The Role of Social Determinants in Health Care: Student Reflections on Patient Needs, Community Resources, and Interprofessional Development

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Abstract

BACKGROUND Teaching emerging health care professionals the importance of addressing social determinants of health is an important step toward equitable care. To this end, students need both an understanding of the narrative of those living with limited healthcare access and the opportunity to reflect upon how experiential learning impacts their views on health care services and professional development.

PURPOSE The purpose of the study was to assess experiential self-reflections among health professions students after participating in an interprofessional, community-based program designed to provide much-needed health care to vulnerable populations.

METHODS After participation, students provided reflections regarding their views on 1) individuals receiving care, 2) community needs and resources, and 3) their own interprofessional growth. A qualitative, iterative process was used to identify emergent themes.

RESULTS Themes specific to both participants and community resources centered on poor access to care, dental and vision needs, and limited awareness of available resources. Those specific to students’ interprofessional experience and professional growth include patient outcomes, understanding community characteristics, communication skills, and an appreciation of interprofessional, multi-level delivery of services.

CONCLUSIONS Consideration of social determinants of care is an important conduit toward clarifying one's views of vulnerable populations and as a means of enhancing professional growth and development.
Introduction

The importance of social determinants of health in relation to health care was first discussed in the early 1990s when McGinnis and Foege identified socioeconomic status (SES) and access to care as important contributors to mortality (McGinnis & Foege, 1993). Further, SES has been linked to morbidity including obesity among adolescents (Lee, Andrew, Gebremariam, Lu, & Lee, 2014), chronic kidney disease among Blacks (Crews, Charles, Evans, Zonderman, & Powe, 2010), and community-based HIV diagnosis rates, particularly among females (Wiewel et al., 2016). Social factors also have the potential to restrict access to health care services such as primary care, health education, and much needed procedures and medications. Being uninsured is a salient barrier to access given the burdensome cost of health care in the U.S. with income being a driving force behind this phenomenon. According to Berchick et al., insurance coverage tends to be greater in groups with higher income-to-poverty ratios; in 2017, those below 100% of the federal poverty level (FPL) had the lowest rate of coverage (83.0%) compared with those 400% above the FPL (95.7%) (Berchick, Hood, & Barnett, 2018). Individuals living in poverty also have a much greater likelihood to delay or fail to receive needed medical attention compared to those in higher income brackets (National Center for Health Statistics, 2018). Though relationships among social determinants of health such as income, individual risk-taking behavior, and education, for example, can be difficult to interpret (Khullar & Chokshi, 2018), it is imperative that measures be taken to address these factors in an effort to enhance patient care through improvements in access.

Regional and demographic disparities of social determinants present a challenge to public health professionals, educators, and emerging health professionals, not only in terms of the role determinants play in mortality and morbidity, but also in how health professionals understand and navigate disparities among populations during the provision of care. Several thought leaders have voiced both concern and guidance in how best to prepare health professionals to meet the needs of various service populations through formal education. In 2010, the Lancet Commission reported “glaring gaps and striking inequities between and within countries” regarding social determinants of health (Frenk et al., 2010). This concern is compounded by reports from the National Academies of Sciences, Engineering, and Medicine (NASEM) that “health professionals are not graduating with the sorts of competencies needed to understand how to combat such disparities.” The NASEM provides guidance to address this in their publication - *A Framework for Educating Health Professionals to Address the Social Determinants of Health* - in which three fundamental domains of student-based transformative learning were identified: integrated education, community partnerships, and supportive organizational relationships (National Academies of Sciences Engineering...
and Medicine, 2016). Within the education domain, two components (experiential learning and collaborative learning) are particularly significant for health professions students, especially when fostering an appreciation of the role social factors play in health and wellbeing. Experiential learning occurs when learners are openly involved in new experiences that lend themselves to introspective thoughts and self-reflection. Additionally, collaborative learning emphasizes an educational process that incorporates other professionals, communities, and diverse organizations allowing students to experience the broad narrative of unique social environments. In their report, the NASEM identified thirty-three courses as exemplar for addressing social determinants of health and it is noted that although each course used diverse organizations (e.g., clinics, hospitals, schools), all provided opportunities toward transformative learning necessary for providing students collaborative and reflective experiences necessary to address the needs of at-risk populations.

Student engagement with vulnerable populations often takes the form of service-learning such as student-run clinical experiences, health fairs, and simulation, each adapt at increasing ones social responsibility and respect for those from dissimilar backgrounds (Kangovi, Carter, Smith, & Delisser, 2018). Social attitudes towards those living in situations different from our own (e.g., in poverty) are thought to be learned through life experiences rather than innate characteristics of the individual. Often, these experiences – and subsequent beliefs and values - predict one’s behaviors towards others (Ajzen & Cote, 2008). The literature supports the idea that providing students an opportunity to engage in realities of those with limited means can decrease perceived stereotypes, support the structural mindset of causation, and increase one’s desire for advocacy (Reutter, Sword, Meagher-Stewart, & Rideout, 2004). Witnessing the lived experience of those most in need of services can create more culturally competent professionals, potentially leading to the reductions in health inequities and enhancement of compassionate care.

To this end, we sought to provide students within the health professions at a mid-sized, state university in the southeast, the opportunity to work interprofessionally when providing care to individuals attending a comprehensive nine-day health services program supported by the Department of Defense (DoD), a local health care system, and our university. This experience allowed both graduate and undergraduate students a chance to interact with program participants from various backgrounds while supporting free health, medical, dental, ophthalmological, and veterinary services.

The purpose of this study was to garner and evaluate student-based reflections on their experiences after working directly with vulnerable individuals receiving care. Reflections were focused on three conceptual areas; what the student learned about those seeking care; what the student learned about community health needs and available resources; and how this experience informed their own professional growth and development, particularly with regard to interprofessional education. We believe giving students these types of experiences will help them better understand the role of social determinants and allow them to offer more unbiased, sensitive care throughout their professional career.

Methods

The Empower Health Service Program

Empower Health was a DoD supported Innovative Readiness Training (IRT) program developed and implemented in collaboration with community health care agencies and our university. IRT/DoD support (in the form of specializing medical, dental, and veterinary services) is awarded through an annual competitive process and requires that the community present not only compelling need, but also the ability to provide both personnel and physical infrastructure to support and manage significant numbers of individuals receiving needed services. One author (JB) applied for and received programmatic support from the DoD in 2018. Four service-sites, each located near vulnerable populations (e.g. homeless camps, immigrants, those living in poverty), operated throughout Chatham County over the nine-day program. Each site provided no-cost care to participants. In all, 7,942 individuals attended the program with health care professionals providing 23,135 free medical and dental procedures, 1,551 pairs of prescription eyeglasses, and numerous pet vaccinations with many spayed or neutered. Both graduate (N=11) and undergraduate students (N=65)
actively participated at all stages of workflow logging a total of 2,732 hours. At the conclusion of the program students were asked to provide structured reflections on their experiences.

Theoretical Foundations

Reflective concepts were founded upon Mezirow’s Transformative Learning Theory (Mezirow, 1991) which supports perspective transformation resulting from exposures to unique situations. According to Mezirow, changes in perspective take place as a result of understanding the self, revisions of individual belief systems, and alterations to one’s behaviors. The essence of transformative learning is its allowance for changes in individual frames of reference as a result of critical reflections on self-assumptions and beliefs. Subsequently, these alterations allow the learner to incorporate new ways of thinking into existing cognitive schema, enhancing one’s willingness and abilities to empathize with others. According to this theory, “making meaning” of learning opportunities requires thoughtful interpretation of lived experiences and is an especially beneficial learning tool when engaged during service-learning involving populations that are unique to one’s own experiences. For learners to alter beliefs, attitudes, and emotional reactions, they must first employ critical reflection on their experiences, which in turn leads to perspective transformation and greater levels of acceptance of those from differing backgrounds. To this end, reflective content was developed to focus student commentary on attitude toward program participants, community needs and resources, and professional growth and development.

Qualitative Analysis

Analysis was based upon a qualitative exploration of three conceptual areas addressing what the student learned about; 1) program participants, 2) community resources and needs, and 3) personal growth and development. Specifically, students were asked to reflect upon the following.

- Discuss three things that you learned after working with patients / clients who attended the Empower Health program.
- Discuss three things that you learned specific to community health and social needs of those clients with whom you worked.
- Discuss the importance of this interprofessional experience in terms of your own professional growth and development.

Students were asked to provide written reflections online with textual input collected through Qualtrics® (Qualtrics, 2018) and later downloaded into Excel® (Microsoft, 2019) for analysis. Descriptive qualitative methods were used to identify themes within these reflections by discussion area. Using an iterative process, each author reviewed the first 10 responses from each of the three conceptual areas to identify preliminary codes representing the quintessence of reflective concepts provided for each. Codes were then reviewed by all authors. A final coding guide specific to each discussion, including definitions for each of the classifying codes, resulted from this process.

Item-specific responses were then reviewed and coded by two authors with the third serving as arbiter in cases where divergence occurred; each author served as a primary reviewer on two responses (two at a time) and arbiter on one. Throughout the analysis, new codes were added as needed. Once responses were coded, all authors met and reviewed each code to address any incongruences due to contextual perspective. Once the authors felt that inductive saturation had been reached codes were then grouped into themes representing the essence of responses to each item. Reflections were collected from all students for grading purposes but were deidentified prior to analysis and after the program had ended and grades had been posted. Institutional IRB approval was granted for the completion of this study.

RESULTS

Student Participants

Study participants included those enrolled in two undergraduate health professions courses and one graduate course during a mini-semester term in May 2018. Course objectives for each class centered upon the Empower Health program being implemented; unique objectives focusing on leadership were provided to graduate students given their supervisory role. Student engagement took place at all levels of workflow from client admissions, triage, resource education, and referrals and follow-up. A total of 84 students were enrolled...
in the experience with 65 (85.5%) undergraduates and 11 (14.5%) graduate students agreeing to participate in the study. Undergraduate nursing students comprised the largest student major (30%) with seniors making up 55.5% of all participating students. (See Table 1)

| Major                              | N  | %   |
|------------------------------------|----|-----|
| Health Services Administration     | 9  | 12  |
| Health Informatics                 | 9  | 12  |
| Nursing                            | 22 | 30  |
| Public Health                      | 11 | 14.5|
| Radiology                          | 20 | 26  |
| Rehabilitation Sciences & Other    | 5  | 5.5 |

| Academic Rank                     | N  | %   |
|-----------------------------------|----|-----|
| Graduate                          | 11 | 14.5|
| Junior                            | 22 | 30  |
| Senior                            | 43 | 55.5|

Table 1. Student Classification by Major and Academic Rank

Reflections on Working with Program Participants

Students were asked to identify and discuss three things they learned after working directly with program attendees. The most common themes shared centered on access to care, dental/vision needs, and student awareness of social needs of patients. Two additional concepts - empathy and immigrant health - also emerged from our analysis as important foci for learning.

Access to Care: Throughout our analysis, access to care emerges as a salient theme, particularly regarding direct interactions with those who attended the program. One of the most common reflections identified within this theme focused on common myths of unemployment as a barrier to access. Students were able to experience first-hand how employment serves as a determining factor in receiving needed health care. One student reported, “...patients taught me that just because individuals have a job, doesn’t mean they have insurance.” Another student “…learned from specific clients that they have normal jobs such as teaching and still need free services. Insurance is expensive, the deductibles and rates are high and it’s a problem for most.” Additionally, the issue of full-time versus part-time employment came to light during our analysis; “I learned that it’s hard to qualify for health insurance if you are classified as a part-time employee. Many companies do not cover insurance if their employees work under 40 hours per week.” Employers were often identified as the culprit with specific regard to insurance; the cost of insurance for part-time workers was often cited as a primary determinant for being insured. One student reflected that “most jobs seem to provide insurance only to full-time workers and when provided to part time workers the insurance is not affordable...; some patients have good jobs but cannot afford to get $250-$300 taken out of their checks to get health insurance.”

A second access-related concept centered on the opportunity-cost involved when people attempt to access health and medical care resources. Regarding Empower Health, “…patients had to sacrifice quite a lot to be there. Being seen in the clinic meant dedicating almost an entire day in order to receive one service and that one day of missed work or other engagements could have a big impact on a person’s life...” Similarly, “…though services provided were free, I felt patients paid for it in time. One patient left the premises with visible frustration because she attended the event for five hours with no dental attention due to her having to leave early for work.” Distance was also identified as an issue for many with “…some clients coming from Atlanta and others coming from out of state such as Orlando, Florida. It is simply amazing the lengths some people would go for free health care, but also understandable since the services offered normally cost way too much for some people to pay out of pocket.”
Students were privy to the density of social determinants, working in unison, to limit access of care, “...including the type of insurance they have, lack of income, and availability in their community; working a job 9:00 – 5:00; or because they are not fit to work and have many health issues.” Throughout these reflections it seemed clear to students that access to health care was not determined by a single factor, but rather a synergy among many.

**Dental / Vision:** Reflections support student learning that dental and vision services are often viewed as luxury services in the health care field reporting “...that dental care is not covered in the Veterans Administration clinics or through Medicaid or Medicare; it is considered a cosmetic service and there is a huge need for people to receive dental and vision care.” Another student continued; “Interestingly, a lot of patients did have health insurance, but they couldn’t afford going to the dentist or eye doctor because they were still paying over $100 out of pocket. For example, a retired public-school teacher of 35 years lacked dental coverage and needed to be seen for multiple procedures.”

Additionally, students reported on the urgency for dental and vision services among program participants in terms of absolute need; “Many patients were there to get dental work done, such as getting cleanings, extractions, and fillings.” “The dental/vision slots consistently filled up daily and throughout the day multiple individuals came to the sites looking for these services. A very large portion of these individuals had chipped or broken teeth that needed extraction. It appeared that few individuals had regular dental care for their teeth.” Like access to care, dental and vision services emerged throughout our study as being limited even though there was a clear need among this service population.

**Student Awareness of Social Needs:** Throughout the experience students were able to obtain a global sense of social needs among the clients with whom they worked. Reflections not only recounted the specific needs of program participants, but also the “un-awareness” among patients of community resources available to them. Patients were reported as being “…unaware of local resources that offered health care on a sliding scale or for free. The lack of health insurance, knowledge, and low income can contribute to poor health.” Many also commented on the need for patient education to alleviate this concern: “Patients did not know their local resources. The patients had no idea what kind of access they had to resources like food, clothes, or education. Most of the local resources are in the low-income areas however - this just shows how far a little education can go.”

**Empathy:** A common theme reported by students about their direct interaction with program participants centered on empathy, not only in terms of the comradery witnessed among patients, but also their own improved ability to develop rapport with those in attendance. Students reported that “not everyone is capable of having the necessities of life and when situations became crazy patients tended to help each other out.”

Also, Empower Health served as an excellent opportunity for students to practice their communication skills with others from backgrounds dissimilar to their own. One student reported that she was able to practice “…listening and actually hearing the patient when they spoke, not just seeing them as a number but as a person in need of assistance.” Another student reported: “Through this program I was taught that communication is important - be respectful to one another and of individual needs.”

**Immigrants:** Student exposure to immigrant populations emerged as a final theme specific to student learning garnered through patient interaction. First, students were able to better understand the numbers behind immigrant populations in the region reporting, “…there are far more Spanish speaking people in Savannah than I had previously thought... I learned that there are a lot of immigrants living here and in surrounding areas; a lot of which need medical assistance but are afraid of being arrested because they are in the USA illegally.”

In addition, students reflected an improved grasp of the overall needs among local immigrants. Common reports of limited resources provided specifically for immigrants emerged from our analysis. For example, one student learned “…that locally, we have very little to offer refugees or immigrants. A surprising number of services are closed to anyone who is not a US citizen - even nonprofit services. I worked with three refugees from wars in Syria and Afghanistan. All of them had unaddressed health problems, compounded by lack of access in a war-torn country.” Lastly, students were able to grasp the importance of effective communication specific to immigrant populations. Many encoun-
ted a “…language barrier…” when trying to render support to non-English speakers. One student reported “…how extremely overwhelming it can be to be in a new country to not know the language or where to go for help. For one patient to prove his legal status, he had to show lots of documentation especially for his child. For example, he had to provide immunization records, medical and physical records as well as dentist records. This can be very hard to accomplish when everything is new.”

Community Health and Social Needs

A second area of reflection focused on students discussing three things they learned specific to community health and social needs of the clients they served throughout the program. Four common themes emerged: access to care, dental / vision services, community resources, and focused community needs.

Access to Care: As was the case with the previous reflective item, issues of access specific to community need were identified as salient through our analysis. However, here the focus was more on cost, insurance, and transportation as determining factors compared to employment, multiple causation, or opportunity cost as seen in our first reflection. Students were exposed to those who “…would often take the freely provided drugs and never follow up if the cost comes from out of their pocket. While the pharmacologic need of lower income populations wasn’t specifically tackled during this program it nonetheless provided some useful insight in how people often go without the medical prescriptions that they need due to financial concerns.” Students continue by reflecting that “…many people want to get better or receive care, it’s just simply too expensive” and “it’s not that people don’t want to get health care services done but they just can’t afford it.” Another student reported that she “honestly didn’t comprehend how bad poverty was in Savannah till this project. One patient explained how even though she has insurance it only will cover certain services and doesn’t even cover the whole cost of the ones it does cover.” Transportation needs of participants were also discussed: “The second thing I learned was most of the people who have needs cannot assess the available resources due to difficulty with transportation. There is a great challenge when patients know they have the possibility of getting help but cannot access it due to the lack of transportation.”

Dental / Vision: The need for dental and vision services within the area was mentioned here as well, again with a focus on cost and patient income as well as a sense of general need within the community. “During this experience I learned how much a critical need vision and dental services were in the community. This is due mostly to the cost of those services. Basic insurance does not cover dental needs because they are viewed as “cosmetic” and not a necessity to health. An eye exam typically starts at $100 and that does not include the cost of frames. Common among most of the patients was their income which was little to none.” Similarly, students reported that “…need for dental care for lower income populations was far, far greater than was ever imagined. The staggering amount of low-income, older patients in need of fillings or extractions was amazing.”

Community Resources: Student reflections revealed learning related to community-based resources available to program participants. These included “…free HIV testing provided by the county health department,” “outpatient clinics available through the Veterans Administration.,” and “…clothing resources, particularly that Salvation Army and the Manna House that offers school supplies and uniforms.” Also, reflections identified an appreciation among students on available safety net programs. One student commented on the “…plethora of services provided throughout Savannah geared towards helping the underinsured and those in need of shelter, food, and other basic services. Without ever having the need to look for these services myself, it is eye opening to see just how many services and people are out working for those who are in less fortunate situations than themselves.” One service frequently mentioned: “…a free summer camp for low-income working families. Not only do they provide free care they also have an academic based activity. This is an effort to help kids improve in math and reading skills during the summer months to prepare them for the following school year.” Students were also able to witness first-hand nutritional and housing needs of those who participated in Empower Health. One student revealed that “…food was a big deal. People didn’t have much, so they took extra [snack] bags which was sad because I wanted to help more. Being set up with food services would be helpful.” Another reported that “several homeless patients that did not want to stay for medical care still asked for snack bags so they could...
have something to eat because they were starving.” “It’s hard to find time to cook or purchase healthy food while juggling with everyday life errands therefore as a community we need to educate these clients for free on how to eat healthier.” Similarly, students reported learning that “…there are many homeless people that need shelter…”, an epiphany broadened by a realization that it’s not just about food for the homeless as “…some individuals requested job placement or training services as well as food and housing… “Reflections also addressed the general lack of awareness of resources among program participants. “Community resources for people in poverty are not well known, therefore, they are not utilized as much as they could be.” Specific to insurance, “…most people didn’t know how to get it and it was a frequently asked question, there was also no brochure about it as well so I think there should be services that provide information on how to get reasonable insurance.” Students also reported opportunities for “teachable moments” specific to resource awareness. One student reflected that he learned “…that most of [his] patients seeking additional resources were also typically looking for help regarding health and dental insurance, food, and adult education. The importance of having the opportunity to inform them about the resources at their disposal can’t be overstated.” Many students internalized the need for more awareness; “I learned that many people including myself, aren’t aware of many of the services that Savannah offers to the community. I learned that patients without insurance can visit [our local health center] where they may apply for benefits such as SNAP and health insurance. I also learned more about the different shelters and housing that Savannah offers.” Mental health services were also identified as important resources for participants. Depression and self-care were listed as barriers to ameliorating health-related conditions. One student learned about “…the scope of community health and social needs relative to mental health; many patients that came in to get serviced were also dealing with depression or mental health issues as well.” Several patients were referred to behavioral health programs within the area giving students the opportunity to learn more about available resources. One student reported that “…one of the girls I talked to had cut her arm repeatedly when she was just a teen. There were a lot of underlying problems, I’m sure, but it’s still good to know that there was somewhere to refer her to for the help she needed.”

Focused Community Needs: Need-specific characteristics of the community also emerged as a salient theme and included a need for health education and greater concern for immigrant issues. Regarding education, one student reported, “…health education is something that the community needs desperately.” “People are not well-educated on behavioral choices and consequences of their actions…awareness and education within the community is very important in making a change.” Another student concluded; “one thing I noticed is that a lot of the patients were not educated on health at all, much less how much attention that is needed towards wellness. Education is where all things begin, so we need to work on that.” Given that a significant portion of the poor and homeless population in Savannah are comprised of Hispanic persons, it is not unexpected that concerns for this demographic group would emerge through our analysis. Students spoke primarily about their experiences with the “language barrier.” One student reported that he learned that “…some patients cannot speak English; therefore, they don’t know where to go or who to get in contact with which makes finding care harder for them.” Students also indicated that many non-English speaking participants relied upon their children for interpretation. Generally, students were also aware of the need for cultural competence when working directly with patients: “When caring for the community’s social needs, it is imperative to be aware, especially of their cultural, religious or monetary differences.”

Professional Growth and Development

Our analysis identified four themes specific to how participation in this interprofessional event aided students’ professional growth and development: Patient care, assessing community need, communication skills, and interprofessional collaboration.

Patient Care: The majority of ideas relayed by students in terms of how the experience augmented their ability to care for patients focused on the pragmatic, experiential nature of this experience. Comments such as the following were common; “…based on this experience I will be able to provide care to future patients with an understanding that everyone deserves the best care possible.” As a more poignant example, one student reported the following: “I went into health care to help people get better and understand their conditions
and treatments. That’s exactly what I got to do for two weeks. It was such a blessing to be able to connect patients with resources they didn’t know existed but desperately needed.” Finally, one student reflected that this experience “…will shape what [he does] for the rest of [his] professional life.”

Compassion and the art of being nonjudgmental were also commonly reported as being an element that supported professional growth and development. “I will graduate next year as a radiology science technologist and I will definitely have more compassion towards less fortunate people who could not afford health care,” reported one student. Another stated, “It is also not fair to judge a person because of their income level. I have met many people who were genuine and smart. Even though they may have only a few dollars to their name, they should not be treated any differently.” Students also reported improved levels of empathy for participants of the program. “It is important to show empathy to the patients and to really understand where they are coming from. This experience has also provided me with a chance to be more extroverted and to get out of my comfort zone.” Another student reflected: “I used to view poor people a certain way but through this experience my eyes were opened, and I have empathy for them.” Finally, students reported that the experience reminded them “…to leave bias and judgment at the door”, a sentiment particularly important in the 21st century.

Another common element of patient care centered on patient equity with many students indicating a change in their values and beliefs in terms of patient care. “I will treat each one with kindness and respect as I now understand how great the need is for universal health care in the U.S. and beyond. Health care should be a right not a privilege,” indicated one student. Similarly, another reported that she didn’t know where she would “…end up working, but wherever it is, [she] would take the same care of people no matter what their socioeconomic background, race, or gender.” Students also reflected upon how grateful they were for this experience, especially as it related to the chosen career paths; “…this experience makes me want to be a nurse who advocates heavily for her client’s and for the reform of health care policies.” “This program really improved as well as developed leadership skills that I will build on throughout my career – I appreciate the experience.” Finally, comments related to general patient interactions were common. “During this experience I needed the patients to feel welcome and valued. I did my best to facilitate that, and I hope I succeeded.”

Assessing Community Needs: Students reflected on how their experience allowed them to better understand the characteristics of the communities in which they work. “Overall this was a great learning experience for me as a nursing student. This class helped me understand the community I will be providing care for in my future career and beyond. The information I learned throughout this class can help me provide vital health care information to my patients and community members in need of health care services.” Similarly, another student stated, “this really helped me grow in my profession by seeing all the people in our community who aren’t fortunate enough to have health care and be taken care of the way they should be.” Students were also able to experience the burden of cost to many who participated in the program and how limited resources serve as a barrier to much needed care. “This experience helped me gain an idea of how influential the cost of health care can be for patients.” “This process was very important to my own professional growth and development. During school while attending clinicals I encountered many patients who expressed difficulty paying for their medical bills and we are not taught about any available community resources. This is unfortunate.” Students also reported being in a better position to identify resource needs and provide to patients information that would help them navigate the health care system. “The first thing that struck my attention was the great need of people in the community. Prior to this experience I knew there was a need but being a part of this has truly made me more aware and imparted to me a desire to help in as many ways as I can …”

Communication Skills: One of the most important advancements to professional growth centered on the students’ improved abilities to develop a rapport with the patients with whom they worked, identifying the importance of “comfort level” when providing care – especially care to those from a different socioeconomic background. “I expect to work as a Cardiovascular Tech in the future and this experience will help me better communicate with patients, help the patients become more comfortable with me, and to know even
more that I should never judge anybody because you never know what their situation is.” Another student reported: “This experience allowed me to work with people from all different races, backgrounds, educational levels, etc. Personally, I realized that everyone is not always like me, therefore, I cannot always address them as I would be addressed (as far as language goes).” Finally, one student reflected that he expects “…to work in a hospital after graduation from the Cardiovascular Intervention program, this experience has helped improve communication and relationships with people.” “Teachable moments” were also an important outcomes of improved communication skills reported by many students. “It also makes me want to take advantage of the time I have to care for patients. If they aren’t insured, I need to educate them on how to care for themselves to reduce the likelihood of their health deteriorating.” Another student reflected that “I got to practice talking to patients about health-related topics and what it means to them.”

**Interprofessional Collaboration:** Finally, students saw the Empower Health program as an opportunity to learn about the importance of intercollaborative teamwork when providing care to vulnerable populations as well as the benefits of a multi-level service model. “The experience of working with other health professionals, fellow students, volunteers, and military health care professionals provided a wealth of situations offering additional knowledge and expertise.” Finally, one student reported, “I believe multiservice models are better than single because the people will get more out of it. Working interprofessionally when addressing health care is crucial in being aware of others less fortunate. It is important that everyone do their part to help others.” (See Table 2)

**DISCUSSION**

Rising health professionals are in a seminal position to address the health care needs of vulnerable populations. Doing so requires both an immersive experience that allows for practical exposure to socially vulnerable clients and a reflective assessment of one’s attitudes and beliefs toward marginalized individuals; exploring social determinants of those disadvantaged by structural and individualistic factors achieves this end. The purpose of our study was to explore self-reflections among a group of graduate and undergraduate health professions students in terms of their experiences with a population with limited access to care, what they learned about community resources and need, and how the experience allowed them to grow and develop as an emerging professional. Student reflections reveal substantive learning regarding limited access to care among program participants, particularly those specific dental / vision needs. Additionally, student comments indicated a general lack of knowledge among participants regarding available social resources within their community. Finally, students indicated an increased ability to communicate with participants and an appreciation of needs specific to immigrant populations within the area. In terms of student learning specific to community services and need, limitations to available resources within the community emerged as an important determining factor, again with a focus on dental / vision services. Students did indicate a better understanding on their part of available resources such as safety net services. Finally, our analysis indicated an enhanced appreciation for community-based health education and measures to address immigrant needs as a means of improving access to care. Finally, student reflections revealed a level of professional growth and development that can only come from participation in real-world, experiential opportunities such as Empower Health. Advancement was achieved through direct patient interactions, assessment of community-based need, improvements in one-on-one communication skills, and teamwork through interprofessional collaboration.

Our role as educators is to provide student-centered learning opportunities that foster acceptance and compassion among health professionals. Empower Health allowed students from multiple academic areas an opportunity to better understand what it means to live with limited access to care, to rely upon community-based resources for health services, and how these experiences have the propensity to support professional growth and development. Students learned five overarching concepts as a result of program participation. First, students saw firsthand the many barriers to health care among a vulnerable population. This was particularly prominent regarding dental and vision services; both emerged as separate themes when students reflected on what they learned about the patients and what they learned specific to community needs. Second, students engaged with the program in a way that
| Learning Foci | Qualitative Theme                | Quotes                                                                                                                                                                                                                                                                                                                                 |
|---------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **Learned about Patients / Clients** | Access to Care                     | I learned that lower income people without insurance often avoid pharmacies due to the costs associated with them. There’s not just one type of person who came to receive help, all types of people came to receive free health care, rich and poor, all with different backgrounds. |
|               | Dental / Vision                   | Patients had insurance, but it only covered medical, not dental, which is what they needed. Some people have gone a long time without being able to see clearly or have been in pain from a toothache for weeks.                                                                                   |
|               | Student Awareness of Social Needs | I learned many people don’t know about the resources available in our community.                                                                                                                                                                                                                                                     |
|               | Empathy                           | Although we all come from different backgrounds, we are all human and have similar needs. Health care is one of those needs.                                                                                                                                                                                                            |
|               | Immigrants                        | Locally, we have very little to offer legal refugees or immigrants. A surprising number of services are closed to anyone who is not a US citizen - even nonprofit services. I worked with three refugees from wars in Syria and Afghanistan.                                                                                                                                |
| **Learned about Community / Social Needs** | Access to Care                     | I learn people with insurance still cannot afford health care due to the deductibles, copayments, or hidden fees. I learned that work really gets in the way of people going to get health care...lost wages.                                                                                                                                  |
|               | Dental / Vision                   | The need for dental care for lower income populations was far, far greater than was ever imagined. The staggering amount of low-income, older patients in need of fillings or extractions was amazing.                                                                                                                                   |
|               | Community Resources               | I learned that substance abuse hinders many in the community to seek help for health.                                                                                                                                                                                                                                                |
|               | Focused Community Needs           | We have a real lack of resources for the homeless and uninsured in our community in Savannah.                                                                                                                                                                                                                                         |
| **Professional Growth and Development** | Patient Care                        | My attitude has greatly changed in regards of patient care. This experience taught me that everyone’s situations are not the same, and there are some that are less fortunate than others.                                                                                           |
|               | Assessing Community Needs         | Being able to witness this event unfold taught me a lot. I now know about different resources that I can mention to future patients I care for. This experience opened my eyes and made me realize that not everyone has medical services available to them. This includes individuals who have jobs, but insurance is not in their everyday budget. |
|               | Communication Skills              | This experience helped me to approach and engage in conversation with patients in a smooth way. Being able to get needed information is much easier now. This experience helped me to approach and engage in conversation with patients in a smooth way. Being able to get needed information is much easier now. |
|               | Interprofessional Collaboration    | As a health care professional I need to expand my basis and learn more about other aspects of health care and services rendered to patients so that I will be effective in addressing the needs of my patients.                                                                                                        |

**Table 2. Learning Foci, Themes, and Reflective Quotes**
allowed them to become not only aware of available community resources, but also better able to gauge the level of need among program participants. As a result, many students are now able to identify community needs, putting them in a better position to share available resources with clients. Third, and one of the most professionally beneficial for students, was an enhanced ability to engage with patients. Several students indicated improvements in empathy for program participants, advancements in communication skills, and an overall feeling of increased efficacy with directly addressing the needs of those they will one day serve. Fourth, reflections reveal that students were able to learn more about their community in terms of special characteristics, such as the number of free, low cost services provided, the number of immigrants / refugees residing within Chatham County, and educational needs specific to resources, health education, and housing. Being able to understand ones’ community helps ensure care which is responsive to authentic needs of a specific region.

Finally, and perhaps most importantly in terms of lifelong learning; real-world experiences provided during the program gave students a deeper appreciation for the benefits of working interprofessionally when assessing needs and providing care to marginalized populations. Empower health was identified as an opportunity; an opportunity to gain “leadership experiences”, “openness toward others”, and to “see how things are done when providing care” – all supported by multi-level collaboration among various health professions. One student reported that “the program helped [him] gain experience in dealing with both military and civilian organizations.” Our analysis supports the idea that students came away with a sense that health care happens only when everyone works together towards a common goal.

Additionally, students gained seminal exposure to other health professionals, volunteers, and community representatives, reporting the experiences as “insightful”, and allowing them to “communicate with professionals from multiple backgrounds.” One student reported that Empower Health “…taught [her] about working with others to promote continuity and the smooth flow of patients throughout treatment. It was nice to be able to broaden my knowledge of the medical field.” The phrase “all working together” was common.

A primary benefit of our study was that it allowed students to examine their own values and beliefs relative to social determinants of access to care. Beyond socioeconomic barriers to access lies a more systematic and egregious characteristic of the medical-industrial complex; stigma. Stigma refers to attitudes and beliefs that lead individuals to circumvent or discriminate against those who are different from themselves. Dissimilarities include many common social determinants of health such as racial inequalities, limited income or educational opportunities, geographic origin, sexual orientation, or political ideology. The literature is replete with examples of how stigma influences access to care for those living with specific conditions such as HIV/AIDS (Kinsler, Wong, Sayles, Davis, & Cunningham, 2007), mental health concerns (Thornicroft, 2008), and most predominately, poverty (Allen, Wright, Harding, & Broffman, 2014), characteristics of many serviced during Empower Health. Patient experiences with stigma within the health care setting have the potential to influence 1) how one views quality of care, 2) choices specific to continuity of care, and/or 3) reported ability to access health care resources (Martinez-Hume et al., 2017). Similarly, according to Noone et al., (2012), negative attitudes toward those living in poverty hinder the delivery of patient-centered, equitable care. This program allowed students to better understand those from disparate backgrounds relative to their own and to reflect on their appreciation of these differences.

As such, it is imperative that health professionals understand the nature of social determinants within the health care setting, particularly by understanding their own bias and more broadly those inherent within the health care system itself; it is important that health professionals understand their own attitudes and beliefs toward various determinants and how their values change over time as a prerequisite to providing equitable care, continuity, and quality of necessary services and resources. Allowing students to explore the narratives of program participants gave them a chance to reformulate their views on others who may be marginalized relative to themselves. This is particularly true for nascent health professionals as experiential opportunities such as Empower Health – early in their careers – will inform their practice throughout their careers. Mindfulness of one’s own views are enhanced through development of patient-centered communication skills,
general awareness of the patient’s community and home environment, and self-reflection of one’s own attitudes and beliefs (Hudon et al., 2016).

Our study would have benefited from an understanding of how reflections differed among student participants, not only in terms of classification (graduate and undergraduate), but also by major. Only 14.5% of students were classified as graduate while 26% and 30% were majoring in Radiology and Nursing, respectively. This is particularly of interest given that graduate students took on more of a leadership role compared to undergraduates. We are unsure of any substantive differences would have emerged yet understanding unique themes by major or classification could be useful when developing future experiences for specific academic concentrations. Additionally, it would have been useful for us to measure the level of poverty using federal guidelines to better quantify the financial burden experienced by program participants and how this influenced their health care decisions. Future research should consider this relationship. Finally, it would have been informative for students to reflect on specific determinants of health when formulating their reflections. Doing so could have provided a more targeted pool of qualitative data upon which to generate codes and resultant themes.

CONCLUSION

Our analysis of student-generated reflections bolsters the importance of participating in community-based, immerse situations during matriculation. Clearly, students benefited from this experience not only in terms of their interaction with both patient and community, but more importantly – the students’ understanding of themselves. It is through programs like Empower Health where students can “make meaning” of the world around them, especially as it relates to their choice to enter the field of health professions. Doing so should empower them to provide unbiased care to both patient and community and to develop into a health professional capable of efficacious, collaborative practice while addressing the needs of those living with limited access to care. As one student put it, “...this was a great experience that I’m happy that I was a part of. Since the beginning I love helping people so that’s why I chose my career path in the health care field.”

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