing primary medical, reproductive, and mental health services, as well as comprehensive health education, to all students who are enrolled in the participating school.[2] According to the most recent SBHC census data, there are 2315 school-based health centers in the United States.[3] Of these SBHCs, 51.2% are located in urban areas, while 34.6% are located in rural areas, and 14.2% are located in suburban areas.[3] SBHCs are located either within the school building, linked to a school, or based in mobile units serving a school community, and they are staffed by a multidisciplinary team comprised of medical and mental health providers, and other support staff.[2] Because these health centers are part of the school environment, access is improved for children and adolescents who might not otherwise be able to access care, including those who have limited access because of their insurance or immigration status.[3,4]

SCHOOL-BASED HEALTH CENTERS OVERCOME BARRIERS TO CARE IN NEW YORK CITY

SBHCs have demonstrated a unique ability to reduce barriers to medical care for underserved populations in New York City. The city is home to an estimated 1.15 million undocumented immigrants,[5] of whom an estimated 58,000 are children and youth 3 to 17 years of age enrolled in school.[6] Previous reviews have demonstrated that significant proportions of undocumented individuals report avoiding the health care system out of fears of discrimination and deportation,[7-10] even among students with Deferred Action for Childhood Arrivals status.[11] SBHCs are ideally positioned to reduce immigrant parents' hesitation to access medical care for their children, as they are located in a school environment that parents are already familiar with and engaged in.[2]

SBHCs also are uniquely positioned to overcome the barriers to care posed by parents' inflexible work schedules. The health centers are located where children spend a majority of their waking hours, and they can be seen without parental accompaniment. The US Government Accountability Office estimates that 40% of US workers have limited job security and are low-income.[12] For job-insecure parents, an SBHC allows them to avoid conflicts with employers over scheduling when their child needs to be brought in for medical attention.[2,3]

For uninsured patients, the choice to access medical care can be a difficult one, but having a conveniently located free clinic makes the decision easier. SBHCs in New York City provide care to students at no cost to parents, allowing uninsured students to receive similar access to care as their insured counterparts.[2,3]

Medical appointments can result in school absences for students. Absenteeism has been shown to correlate negatively with academic performance on standardized tests.[13,14] The option to tend to medical needs in the school setting enables students and their families to address their health care and academic needs under one roof, and the provision of care can also reduce absence due to illness.

Nationally, 8 in 10 SBHCs today serve adolescent students in sixth grade or higher.[3] In addition to improving access by providing primary care services, SBHCs further increase access to care for adolescents by providing confidential care for reproductive and other sensitive health issues in a nonjudgmental setting. One such program that serves adolescents in New York City is the Mount Sinai Adolescent Health Center SBH Program.

THE MOUNT SINAI ADOLESCENT HEALTH CENTER SBH PROGRAM

The Mount Sinai Adolescent Health Center School-Based Health Program (MSAHC SBHP) was established in 1985 in order to increase access to care for New York City teens.[15] The program has grown to include 6 school-based health centers located within 6 buildings that house 21 high schools and 2 middle schools, serving 11,609 youth in Manhattan, New York City.[15,16]

In the summer of 2015, one of the MSAHC SBHCs, which had been in operation for over 30 years, was moved and rebuilt in a corner of the lower level of the building. Although the new clinic was spacious and modern, the move was followed by a significant decrease in clinic visits and enrollment, and staff members observed that student awareness of the health center was poor. During the 2015-16 school year, SBHC staff conducted outreach initiatives aimed at the school administration and faculty to increase enrollment and utilization, but the results of those efforts were disappointing. The staff observed that although they operated within the school community, school personnel, students, and parents, who approved and appreciated SBHC services, did not actively support them. The SBHC was considered to be a separate entity. It became clear that a new approach to community engagement was needed, and the SBHC staff chose the Community Health Worker model as their new approach to outreach.

COMMUNITY HEALTH WORKER MODEL IN A SCHOOL-BASED HEALTH CENTER SETTING

The Community Health Worker model as defined by the WHO states, "Community Health Workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers."[17] This model has been widely used and recognized for its usefulness in reaching target populations.[18] Adolescents have unique characteristics that distinguish them from other age groups: they look to their peers not only for recommendations for where to acquire services but often go to their peers as a source of information, especially concerning more sensitive topics such as reproductive and sexual health.[19] Inspired by the diversity of students from all over the world in the school, the Mount Sinai SBHC staff designed a pilot outreach program based on the Community Health Worker model in an attempt to overcome the problems posed by the relocation of the health center.

ROADMAP TO CHANGE: THE STUDENT AMBASSADOR PROGRAM

Mission. The goal of the Student Ambassador Program is to engage students as Community Health Workers, called "student ambassadors," to increase the utilization of the SBHC located inside an urban high school. Using the Community Health Worker model, the program is based on the premise that youth can be effective at outreach and serving as community liaisons to increase awareness and use of the SBHC.

Implementation

1) *Recruitment*

All students in the school were eligible to participate in the Student Ambassador Program. Interested students were asked to complete a formal, online application. A total of 40 applications were received, and 13 students were selected for interviews. The selection criteria for the student ambassadors included academic standing, extracurricular activities, leadership capacity, creativity, communication skills, and problem-solving skills. The 6 students that were selected to become student ambassadors represented grades 9-12 and were racially and ethnically reflective of the student population, which includes Black/African American, Asian, and Latino youth. Of the 6 student ambassadors, 2 were male and 4 were female youths.

2) *Training*

The SBHC program health staff trained the student ambassadors. Ambassadors attended training sessions to learn about the SBHC clinic services, identify issues in outreach and utilization, and brainstorm and develop projects. Student ambassadors received basic education about adolescent health topics such as chronic illnesses, reproductive health, mental health, wellness, and acute care concerns to gain a better understanding of how the SBHC serves their school community. Throughout the following 4 months, SBHC staff held weekly meetings and helped students implement their projects. Attendance was required at all training sessions.

3) *Activities: Identification of Problems and Development of Solutions*

Drawing on their knowledge of their peers in several brainstorming sessions, the student ambassadors identified 3 concrete problems and solutions regarding utilization. One of the problems that the ambassadors described was that although the location of the SBHC was identified by standard wall signs, there was a lack of SBHC signage in the school building that students could identify with. They recommended and developed print material made by adolescents for adolescents to promote specific clinical services, while identifying specific locations that their peers would most likely congregate to maximize poster viewership.

Another problem identified by the student ambassadors was the perception that the SBHC was separate from the school community. The ambassadors suggested that utilization would increase if the SBHC established a presence in their community by hosting events. The student ambassadors organized a sports tournament that was open to all students and staff members within the school. Over 50 students, teachers, and administrators participated in front of an audience of over 200 of their peers.

School announcements are typically distributed through morning announcements on the loudspeaker or through the school website. Ambassadors observed that the SBHC advertisements that were featured on the loudspeaker and website were ineffective at improving SBHC utilization. Ambassadors

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created teen-friendly, amusing, and engaging announcements about SBHC services that would resonate with their peers.

4) *Evaluation*

The MSAHC SBHP uses the New York City Department of Health's Online School Clinic Data Repository (OSCR)[16] to collect utilization and patient data on an ongoing basis. The enrollment of the SBHC in the year immediately after the renovation was 74%, with 30% of students utilizing the clinic and receiving 695 visits.[16] Since the completion of the student ambassador projects in May 2017, enrollment was up to 79%, with 47% of students utilizing the clinic for 1749 visits.[16] The results of the Student Ambassador Program continued to accrue during the 2017-18 school year, with a year-to-year increase of 4.3% in enrollment and 32% in medical visits compared to the first month of the 2016-17 school year.

Some of the benefits of the Student Ambassador Program cannot be captured quantitatively. One of the largest impacts of the program was the establishment of richer communication between the school community and the SBHC. Some of the projects required working together with school staff and administrators, which helped to create a sense of community within the school that included the SBHC. This, we anticipate, will continue to translate into increased visibility and utilization of the SBHC.

NEXT STEPS

School-based health centers in the United States have helped to provide comprehensive, multidisciplinary care to many children who would otherwise not be able to access care.[3] By applying principles set forth by the WHO for global health utilizing Community Health Worker models, the Mount Sinai School-Based Health Program is working to better serve a diverse population of young people in New York City.[1]

In future endeavors, we plan to expand the pilot of the Student Ambassador Program across other SBHC sites. The Student Ambassador Program is particularly useful for implementation in resource-constrained environments. SBHCs already have the resources at hand to establish a voluntary student program and do not require additional funding. By adapting the Community Health Worker model, sites can utilize student ambassadors to help identify key issues and concerns within their communities and collaborate with SBHCs at different sites to better understand how to serve the needs of their students. Additionally, we hope to utilize student ambassadors to develop a more robust curriculum for youth-initiated health education projects on sensitive adolescent health topics across all of our sites.

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