An Experiential Resident Module for Understanding Social Determinants of Health at an Academic Safety-Net Hospital.

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An Experiential Resident Module for Understanding Social Determinants of Health at an Academic Safety-Net Hospital

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Abstract

Introduction: Half of the U.S. population has chronic illness. Many disparities exist in health care for management of chronic disease among poorer individuals, including decreased access to healthy foods, homelessness, and difficulty navigating large hospital systems due to low health literacy. A survey of resident physicians found significant gaps in preparedness to provide cross-cultural care. Education is needed to promote consideration of patients' social and cultural barriers in managing disease and navigating the health care system. This module was created as an introduction to social determinants of health, and highlights disparities in access to healthy food, water, shelter, and medical care in a sample of the residents' own continuity clinic patient panel. **Methods:** We designed this experiential module to help internal medicine residents at an urban institution better understand how social constructs might hinder patient health. Activities were chosen by learners from a list of options, and carried out in small groups during a half day of protected time. We used reflective writing exercises to elicit resident thoughts about the module. **Results:** Thirty-nine second-year residents participated in the module. Following the course, 41% of residents submitted reflective statements about their experience. Reflective responses suggest an enhanced appreciation for social determinants of health, a sense of empowerment to advocate for better patient resources, and an appreciation for systems-level factors that play a role in social determinants of health. **Discussion:** Our results demonstrate that a short, experience-based module can impact resident attitudes about social determinants and improve advocacy around identifying community resources.

Keywords

Curriculum, Experiential, Social Determinants, Editor's Choice, Safety-Net

Appendices

A. Module Overview and Assignments.docx

B. Living the Social Determinants PowerPoint .pptx

C. Postcourse Reflective Questions.docx

All appendices are peer reviewed as integral parts of the Original Publication.

Educational Objectives

By the end of this session, learners will be able to:

1. Identify, understand, and appreciate the social factors that affect the health of patients.
2. Appraise their own knowledge and attitudes about social determinants of health.
3. Implement experiential exercises which demonstrate how social determinants contribute to disparities in health and the health care experience.
4. Investigate and create a list of local community resources that might assist patients in overcoming barriers as it relates to their health or access to health care.

Introduction

Our Primary Care Center is an academic, safety-net, hospital-based clinic that accommodates approximately 70,000 visits a year, mostly by uninsured, low-literacy patients with multiple chronic illnesses. The majority of our patients are poor (90% with family household incomes less than $20,000), chronically ill (62% reporting more than four chronic diseases), of lower literacy (57% reading below an eighth grade level), and demonstrate lower patient activation (60% lack knowledge and confidence to take

action).[1] Further, evidence shows that difficulties in patient navigation lead to higher-cost care and poorer health outcomes, likely due to inadequate chronic disease and preventive care management resulting from missed appointments or an inability to navigate the health care system.[2] This requires that patients, and health care providers, identifythe personal, psychosocial, and environmental factors impeding these patients from appropriately caring for their disease, then learn to overcome these obstacles.[3]

Health care providers should be empowered to advocate for their patients in order to eliminate the disparities created by social determinants. Professional associations such as the American Board of Internal Medicine cite advocacy as a central component of professionalism in medicine.[4] In their *Declaration of Physician Responsibility*, the American Medical Association declares that physicians should "advocate for social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being."[3]

And yet, a survey of resident physicians across multiple specialties found significant self-identified gaps in their preparedness to provide cross-cultural care, which may contribute to health disparities.[5] A 2015 literature search conducted by the authors of this module found only seven institutions in which health disparities and advocacy were taught to residents. As a result, we sought to develop a module targeted at second-year internal medicine residents, by which they could better understand and appreciate social determinants of health while also feeling more confident to advocate for community resources addressing these issues. Further, we aimed to design a lesson plan that did not require extensive faculty time for lecturing, oversight, or implementation, and that could also be shared with other faculty and institutions.

In our review of educational resources in *MedEdPORTAL*, we found that most modules teaching social determinants of health are either designed for medical students, promoted a longitudinal design, or focused on abroad issues and global health.[6-9] Others focused solely on online modules or videos to deliver content to learners.[10,11] Only one program has been published in *MedEdPORTAL* which followed a brief, one-time, 4-hour field experience with a design similar to our module.[12] However, their module is distinguishable from ours in that it is taught to medical students rather than residents.

Thus, we have come to realize that resident modules are needed to: (1) promote resident recognition and appreciation of the role that social determinants play in the health of patients, (2) engage residents in truly understanding their patients' perspectives, and (3) empower residents to advocate for patients by investigating and identifying local community resources that overcome barriers to their patients' health. Our teaching model is novel in that the experiential portion can be completed in one half-day by our residents (during ambulatory rotations), with minimal faculty time commitment (1 hour at the beginning of the month, 45 minutes at the end of the month).

Methods

The module was carried out during the month-long ambulatory rotation of second- and third-year residents. This period of time was thought to be best to implement the module, as this rotation focused on the role of the outpatient clinician in understanding the social context of their patients as residents delivered longitudinal care for management of chronic diseases and preventive health. Further, residents on their ambulatory rotations had a half-day of protected administrative time, during which they could carry out the experiential activities chosen in this module. This protected time also allowed residents to conduct telephone outreach and care coordination for their highest-risk ambulatory patients (who are often in need of social services to maintain their health). From this cohort of patients, residents were able to choose one individual patient for whom to focus on for their experiential exercise.

The month-long module started with an outline describing the module assignments, and an overview of the experiential activities that residents could choose from (Appendix A). After reviewing the assignments (which were emailed), residents attended an hour-long introductory workshop consisting of a PowerPoint presentation (Appendix B) that followed the outline provided in Table 1.

Table 1. Introductory Workshop Schedule: Living the Social Determinants of Health

Time	Topic	Format
5 minutes	Discuss aloud some social disparities that exist for patients you have treated in primary care clinic.	Large-Group Discussion
5 minutes	Depict the social disparities that one resident observed when visiting the local neighborhood of a patient he cared for (as part of his experiential exercise).	PowerPoint Slides
5 minutes	Describe the World Health Organization definition of the "Right to Health" and review the Universal Declaration of Human Rights. Contrast this to what our patients experience in their community and in our health care setting.	PowerPoint Slides, Large-Group Discussion
20 minutes	Identify innovative ways to address and improve social determinants of health for clinic patients.	Video by Rebecca Onie: *What if Our Health Care System Kept us Healthy?*
15 minutes	Break into small groups to review experiential exercises. Commit to one exercise that each small group will complete together over the course of the month.	Small-Group Discussion

After their introductory workshop, residents used their half-day of ambulatory administrative time each week as follows:

- Week 1:
  - Create a list of your high-risk patients using the electronic health record (EHR), choosing those patients for whom you are listed as primary care physician.
  - Determine their unmet medical needs.
  - Assist in coordinating their care through any of the following:
    - Social worker consultations.
    - Specialist referrals.
    - Ordering preventive health services.
    - Medication consolidation.
    - Assisting in making appointments for missed referrals.
  - Document your care plan and patient outreach in an EHR note, and add the course director as a cosigner to your note.
- Week 2:
  - Meet with social worker/pharmacist as needed to assist your patients.
  - Continue to document your care plan and patient outreach in an EHR note
  - Add the course director as a cosigner to your note.
- Week 3:
  - Choose one patient's social barriers of health to focus your experiential project on.
  - Conduct your experiential exercise within your assigned small group, to better understand that patient's social determinants of health.
  - As a small group, collaborate on how you would advocate for your patients to achieve better health.
- Week 4:
  - Write in to your facilitator with a summary statement describing the exercise, what you learned, and how you might advocate for patients in similar situations moving forward.
  - Attend a culminating 45-minute reflective postcourse workshop for large-group discussion of lessons learned, as outlined in Table 2.

Table 2. Reflective Postcourse Workshop Schedule: Advocating for Our Patients

Time	Topic	Format
20 minutes	Small groups present their exercise (showing pictures that were taken along the way, if applicable).	PowerPoint Presentation, Large-Group Discussion
10 minutes	Small groups research online any nonprofit/volunteer organizations that exist locally to address the needs of their community.	Small-Group Discussion
15 minutes	Small groups present aloud the organizations they identified, to create a living document of local community resources addressing patient needs.	Large-Group Discussion

This module was conducted by faculty with interest in teaching about social determinants. No faculty development was required; general interest and experience with safety-net patient populations (and a review of the materials provided) sufficed for teaching this module. At our institution, the module was taught by one faculty member. Additional faculty volunteers could attend the resident experiential exercises, although allowing them to be resident-led appeared to allow for more robust discussion among learners. For this reason, we designed the experiential exercises such that faculty did not attend them.

Results

Thus far, 39 second- and third-year residents at the Emory University School of Medicine experienced this module during their required 4-week ambulatory rotation. Residents were reminded at the end of the module to write in about their experience and explain both what project they chose, and what they learned from the experience. Following the course, 19 (41%) residents submitted reflective statements demonstrating a high degree of engagement in the module, multiple insights gained, and identified areas of behavioral change in their medical practice. Learners were given a document containing postcourse reflective questions (Appendix C), to aid in the writing of their statements. Examples of narrative reflections obtained from residents include the following quotes:

- "For my [experiential activity], I chose to brave the outdoors from the deck of my home. I did this last night. . . and I lasted from 8pm-1am. I did my best to avoid going inside to warm up or to fetch some food, but I found this very difficult. . .A few things I tried to appreciate. . . No climate control, no clean water, no shower, no access to cell phone charger (or cell phone for that matter), no place to feel safe, no place to store belongings/food. . . We are very fortunate and have daily blessings that we take for granted. . . First of all, how demeaning it must feel to be counted like sheep [by authorities as a homeless person]. Secondly, I am interested to see if our homeless population is growing or declining. . ."
- "I was planning to identify and visit a senior center and/or local pool and see how hard it is to get to these places, and to find out what activities they have. The idea came about because I recently had a patient with bad knee [osteoarthritis] in the clinic who I encouraged to do the same. She was asking where to look, to which of course I really had no clue. Turns out that even finding these places and learning when they are open, cost, etc. was quite difficult for me (I looked online at the city of Atlanta website). . . I ended up emailing the Coordinator for Senior & Volunteer Services with the City's parks and rec department, to see if they had anything we could hand out in the clinics. She actually got back to me today and is going to come to Grady tomorrow @ 3:00 to meet me and [our social worker] for 30-40 min to give us a little more information."
- "We went to [the nursing home where most of our uninsured patients are discharged to]. . . it reminded me of a lot of nursing homes that I had seen, but more barren and with only the essential amenities. . . Throughout our visit there, we didn't see any visitors, and most of the patients kept to themselves. The aspect that stood out to me most was the workload. One nurse told us she was responsible for 27 patients—27! That included medication administration and all other tasks. It made me understand that even though there are capabilities that a [nursing home] should technically be able to handle, sometimes the large patient burden per nurse may make that very difficult to do. Most of the patients we send [here] lack a strong social support network. A strong family presence at an institution that is so overworked would have many benefits for the patient, including an extra pair of eyes in case something did not seem quite right to the family member. It is simply impossible for any health care provider to keep track of 27 patients at one time. I wonder if there could be other social support systems that could become involved in public nursing homes, such as volunteer organizations that could bring pets, holiday festivities, etc. to the facility. . ."

Discussion

A short, experience-based module can impact resident attitudes about social determinants and strengthen their advocacy around providing enhanced patient resources. Our module is unique in that it can be deployed to engage second- and third-year residents around social determinants of health, while in a busy

academic center caring for underserved patients. Of note, this module could also be adapted for use with a broad spectrum of resident learners, including residents in emergency medicine, general surgery, orthopedics, and gynecology. Further, it can be discussed with students, giving it a broad appeal. It may also be implemented across health care disciplines including medicine, nursing, allied health, and dentistry.

We believe our module to be effective. While a resident response rate of 41% for submitting written reflective statements may seem low, we believe this to be a high response rate given the context of a busy clinical environment, thereby demonstrating a high degree of engagement in the module. Many reflections were pages in length, well beyond the level of what we were expecting. Further, reflections highlighted a number of diverse themes: a better appreciation and desire to understand the patient experience related to homelessness, inability of patients to navigate the health care system, affordability of food or medication, or a desire to better identify community resources that could better help patients dealing with such issues.

A few challenges were encountered in implementing the module. First, groups varied in the degree to which they conducted their experiential exercises based on learner level of comfort and enagagement in the module.

Second, because the end-of month written synopsis was e-mailed to the course director, some learners failed to submit their reflections. Facilitators should therefore endeavor keep track of learners' responses and encourage participation. For the purposes of our module, we intend to have our residency program coordinator track responses via an Excel file, to identify those residents who have not yet submitted their response. Successful completion of the ambulatory module will be contingent on submission of responses, and the program coordinator will facilitate outreach to those who have not submitted their reflections.

Finally, the module requires advocacy in the form of online searches of local organizations, but there is no vetting process to detremine which organizations are most effective at addressing a community's needs. Further, there is not enough time within the module to reach out to those local organizations.

Limitations of this study include the small sample size, and the 41% response rate. Also, no pre- or posttest was employed for statistical analysis. However, the written reflections we received disclosed impactful, personal experiences that have the potential to change deeply held values and assumptions. We thus felt that assessment in the form of narrative reflections best met the broad educational goal of the experience, including important reflections and self-disclosure that could potentially be missed with pre- and posttest assessments. Additionally, the authors recognize that this module is focused on enhancing provider understanding and advocacy towards improving social determinants of health. Ultimately, we hope that the lessons learned might enhance the physician-patient relationship and promote implementation of and/or advocacy for resources to overcome social determinants as barriers to health. However, because of the short duration of this module, and the intensity of focus and broad knowledge of various resources needed to overcome social barriers, we felt it would be difficult to assess short-term improvement in clinical outcomes for patients as a result of this module. Thus, specific patient information was not retained or evaluated during this study.

We do plan, however, to reach out in writing to residents 12 months after their participation in the project. This written correspndence would include the residents' original reflections and additional questions asking how the experience has impacted their behaviors over the 12-month period following the exercise, and if the provider feels that the experience has: (1) enhanced the provider-patient relationship, (2) promoted more resource utilization for patients, and/or (3) improved clinical outcomes for any of their patients. We recognize that this would be a subjective assessment, but as the goal of this module is to assess it's impact on provider attitudes and behaviors toward understanding and addressing social determinants, we feel this to be an adequate future assessment of modules impact. Moving forward, we also plan to validate the community resources identified by residents as a result of this module, and create a central repository whereby these resources can be accessed.

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References

1. Chapman LT. *Assessing the Relationship among Literacy, Patient Activation, and the Self-Control Performance for Patients to actively Participate in Their Health Care* [thesis]. Atlanta, GA: Rollins School of Public Health, Emory University; 2008.
2. Freund KM, Battaglia TA, Calhoun E, et. al. Impact of patient navigation on timely cancer care: the Patient Navigation Research Program. *J Natl Cancer Inst*. 2014;106(6):dju 115. https://doi.org/10.1093/jnci/dju115
3. American Medical Association. Declaration of physician responsibility: medicine's social contract with humanity. *Mo Med*. 2002;99(5):195.
4. ABIM Foundation, ACP-ASIM Foundation, European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. *Ann Intern Med*. 2002;136(3):243-246. https://doi.org/10.7326/0003-4819-136-3-200202050-00012
5. Mou D, Sarma A, Sethi R, Merryman R. The state of health policy education in U.S. medical schools. *N Engl J Med*. 2011;364(10):e19. https://doi.org/10.1056/NEJMp1101603
6. Martinez I, Martin L, Hayden M, Balmaceda V. Incorporating social work perspectives into interprofessional health teams: engaging students in a biopsychosocial assessment of family. *MedEdPORTAL*. 2014;10:9915. https://doi.org/10.15766/mep_2374-8265.9915
7. McDonald M, West J, Israel T. From identification to advocacy: a module for teaching social determinants of health. *MedEdPORTAL*. 2015;11:10266. https://doi.org/10.15766/mep_2374-8265.10266
8. Drake C, Keeport M, Chapman A, Chakraborti C. Social contexts in medicine: a patient-centered curriculum empowering medical students to provide contextualized care. *MedEdPORTAL*. 2017;13:10541. https://doi.org/10.15766/mep_2374-8265.10541
9. Fredrick NB. Exploring health systems within the context of social determinants of health: a global health case study. *MedEdPORTAL*. 2016;12:10457. https://doi.org/10.15766/mep_2374-8265.10457
10. Kuhle C, Varkey P. Enhancing the health of communities: a primer on empowerment. *MedEdPORTAL*. 2012;8:8400. https://doi.org/10.15766/mep_2374-8265.8400
11. Klein M, Beck A, Kahn R, et al. Video curriculum on screening for the social determinants of health. *MedEdPORTAL*. 2013;9:9575. https://doi.org/10.15766/mep_2374-8265.9575
12. Fredrick N. Teaching social determinants of health through mini-service learning experiences. *MedEdPORTAL*. 2011;7:9056. https://doi.org/10.15766/mep_2374-8265.9056

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