

Teaching and Addressing Health Disparities Through the Family Medicine Social and Community Context of Care Project

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ABSTRACT

By training future physicians to care for patients with backgrounds different from their own, medical schools can help reduce health disparities. To address the need for education in this area, the leaders of the Family Medicine Clerkship at the Warren Alpert Medical School of Brown University developed the Social and Community Context of Care project, required of all medical students rotating through this clerkship. Students develop a hypothetical intervention addressing a health issue seen at their preceptor site, and are assessed on their grasp of the social and contextual issues affecting that health issue in their particular community. Some interventions are actualized in later clerkships or independent study projects; one example, a health class for pregnant and parenting teens at Central Falls High School, is described here. If made a routine part of medical education, projects such as these may help medical students address the health disparities they will encounter in future practice.

KEYWORDS: Education, medical, undergraduate; Students, medical; Curriculum; Peer mentoring

INTRODUCTION

Medical education has an important role in addressing health disparities. Patient outcomes, for example, can be affected by sociocultural differences between patients and their providers; when these differences are not understood or addressed, disparities in care may be exacerbated.¹ Education that improves future physicians' abilities to care for patients with backgrounds different from their own could reduce the health disparities we see in the United States, by helping physicians understand sociocultural factors that may impact their patients' health decisions.¹

At the Alpert Medical School (AMS) of Brown University, the undergraduate medical curriculum is organized into nine abilities which represent competencies expected of each graduate.^{2,3} Ability VII, Community Health Promotion and Advocacy, is defined as follows:

The competent graduate practices medicine in a broader context by understanding the many factors that influence health, disease and disability. The graduate advocates for the patient's well-being and works with

community partners to identify and address environmental, social and behavioral factors and health system policies which alter the opportunities to be healthy.”⁴

Family Medicine, a specialty providing “continuing, comprehensive health care for the individual and family,”⁵ has incorporated into its national clerkship curriculum the idea that contextual care is important.⁶ This curriculum highlights objectives that consider patients in the context of their communities and cultures, and asks students to discuss the role that these factors might have on health outcomes. At AMS, the Family Medicine Clerkship has long embraced teaching the concepts of Ability VII,⁷ and this teaching has had an impact on both our students and the communities in which they learn.

THE SOCIAL AND COMMUNITY CONTEXT OF CARE (SACC) PROJECT

To address Ability VII, and to help students achieve the contextual care learning objectives for Family Medicine, the Social and Community Context of Health (SACC) project was developed in 2006. This project, completed by every student on the required, six-week Family Medicine Clerkship, serves as an opportunity for students to consider the social and community context of a particular health issue affecting patients at their preceptor sites and to propose a hypothetical intervention to address that issue. The project is paired with a half-day session and one-hour group discussion during which students explore one of two communities in Rhode Island and learn about the agencies that address the social issues affecting the health of the populations living in those communities.

In completing their individual projects, students first perform a similar exploration of the communities surrounding their individual preceptor sites by walking or driving around the area to investigate key resources such as service organizations. Students also use internet resources to explore the demographics and health statistics relevant to that community and to further understand the health issue chosen for the project. They conduct a literature review to inform their intervention design, and compile information about the status, content and quality of existing community resources related to their target health problem. Students next conduct key informant interviews with patients/caregivers affected by the health problem and with non-physician

Table 1. Sample Community-Based Interventions Proposed by AMS Students

Health Issue	Community	Proposed Intervention
Obesity	South County, RI	Improve reporting of sidewalk problems and encourage community involvement for sidewalk repairs
Body Image	Plainville, MA	Implement middle school curriculum addressing healthy relationships with bodies
Melanoma	Newport, RI	Increase sun safety among visitors to Newport beaches
Depression	East Greenwich, RI	Develop a mindfulness meditation program to prevent and treat depression
Homelessness	Danielson, CT	Provide sliding-scale transportation from homeless shelters to job interviews, trainings, and newly obtained jobs
Falls	Pawtucket, RI	Offer Tai Chi classes to seniors at the senior center and in Pawtucket parks

community-based individuals who can provide them with information about the problem from differing perspectives. Finally, students propose a feasible, community-based intervention that is relevant to the needs and resources of their community, is informed by their key-informant interviews, and is targeted to the particular social and community context. Often the chosen health issue comes to students' attention during the first weeks they spend seeing patients in their preceptor's practice.

Students are encouraged to broadly define the health problem they are addressing, while adequately explaining the contextual relevance of the problem and designing an intervention that is community-based rather than office- or hospital-based. For example, one student might intervene to improve transportation access to reduce social isolation among rural, community dwelling older adults, while another might choose to address inadequate dietary adherence to foster better disease control among urban, low-income patients with diabetes. For further examples of student SACC projects, see **Table 1**.

During the final week of the clerkship, each student gives an eight-minute presentation which counts for 15% of the final clerkship grade. Students are evaluated on their grasp of 1) the social context of the health issue addressed by their proposed intervention, and 2) the extent to which their intervention is appropriate for that particular social context.

Due to the clinical demands of the clerkship, SACC projects are hypothetical in nature; however, some students choose to fully implement their proposed interventions as independent study projects or as assignments for another course. One student's SACC project, for example, proposed a digital mindfulness-based intervention to address stress in residents of Central Falls. A year later, he actualized this project during his fourth-year Clerkship in Community Health. Another project, described in detail below, has grown from the SACC project of two medical students into a lasting partnership between Central Falls High School, AMS, and the Department of Family Medicine at Memorial Hospital of Rhode Island.

Evolution of a SACC Project

In 2011, two students (JH, CD) noticed that many of the patients they saw for prenatal appointments at the Family

Care Center at Memorial Hospital of Rhode Island in Pawtucket were adolescents, and they sought to better understand teen pregnancy in the clinic's catchment population. Their initial research brought them to neighboring Central Falls, which, at the time, had a teen pregnancy rate more than three times the state average (nearly one in 10) and a child poverty rate of 41.5%.⁸ To better understand the young women behind these statistics, the students interviewed the following key informants at Central Falls High School (CFHS): several high school students who were pregnant or parenting, a gym/health teacher, a guidance counselor, an English teacher, and the school's Expanded Learning Opportunities (ELO) coordinator. Their interviews demonstrated that pregnant and/or parenting female teens felt as though pregnancy itself was relatively easy, but that they were underprepared for the realities of parenthood. Faculty members at the school also expressed feeling underprepared – in their case, for helping guide their pregnant students through this life-changing event. Taking this information into account, the students' SACC project proposal was to create a health class that would combine medical information related to conception, birth, and parenting with a peer support group. The class would provide knowledge, support and course credit, something many teen mothers were lacking due to the time off required by their pregnancies.

In response to excitement at the school about this hypothetical project, the students then turned the class into a reality during their fourth-year Community Health Clerkship. The ELO program at CFHS, which supports students in crafting academically rigorous experiences in a particular field of interest, became the setting for this class. After advertising widely throughout the school, JH and CD designed and taught a weekly health class to teen mothers and mothers-to-be. Classes opened with journaling, included didactic and peer-to-peer teaching on a particular topic (e.g., "how is a baby made?" and "what do I do to calm a fussy child?"), and ended with teaching about nutrition through preparing a healthy snack as a group. Overall, nine students ranging in age from 14-18 years participated in the course, and about half were pregnant with their first child. Though individual attendance varied throughout the semester, students overall voiced that they had had a positive experience, with one student stating that the class "was worth my time because

Figure 1. Rye-Jim Kim, AMS Class of 2014, with a child of a mother in the team mom health class at Central Falls High School.



Figure 2. Teen mom health class at Central Falls High School, 2013-2014.



I got to express how I felt and ask questions if I wanted to."

Upon the graduation of JH and CD from AMS, two other medical students (AY and RK), each with interest in primary care and underserved communities, continued to work with CFHS on this project. As before, it was designed to serve as both a source of useful information for adolescent mothers and as a peer support group with medical students serving as mentors and facilitators/teachers. In the second year, the CFHS students in the class all had at least one child and, as such, the curriculum was adapted to already-parenting adolescents (see **Figures 1 and 2**). Overall, eight students ranging in age from 18-20 years participated; classes focused on learning about prenatal care, parenting, and contraception, to name a few. Input from students often determined the material for future classes; for example, questions and concerns about child development led to two sessions focused on how to best engage with a child according to his/her stage of growth.

This second group of high school students collectively decided to create a workshop in which they would share personal stories about pregnancy and teen motherhood with younger students at the Dr. Earl F. Calcutt Middle School, also in Central Falls. With this goal in mind, the majority of spring semester class sessions focused on "Storytelling," guiding these young mothers in reflecting upon their own life experiences in order to facilitate their role as peer educators for the middle school students. Students listened to a teenage mother's story on National Public Radio, discussed how they viewed

themselves and their relationships, and talked about what makes a story powerful. Each student chose a specific message she wanted to convey to the younger girls. For example, one student discussed the financial burden of having a child; another spoke about her birthing experience and being pregnant. This process resulted in the development of a video that was shown at the beginning of the middle school workshop, conveying the powerful impact that motherhood has had on these adolescent women, and allowing them to share this experience in a productive way with younger girls. High school students' thoughts about the value of this class can be seen in **Table 2**. (If interested in viewing the video, please contact cfhsteenmomsams@gmail.com).

Table 2. Quotations from High School Students Describing the Impact of the CFHS Project

High School Student	Quote
N.	"I enjoyed being a part of the Teen Parenting ELO because it gave me ideas of ways to have my son express himself. It was great working with Brown Medical Students because we found what we had in common."
C.	"I loved it ... it was a lot of fun. Especially knowing the other girls' experiences... It's interesting knowing other people's stories because you know you are not alone – that you're not the only young mother out there...people by your side, know how you feel, the struggle you have." "A lot of people think they [teenage mothers] are into this because they had sex. It's not just that. There's so much more to it that a lot of people don't understand..." "I learned I'm a strong person."
Y.	"At first, I didn't want to talk about my life, my personal life. But after, I got closer to you [medical student], and you got closer to me, I actually started to get more open and not shy...help other people. Now I can actually say this class helped me realize a lot of things I didn't know so I'd like for this class to keep going."

Table 3. Quotations from Medical Students Describing the Impact of the CFHS Project

Medical Student	Quote
JH	"The work that I did with the wonderful students and staff of CFHS...is exactly the type of community-based work that I hope to engage in once I graduate from residency. To be able to see disparities in clinic and then carefully design interventions based on community needs and in conjunction with community members reinforces my decision to pursue a career in family medicine centered around caring for and serving the underserved."
RK	"Just as starting clinical rotations adds a whole different dimension to the medical school experience that students cannot get in their preclinical years, working out in the community adds something that physicians and physicians-in-training can't get from working just in the hospital or office. Seeing people in their community allows the physician to see their patients in context and compels him/her to collaborate with their patients from a place of true respect and love. [And with regard to teen pregnancy], what I've gained greater appreciation for is that raising a baby is difficult for anyone and everyone regardless of age and background, and having children can be a powerful motivator for many people who may have had little hope for or confidence in themselves. If they are given the right tools and resources, the contact with the right people, the opportunities to prove their abilities and determination to themselves and others who have doubted their worth, they want to improve."
AY	"When we think of teenage mothers or encounter them as patients in the clinical setting, it is tempting to group them into a challenging and needy population for which we think 'sex education and access to contraception-related resources' is the answer. Yet in getting to know the teen mothers in our class – hear their stories, meet their children, learn of their struggles and witness some of their achievements and efforts – I have been profoundly struck by themes of social and economic hardships, painful familial and relational brokenness, and cycles of social immobility. It compels me to believe that in our responsibility to care for them, we must advocate for mentorship and peer support with good role models, creative educational opportunities, and a committed presence in the community to help but also to learn and adapt."

Impact of the CFHS SACC project on Medical Students' Education

For the medical students involved in this project, working with the young mothers at CFHS has had a long-lasting impact on their perspectives about community work in general, and teen pregnancy more specifically. For quotations detailing the influence this work has had on the medical students involved, see **Table 3**.

CONCLUSION

The SACC project provides medical students with the opportunity to address a specific health issue affected by contextual issues in a systematic fashion. Through the work required for this project, students developed a deeper understanding of the societal issues that affect the health of the populations for whom they are caring during their clinical training. It is this type of education that may provide future physicians with the training they need to better understand their patients and deepen their abilities to care for diverse communities.

As exemplified by the CFHS partnership, SACC projects can demonstrate the possibilities that exist when health professionals dig beneath the surface of disheartening data and build relationships outside of the physician's office. As Elizabeth Ochs, the CFHS ELO coordinator, stated, "The partnership...is a prime example of the power of mentorship and community connection. The medical students developed relationships with the students that extended far beyond sharing medical knowledge and health guidelines. They created a learning community in which everyone felt safe enough to express themselves, share their hopes and fears, and develop a sense of agency around their own health and the health of their children." And as the medical students saw, the impact

on their own education and career paths was equally powerful. If partnerships such as this continue to be cultivated as a routine part of medical education, perhaps our future physicians truly will begin to break down the disparities that continue to challenge our healthcare system.

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Disclosures

None

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