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Innovative Ways of Integrating Public Health Into the Medical School Curriculum

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Abstract

This is one of six short papers that describe additional innovations to help integrate public health into medical education; these were featured in the “Patients and Populations: Public Health in Medical Education” conference. They represent relatively new endeavors or curricular components that had not been explored in prior publications. Although evaluation data are lacking, it was felt that sharing a description of the methods use by Morehouse School of Medicine to integrate public health in the curriculum would be of value to medical educators.

Objective

The mission of the Center for Community Health and Service Learning (the Center) is to utilize creative service-learning approaches to introduce medical and other health professions students to the principles of public health and population health.

Description

The Center, located in the Department of Community Health and Preventive Medicine, is responsible for integrating public health and service learning into the MD program as well as into the fabric of the entire institution. The Center works with department faculty to identify community partners, and together with these partners, the faculty, and the students, it develops and evaluates service-learning projects.

Started in 2000 with seed funding from the Corporation for National and Community Service, the Center developed the Morehouse School of Medicine Model of Community Health, Community-Based Service-Learning, and Civic Engagement. Through this model, the Center has increased student exposure to the public health principles without increasing lecture time. This model also assists Morehouse School of Medicine (MSM) in meeting its institutional mission of training minorities and other individuals as physicians dedicated to the primary healthcare needs of the underserved.

Morehouse School of Medicine has been a consistent leader in the percentage of its graduates selecting primary care and has achieved a track record of low attrition rates, strong licensure exam performance, and commitment of its graduates to service. Recently, MSM was ranked as number one among U.S. medical schools in fulfilling the social mission of medical schools.¹ The authors of this article believe that a large part of this success is due to the extensive opportunities provided for students to engage in community-based training

opportunities.^{2,3} The Center's goals are to prepare medical students to provide service to the underserved, to provide health benefits to communities participating in the programs, and to offer public health opportunities and exposures for MSM students.

First-year medical students are introduced to public health, defined as "the science and art of preventing disease, prolonging life, promoting health and efficiency through organized community effort,"^{4,5} in two 11-week semesters of the Community Health course, which is taught predominantly within the community. During the fall semester, two lectures expose students to public health principles, needs assessment techniques, and public health policy. Following the initial sessions, students are divided into small groups that meet 3 hours weekly with two faculty members at assigned community sites (e.g., public schools, faith-based organizations, Boys and Girls clubs) to conduct a needs assessment that includes a "windshield survey," focus groups, key informant interviews, a written survey, and sometimes other parameters such as children's anthropometry.

In the second semester, students present the fall needs assessment results to community representatives, agree on a health promotion intervention to address health concerns identified in the fall semester, and implement and evaluate their intervention. Placing students at the same sites each year shows MSM's long-term commitment to the community and furthers trust and respect between the community and MSM. Community participants view the program as an "ongoing partnership" and request that faculty and students return in the next academic year. Each year, students ask community representatives to identify the most pressing health concerns for their community, to allow ownership of and commitment to the topics for the health promotion interventions. Medical student interventions for the community health course have included the development of a student-run fruit and vegetable stand to encourage healthier eating; the *Biggest Loser* competition at a school to encourage parents and teachers to exercise and lower their BMI; FIT: Fitness Intervention at Thomasville; and *Bring Healthy Back*, a fitness program for middle school students.

The success of this course led to an expressed student interest in continuing to provide public health interventions and service after the community health course. In response, the Center developed a fourth-year longitudinal service-learning elective that can begin anytime after the first year of medical school but is completed and credited in the fourth year. The one-credit elective follows the format of the community health course but is completed by individual students, and encourages a greater understanding of public health. The course requirements include 100 hours of community service, a scholarly paper, and a final presentation to faculty. The course requires students to assess the health needs of the community and implement and evaluate a health promotion intervention. The students develop community projects that are consistent with their personal and professional interests, and select the community in which to implement the intervention. The topics and sites are identified by the student but must be approved by the faculty advisor selected by the student, the community organization, and the Center director. This elective is consistent in level of complexity with other fourth-year electives.

Extracurricular public health experiences include public health mini-grants. Students apply for mini-grants as individuals or in small groups to develop public health service-learning projects utilizing the assessment and intervention methods learned in the community health course. These are short-term projects that are completed within 3–6 months in communities of the students' choice and are not tied to course offerings. These activities do not have to offer the same academic rigor as the other program offerings. Students prepare poster presentations based on their mini-grant activities and display them during MSM's observance of National Public Health Week. Examples of student projects are included on Table 1.

In 2001, the Center developed the Honors in Community Health and Service program, which offers a yearly maximum of five rising second-year medical students an extended opportunity to partner with and provide service to underserved communities. This program selects high-achieving medical students who are recommended by faculty to participate in an honors program during their final 3 years of medical school. Honors candidates develop a project over the 3 years under the supervision of an advisory committee, which includes MSM faculty and community representatives. The students complete yearly required community service hours (32 in the second year; five in the third year; and 100 in the fourth year associated with the elective) that are specific for this program, participate in one or more mini-grant opportunities, and present at MSM public health day or at another professional conference.

In the second year, students develop the first draft of their project, select a faculty committee, and meet with evaluation faculty advisors. Students are encouraged to take the service-learning elective, which gives them course credit and time to complete the scholarly project and mini-thesis. Students provide an oral defense of their project followed by questions and answers to faculty, students, community representatives, and top administrators.

On successful completion of this program, students are acknowledged on Class Day (a pre-commencement occasion on which academic honors are conferred), in the dean's residency letters, and at graduation. Honors projects are more complex than in the other program offerings and have included: (1) an HIV/AIDS Awareness Intervention for High School Students; (2) Adolescent Pregnancy, STD, and HIV Prevention Program in an After-School/After-Work Setting; and (3) Life Skills-Based Intervention for the Prevention of Youth Violence in an After-School Setting: a Pilot Study.

In summary, the Center for Community Health and Service Learning at Morehouse School of Medicine sows public health opportunities throughout the 4 years of medical school. It organizes and supports the first-year service-learning course required of all students; it provides small grants to fund student-run community projects; it offers a fourth-year service-learning elective; and it sponsors a unique honors program in community service that engages candidates throughout their medical school experience. Its success in promoting these activities is nurtured by an institutional environment in which service to underserved communities is the norm.

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Table 1

Examples of students' mini-grants

Project titles and summaries	Community
1. Food for Thought: Healthy Eating in the West End: to assist AUC undergraduate students in make healthier food choices with the limited choices eateries close to campus; three second-year medical students: mini-grant	Atlanta University Center Atlanta GA
2. Stepping Stones to Getting Fit: establishing a fitness program for adolescent girls, aged 10–16 years, in association with the 100 Black Women of Atlanta One third-year medical student: honor's program and mini-grant	Sylvan Middle School
3. "Heart to Heart": a Pregnancy, STD, and HIV Prevention Program: Reduce the high school dropout rate focusing on pregnancy prevention and STDs One fourth-year medical student: honor program and mini-grant	East Lake YMCA and the Cherokee Focus
4. Third-Trimester Counseling Health education on the benefits of breastfeeding Two fourth-year medical students: elective and mini-grant	Willie J. Freeman Clinic and MSM CFHC
5. Balanced Student—Better MD: Surveying the MSM students to gauge eating habits and exercise to evaluate "Do providers' own lifestyle habits matter?" Three first-year medical students: mini-grant	Morehouse School of Medicine Campus

AUC, Atlanta University Center; CFHC, Comprehensive Family Health Care Center; MSM, Morehouse School of Medicine; STD, sexually transmitted disease