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Medical Students' Perceptions of Social Responsibility Development Following Service Learning Participation

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Walden University

College of Education

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Sherry A. McDonald

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Walden University

2020

Abstract

Medical Students' Perceptions of Social Responsibility Development Following Service

Learning Participation

by

Sherry A. McDonald

MA, Walden University, 2013

BS, Mid-America Christian University, 1991

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

December 2020

Abstract

As criticism intensifies regarding healthcare disparities, the Liaison Committee for Medical Education has added accrediting standards mandating service learning (SL) in their curriculum. SL is a viable educational method to enhance social responsibility and other elements of professional identity. The problem of implementing highly effective SL projects in medical education was addressed in this study. Kiely's model of transformational SL was used in this basic qualitative study to examine 10 medical students' experiences during an SL project. The research question for the study was focused on the students' descriptions of their experiences to understand how they perceived changes in themselves resulting from participation in SL. Findings from the data collected with semistructured interviews indicated that medical students described SL experiences as beneficial for community integration, educating others, and gratification. They expressed disappointment that they did not know the results of their projects. They related SL experiences that were eye-opening for them and stated that SL influenced their development of compassion as well as their intent to serve their community in their future practice of medicine. The resulting project consisted of a curriculum plan for a required, credit-bearing SL project. The project contributes to positive social change by the intentional design of a transformative SL curriculum to foster social responsibility development.

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Dedication

I would like to dedicate this project study to my grandchildren and to the hope of a future that embraces compassion, social justice, and the absolute joy of learning.

Education is never wasted.

Acknowledgments

I would like to express my gratitude by acknowledging several individuals who assisted me during my doctoral journey. There are no words that adequately express my heartfelt thanks to my committee, Dr. Christopher Cale and Dr. Stacy Wahl. Your support of my work and helpful, applicable, and timely feedback were fundamental to my success. I would also like to thank my URR reviewer, Dr. Dan Cernusca, whose insight and correction strengthened my study. I am grateful for everything that I have learned as a result of this process.

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Section 1: The Problem

The Local Problem

The site for this project study was the School of Medicine (SOM) at a public university in the Midwestern United States. The administration and faculty of the SOM developed mission, vision, and values statements as well as educational goals that support the cultivation of social responsibility in their medical students. According to Halman, Baker, and Ng (2017), this goal is vitally important in medical education due to the increasing diversity of patients as well as the increasing diversity in patient needs. The SOM faculty developed a service learning (SL) project to foster the development of social responsibility because SL is an evidence-based practice shown to improve social responsibility and other areas of professional identity development (Chavez-Yenter, Badham, Hearld, & Budhwani, 2015). The problem that was the focus of this study was the need to understand medical student perceptions about how the SOM's voluntary SL project influenced the development of social responsibility. Exploring medical students' perceptions and experiences of social responsibility during the SL project provided insight into the effectiveness of the educational method in this context and how to best allot scant time and resources in the future. The purpose of this study was to explore, from the students' perspective, their descriptions of SL experiences that influenced the development of social responsibility.

Rationale

Evidence of the Problem at the Local Level

Medical educators at the local SOM work to improve students' skills and attitudes related to social responsibility and other aspects of professional identity. The associate director for rural health programs at the SOM stated that an SL project was incorporated into the rural clerkships in 2008 because of concerns that their students were not integrating into the rural community placements enough to positively impact their social responsibility. The experiences of students who participated in the SL project were not explored to show if those experiences influenced social responsibility development. Social responsibility is not easily assessed because it is an attitude that can only be understood from the perspective of the individual (Beninger, 2019).

The difficulty of teaching and assessing social responsibility is not unique to the local SOM. Siega-Sur, Woolley, Ross, Reeve, and Neusy (2017) stated that globally the failure of medical education to use evidence based educational methods and to address local contexts in the curriculum are causes for inequities in the healthcare systems. Additionally, the Liaison Committee for Medical Education (LCME) recently included SL opportunities and social responsibility curriculum as accrediting standards mandating that all U.S. medical schools include these in their curriculum (LCME, 2017).

Evidence of the Problem From the Professional Literature

Social responsibility in physicians is the belief that the physician is responsible for not only treating illness but also preventing illness and promoting health in individuals and communities (Patel, 2015). There is a long tradition that social

responsibility should be part of every physician's professional identity (Beninger, 2019; Borah, 2018; Desrosiers, Macpherson, Coughlan, & Dawson, 2016; Kangovi, Carter, Smith, & DeLisser, 2018; O'Connell, Ham, Hart, Curlin, & Yoon, 2018). Beninger (2019) stated that since at least 1847 the American Medical Association has had a goal to improve public health. Currently, the Association of American Medical Colleges (AAMC), the World Health Organization (WHO), Physicians for Social Responsibility, the American Board of Internal Medicine, and the American Academy of Pediatrics, among others, have mission statements or goals that include the social responsibility of physicians (AAMC, 2016; Beninger, 2019; Law, Leung, Veinot, Miller, & Mylopoulos, 2016).

Social responsibility is important in health care because the social determinants of health (SDOH) affect health more than genetic or pathologic determinants (AAMC, 2016; Borah, 2018). SDOH include socioeconomic status, education level, racism, inadequate and/or unsafe housing, tobacco/alcohol/opioid and other substance abuse (Beninger, 2019) as well as "unequal distribution of money, power, and resources at global, national, and local levels" (Sharma, Pinto, & Kumagai, 2018, p. 26). Furthermore, according to the AAMC (2016), these social factors increase morbidity and mortality for the most vulnerable populations and are both preventable and solvable.

According to Borah (2018), despite its importance, social responsibility is deficient in most healthcare professionals and should be an objective of medical education. While there are myriad reasons for this, Luft (2017) stated that because physicians are socially and economically privileged, they are often unable "to directly

relate to how a person without social privilege experiences illness or need” (p. e110). Furthermore, results from the AAMC’s Matriculating Student Questionnaire (2019) showed that the median household income for families of medical students was \$130,000, double the U.S. median household income (U.S. Census Bureau, 2019); this suggests that most physicians were socially and economically privileged before they entered medical school (Kangovi et al., 2018; Kayser, 2017). Without relatable experiences, it is difficult for medical professionals and students to understand the influence of SDOH (Kline et al., 2018).

Another reason social responsibility is lacking in some physicians is that during the final 2 years of medical school students’ attitudes of social responsibility decline (Kavas, Demirören, Koşan, Karahan, & Yalim, 2015; Sharma et al., 2018; Ventres, Boelen, & Haq, 2018). Medical educators are frequently criticized for these declines because of the way SDOH and social responsibility are taught (Halman et al., 2017). Sharma et al. (2018) stated that “the current approach to the SDOH within medical education positions them as facts to be known rather than as conditions to be challenged and changed” (p. 25) leaving graduates without the skills and training necessary to take effective action to alleviate disparities and display qualities of social responsibility. Recommendations for reform in medical education curricula to counteract the decline in students’ attitudes include adding self-reflection activities, experiential learning and SL, exposure to marginalized groups, and role models. Shor, Cattaneo, and Calton (2017) stated that the most promising of these is SL.

Definition of Terms

The following terms were used to guide my study:

Frames of reference: Mezirow (1997) defined this term as “A coherent body of experience—associations, concepts, values, feelings, conditioned responses—that define... [the] world” (p. 5). Frames of reference are also “the structures of assumptions through which we understand our experiences” (Mezirow, 1997, p. 5). Mezirow also stated, “We have a strong tendency to reject ideas that fail to fit our preconceptions” (p. 5).

Genetic determinants of health: Examples of genetic determinants of health are age, sex, inherited conditions, and carrying specific genes (Borah, 2018).

Healthcare disparities: Healthcare disparities are the avoidable differences in health status between communities (Sharma et al., 2018).

Liaison Committee for Medical Education (LCME): The LCME is the accrediting body for U.S. undergraduate, allopathic medical schools (LCME, 2017).

Pathologic determinants of health: Examples of pathologic determinants of health are viral and bacterial infections (Borah, 2018)

Professional identity of physicians: According to Wald (2015), professional identity of physicians includes the “requisite knowledge, skills, attitudes, values, and attributes” necessary to transform “a lay person into a health care professional” (p. 701). Wald also stated that it is “a complex structure that an individual uses to link motivations and competencies to a chosen career role” (p. 701).

Service learning (SL): SL is an educational method that combines in-class learning with opportunities for critical self-reflection and community-identified service that fosters a transformative learning experience for students and improves community-identified areas of need (Shor et al., 2017). For SL to be most effective in medical education, there must be reciprocity (i.e., equity in relationship and in information sharing) between the medical school and the community in which service is to be provided (Strasser et al., 2015)

Social determinants of health (SDOH): According to the WHO (2019), SDOH are the contexts in which people exist (e.g., safe housing, socioeconomic status, education, gender); these contexts are shaped by the economic and social policies of the community (e.g., access to insurance, availability of resources). SDOH vary from one community to the next and are responsible for healthcare disparities. SDOH include socioeconomic status, education level, racism, inadequate and/or unsafe housing, tobacco/alcohol/opioid, and other substance abuse (Beninger, 2019) as well as “unequal distribution of money, power, and resources at global, national, and local levels” (Sharma et al., 2018, p. 26).

Social responsibility of physicians: Social responsibility is a virtue demonstrated by a personal commitment to the common good over self-interest. The concept of social responsibility for medical professionals also includes addressing SDOH in patients and communities (Borah, 2018), alleviating healthcare disparities in communities (Boelen, 2018), and critically self-reflecting on personal and problematic frames of reference that could inhibit treatment of a patient (LCME, 2017). As part of professional identity,

medical students are taught and expected to be socially responsible (Ponka, Archibald, Ngan, Wong, & Johnston, 2017).

Significance of the Study

O'Donnell, Humeniuk, West, and Tilburt (2015) found that current curricula on social responsibility and SDOH does not provide the skills training and experiences necessary to provide students with the confidence and ability to meet the needs of medically underserved populations. Accrediting standards added in 2017 were intended to improved curricula on social responsibility and SDOH; these changes include providing opportunities for SL (LCME, 2017). This study was designed to explore, from the student's perspective, the efficacy, if any, of the local SOM's SL project in improving attitudes of social responsibility, a stated objective of the project. The only assessment for the project was a presentation on SDOH for the community in which each medical student served. This resulted in a lack of data confirming or disconfirming that students perceived the project influenced their development of social responsibility. The results add to the body of knowledge on SL and social responsibility development. Locally, results can inform future curriculum planning.

Research Question

Beninger (2019) stated that "little is actually known about the process by which [social responsibility] develops" (p. 147). The purpose of this study was to explore, from the students' perspective, their descriptions of SL experiences that influenced their development of social responsibility. This study was guided by one research question:

1. How do medical students describe their experiences during an SL project?

Review of Literature

Since its publication over 100 years ago, the Flexner report has continued to influence medical education with a focus on the patient and biomedical science (Shelton, Corral, & Kyle, 2017). According to Ponka et al. (2017), a myopic view of medical practice renders the social responsibility of physicians as unimportant in addressing and working to solve wider healthcare disparities, including SDOH. Recently, accrediting standards for medical schools have begun to address social responsibility as a vital component of medical education (LCME, 2017). SL is one educational method recognized by the AAMC and the WHO for developing social responsibility and other skills and attitudes in medical students (Stewart & Wubbena, 2015). The following review of the literature addresses the need for transformative learning through SL to develop socially responsible medical students to become physicians committed to equity in healthcare.

Conceptual Framework

Kiely's Process Model of Transformative Service Learning

To understand perceptions of social responsibility in medical students who participated in an SL project, I used transformative SL (TSL) as the conceptual framework (see Kiely, 2005). Kiely developed TSL by studying an international SL project at a community college in the Northeastern United States. Kiely based the model on Mezirow's transformative learning theory (TLT).

TLT is a theory of adult learning that focuses on how adults transform their assumptions and expectations from the largely uncritically assimilated frames of

reference (e.g., deeply held assumptions, attitudes, rules, standards) socialized in childhood to those chosen in adulthood (Mezirow, 1997). According to Mezirow (1997), the goal of transformative learning is to facilitate the individual's ability to make sense of experiences rather than uncritically acting on the frames of reference taught by others (e.g., parents, teachers, and friends). Educators can facilitate transformative learning by creating a learning experience that produces a *disorienting dilemma*, which is an experience that causes internal conflict in the learner's frames of reference (Mezirow, 1991). Next, the educator must provide the student opportunities for *critical self-reflection*, which is the act of consciously comparing and contrasting current frames of reference to the experience that caused the disorienting dilemma (Mezirow, 1997). According to Kiely (2005), educators can encourage transformational learning through SL.

Kiely's (2005) process model of TSL builds on Mezirow's work by studying TLT as it occurred in SL projects. Kiely found that context, which is not part of TLT, is an influencing component of transformative learning in SL. Context in an SL project not only includes the location and history of the community service site but also the personal and structural contexts (e.g., frames of reference) of the participants (Kiely, 2005). To incorporate the role of context into TSL, Kiely posited five learning processes that lead to transformative learning in SL: (a) contextual border crossing, (b) dissonance, (c) personalizing, (d) processing, and (e) connecting.

Contextual border crossing. The first process that leads to transformative learning in SL is contextual border crossing. *Contextual border crossing* refers to four

aspects of context that inform a student's experience of SL: (a) personal, (b) structural, (c) historical, and (d) programmatic. Kiely (2005) found that these four aspects of context affected students before, during, and after an SL experience. According to Kiely, personal context includes the personality traits, social roles, professional background, beliefs, values, motivations, fears, and sense of efficacy of the learner. Structural context refers to the individual's race, gender, and nationality; qualities, according to Kiely, that focus the participant's attention on power differences between them and the community members served. Personal and structural contexts make up the learner's frames of reference. The final two dimensions of contextual border crossing, historical and programmatic, provide insight into the history of the community in which the SL service takes place as well as programmatic factors such as course objectives and length of program. Kiely asserted that all of these contextual factors work together to either enhance or hinder the subsequent processes of transformational learning.

Dissonance. The second learning process of TSL, *dissonance*, is similar to Mezirow's disorienting dilemma and refers to the intersection of the participant's personal and structural contexts with the community-of-service's reality. According to Taylor and Baker (2019), the amount of disparity between the student's context and that of the community members causes dissonance for the student. Dissonance can be low-impact (e.g., local food preferences versus personal food preferences) or high-impact (e.g., exposure to extreme poverty versus personal socioeconomic status); these aspects influence the depth of transformative learning (Taylor & Baker, 2019). To be meaningful for the student, dissonance must become personalized so that the student experiences how

SDOH and healthcare disparities affect the most vulnerable members of a community (Shor et al., 2017).

Personalizing. Personalizing, the third learning process in Kiely's (2005) model, encompasses the deep emotional impact that relationships with community members have on the student. Once the student begins to form relationships with individuals from the community, abstract concepts such as access to and equity in healthcare become tangible (Shor et al., 2017). SDOH and healthcare disparities begin to affect people the student has come to know (Kiely, 2005). Understanding inequity in context is not enough to foster long-lasting transformative change; Kiely's final two stages must also be experienced.

Processing and connecting. The final two learning processes in TSL are processing and connecting. *Processing* refers to the ways in which students reflect upon and analyze their experiences as they identify issues within the community and try to problem-solve. Participants in Kiely's (2005) study processed in several different ways including reflective journaling, dialogue, and observation. According to Kiely, *connecting* is the process by which the participant makes sense of the SL experience and commits to continue service activities in the future. Students make connections between previous learning and experiences and current learning and experiences. Processing and connecting are iterative processes that may continue long after the SL experience concludes, resulting in transformational change in the student (Kiely, 2005).

The Framework's Relation to This Study

The purpose of this study was to explore, from the students' perspective, descriptions of SL experiences that influenced their development of social responsibility. Developing social responsibility in a medical student that results in a career dedicated to community service and equity in healthcare, requires transformative learning (Kayser, 2017). Kiely (2005) found that transformative learning can occur through participating in an SL project. Thus, I used Kiely's model in this study to frame interview questions and to frame and analyze the data.

Review of the Broader Problem

The Literature Search Process

When conducting the review of literature, I searched databases using the key terms *service-learning*, *social responsibility*, and *medical education*. Searches were conducted using Google Scholar, PubMed, the Walden University library, and the library at a local university. Searches were limited to 2015 to the present. I used citation chaining with articles from 2015 to identify additional recent articles. As articles were collected, other search terms (e.g., *social accountability*, *civic engagement*, *interprofessional education* and *SL, healthcare and SL*) were identified and then used in the search process. Saturation was achieved when searches yielded the same set of articles. I used a personal database to track articles assessed for inclusion in the review of literature.

Social responsibility. Social responsibility is a virtue demonstrated by a personal commitment to the common good over self-interest. The concept of social responsibility for medical professionals also includes addressing SDOH in patients and communities

(Borah, 2018), alleviating healthcare disparities in communities (Boelen, 2018), and critically self-reflecting on personal and problematic frames of reference that could inhibit the treatment of a patient (LCME, 2017). As part of professional identity, medical students are taught and expected to be socially responsible (Ponka et al., 2017). A socially responsible doctor is not only aware of personal frames of reference, SDOH, and healthcare disparities, but is also committed to working toward equity in healthcare throughout his/her career.

Social determinants of health and healthcare disparities. According to the WHO (2019), SDOH are the contexts in which people exist (e.g., safe housing, socioeconomic status, education, gender); these contexts are shaped by the economic and social policies of the community (e.g., access to insurance, availability of resources). SDOH vary from one community to the next and are responsible for healthcare disparities, the avoidable differences in health status between communities (Sharma et al., 2018). An example of SDOH and healthcare disparities in the United States is the pervasive lack of access to quality healthcare in rural communities (National Rural Health Association, 2019). Medical education is responding to alleviating this rural health disparity by using rural health systems for clinical rotations of medical students in an effort to attract graduates to rural service (Porter, Quinn, Kane, Stevermer, & Webb, 2016). Sharma et al. (2018) warned that placing students in clinical rural rotations is not enough to facilitate transformation in social responsibility; however, including an SL project in the rotation can facilitate critical self-reflection regarding SDOH and healthcare disparities which leads to improved social responsibility.

Critical self-reflection. Critical self-reflection in medical education is the ability to consider and process one's frames of reference, actions, and motives and how those characteristics affect patient care (Dao et al., 2017). The purpose of critical self-reflection in education is to facilitate a life-long commitment to ameliorating disparities (Freire, 2018). According to Sharma et al. (2018), anything less than a life-long commitment to ameliorating disparities results in upholding the status quo. Although accredited U.S. medical schools are mandated to teach critical self-reflection in relation to SDOH and healthcare disparities, research on social responsibility in medical students shows that teaching does not guarantee learning (Kavas et al., 2015).

Difficulties Developing Social Responsibility in Medical Students

Medical students become less socially responsible as they progress through medical school. Most U.S. undergraduate medical school programs are 4 years in length; the first 2 years are preclinical (no direct patient contact) and the last 2 years are spent in clinical rotations (supervised patient contact). Kavas et al. (2015) found that medical students in the first 2 years of training reported far more capacity for social responsibility than was reported by medical students during the last 2 years. Similarly, Sharma et al. (2018) found that the socialization process during clinical rotations diminished many of the attributes and virtues taught during the preclinical years. There is therefore a discrepancy in medical education between what is taught in the first 2 years and what is experienced in the final 2 years (Ventres et al., 2018).

Medical education is to blame due to the hidden curriculum. The *hidden curriculum* refers to the socialization process experienced by medical students as they

work with role models in healthcare (Bandini et al., 2017). According to Lawrence et al. (2018), the effects of socialization can be more influential to professional identity development than the formal curriculum. Sharma et al. (2018) cautioned that these informal lessons often contradict the values that are taught in the classroom and that are considered vital to professional identity development. Development of social responsibility requires learning concepts and practicing skills (e.g., communication, cultural competence) as well as significant transformation of frames of reference and attitudes, all of which are difficult to teach through didactic lecture alone (Conner & Erickson, 2017).

Knowledge and experience are needed to effect lasting change. Knowing about social responsibility is not the same thing as challenging and changing inequitable conditions (Sharma et al., 2018). Sharma et al. (2018) stated that separating knowledge from action sends the tacit message that SDOH and healthcare disparities are a natural state of existence and that knowing about them is enough. Although necessary, without meaningful experience and critical self-reflection, knowledge alone does not lead to the transformative learning necessary to develop lasting change in social responsibility (Essa-Hadad, Murdoch-Eaton, & Rudolf, 2015).

Effective learning techniques to address these difficulties. Research on professional identity and social responsibility revealed several recommendations to overcome the difficulties of teaching these concepts to students. Improving institutional constructs to make the culture more socially responsible was suggested in three studies. Strasser et al. (2015) recommended strong partnerships between university and

community through reciprocity. Siega-Sur et al. (2017) reported that a strong philosophy promoting the universal right to health and education should be included in the school's mission statement. Rafique, Nuzhat, and Enani (2017) found that change to the existing culture of the faculty could be attained through professional development activities.

Reflection and experiential learning activities were the most suggested ways to improve social responsibility formation. Critical reflection was essential for personal identity transformation (Wald, 2015). Halman et al. (2017) stated that reflection exercises should include opportunities for students to appreciate personal and learning contexts and to engage in explicit discussions of existing power structures. Vackova, Chen, Lui, and Johnston (2018) advocated for experiential learning to encourage professional identity formation. Two types of experiential learning, SL and community-based participatory research, were found to be beneficial in identity formation as reported by Gimpel, Kindratt, Dawson, and Pagels (2018) and Parks, McClellan, and McGee (2015) respectively.

Service-learning (SL)

SL explained. SL is an educational method that combines in-class learning with opportunities for critical self-reflection and community-identified service that fosters a transformative learning experience for students and improves community-identified areas of need (Shor et al., 2017). According to Chrisman-Khawam, Abdullah, and Dhoopar (2017), SL is most effective when designed to meet course objectives in the classroom and in the service experience. Kline et al. (2018) added that service experiences must be designed collaboratively through a reciprocal relationship between the university and

community. The relationship is reciprocal when knowledge, resources, and responsibility for the SL project are shared equitably and collaboratively (Pierangeli & Lenhart, 2018). Castañeda, Islam, Stetten, Black, and Blue (2017) stated that when developed reciprocally, SL projects are more likely to produce transformative learning.

SL can prepare student to recognize the social determinants of health of a community. The LCME (2017) requires that all U.S. medical school curricula include instruction on SDOH. Kangovi et al. (2018) stated that without self-reflection and training in the behavioral and SDOH, students are more likely to “blame the victim” and not consider the greater societal forces at work (p. 586). Kangovi et al. studied a 2- to 4-week elective SL project in which medical students shadowed a community health employee. The each pair worked in a community with a large proportion of medically underserved members. This project was unique because the community health worker was also a member of the community of service. Students reported that prolonged contact with the community health worker provided better understanding of SDOH and increased their desire to work with the medically underserved (Kangovi et al., 2018). Although Robison, Leader, Gathambo, Madison, and Thomas (2018) criticized short-term programs, they reported the same student outcomes in their study of an SL project spanning all 4 years of medical school; that is, students reported greater understanding of SDOH after meaningful contact with community participants.

SL can prepare students to recognize and address problematic frames of reference in themselves. The LCME (2017) requires the medical school to provide opportunities for critical self-reflection to raise awareness of problematic frames of

reference (e.g., gender and cultural biases) that could impede patient care. Desrosiers et al. (2016) studied a 1-week mandatory SL project providing sexual health information to members of a sexual and gender minorities community. Laks et al. (2016) studied a 14-week elective SL project providing health information to geriatric patients at a residential care facility. The programmatic contextual differences between the two studies are the length of the SL project and critical self-reflection assignments. Students in the 1-week program, which did not include self-reflection exercises, only reported increased comfort communicating with sexual and gender minority community members (Desrosiers et al., 2016). The 14-week program, however, included self-reflection exercises, and students reported improved self-awareness regarding ageist attitudes as well as a future intent to work with geriatric patients (Laks et al., 2016).

SL can prepare students to recognize and work to solve healthcare disparities. For accreditation purposes, medical school administrators and faculty are required to include ways to ameliorate healthcare disparities in their curricula (LCME, 2017). Porter et al. (2016) studied an elective 6-to 12-week SL project set in a rural area. This project was created to address a rural physician shortage by fostering integration of the medical student into the rural community through meaningful service and research (Porter et al., 2016). Annual follow-up surveys with alumni of the project consistently indicated that these students remained committed to rural service (Porter et al., 2016). Cohen, Leung, Oriuwa, and Wright (2019) reported on a project that was mandatory, had a duration of 1 year, and was set in an urban area. After the project was redesigned to be reciprocal and consistent with its community partner, students reported richer experiences

and deeper relationships with community members than previous cohorts (Cohen et al., 2019). Students also reported feeling empowered to continue working toward equity in healthcare (Cohen et al., 2019).

Criticism of SL in Medical Education

Medical education SL projects lack reciprocity. SL in medical education is most often criticized for its lack of reciprocity (Boelen, 2018). Laks et al. (2016) reported that the SL project they studied was unsuccessful in its early years because the project development team did not include the community partner in planning. Few patients participated because the concepts covered by the students were already addressed better by the community partner (Laks et al., 2016). For transformative learning and lasting change in attitudes to occur, learning and experiences must be developed that are intentionally meaningful for the community, university, and students (O'Connell et al., 2018).

Medical education SL projects assign tasks unrelated to course objectives.

Another criticism of SL in medical education is that medical students are assigned service activities that do not pertain to the curriculum. Gonzalo, Dekhtyar, Hawkins, and Wolpaw (2017) cautioned that in-class learning must support and inform the service experiences; otherwise, service activities become unrelated and are detrimental to learning course objectives. Examples of service activities that have not been tied to in-class learning and that can deter medical education include repetitive actions not contributing to skill improvement (vain repetitions) and non-physician activities such as making appointments and scheduling patient transport (Catalanotti et al., 2017). The SL

project studied by Chrisman-Khawam et al. (2017) originally assigned medical students to deliver meals and warm clothing to the homeless in a downtown urban area; however, by building relationships within the community, the project student-participants were successful in providing basic medical care to this population. Building authentic relationships with homeless individuals focused students' attention on the assets rather than the deficits of the community and fostered trust with the community members resulting in access to more of the homeless community (Chrisman-Khawam et al., 2017).

SL experiences tend to focus on community deficits. Kline et al. (2018) were critical of SL experiences that focused solely on community deficits (i.e., fixing problems) because identifying community assets could facilitate meaningful change within and empowerment of that community. Focusing on community deficits reifies negative stereotypes (Brooks, Magee, & Ryan, 2018). Another risk of deficit-focused SL activity is bolstering medical student development of a savior complex (i.e., the image of the doctor as god); this attitude is not compatible with a socially responsible patient-care approach (Castañeda et al., 2017; Catalanotti et al., 2017).

Research of medical education and SL projects does not provide evidence of lasting transformative change. A final criticism of SL in medical education emerged from this review of literature and corroborated findings from Stewart and Wubbena's (2015) earlier systematic review of literature. Although there was ample evidence of immediate transformative learning, there were few data collected to confirm long-lasting and career-impacting transformation in frames of reference. The only exception was the study conducted by Hand et al. (2018) in which they interviewed 22 physicians about

their SL experiences that influenced their professional development. Hand et al. found that physicians who were predisposed to service prior to medical school were most likely to credit SL with influencing their professional development. Without more data from alumni to confirm permanent transformation of frames of reference, it is difficult to assume SL in medical education results in greater social responsibility in the long term.

Implications

The purpose of this study was to explore, from the students' perspective, their descriptions of SL experiences that influenced their development of social responsibility. Scholarly literature focused on SL in medical education consistently noted that social responsibility was among the benefits reported by medical students (Beck, Chretien, & Kind, 2015; Brooks et al., 2018; Chrisman-Khawam et al., 2017; Desrosiers et al., 2016; Essa-Hadad et al., 2015; Gimpel et al., 2018; Laks et al., 2016; Parks et al., 2015; Pierangeli & Lenhart, 2018; Ponka et al., 2017; Porter et al., 2016; Rafique et al., 2017; Sharma et al., 2018; Siega-Sur et al., 2017; Ventres et al., 2018). Researchers of medical education reported that social responsibility is decreased during the final 2 years of medical school indicating a problem in the medical education system (Kavas et al., 2015). Consequently, two possible project studies seem plausible, a curriculum plan or a professional development seminar.

Implications of the review of literature inform that professional development is a possible type of project that may result from the study findings; however, the results of the analysis of data did not provide evidence that this was needed. Primarily due to the timing of the project during the clerkship year when faculty are community- or clinical-

site-based and who volunteer their time to teach medical students. The review of literature also indicated that a curriculum plan could be an appropriate project which was the genre chosen for my doctoral study. The curriculum plan addresses criticisms that were addressed in the review literature regarding developing reciprocity (Boelen, 2018; Laks et al., 2016), focusing on community assets (Brooks et al., 2018; Kline et al., 2018), and providing meaningful service activities (Catalanotti et al., 2017; Gonzalo et al., 2017). The purpose of the curriculum is to intentionally create an SL project curriculum that addresses the attributes of a high-quality SL project allowing more frequent and meaningful contact with underserved populations to affect positive social change for the communities and for the students (O'Connell et al., 2018).

Summary

This review of literature described the issues in medical education regarding the need for TSL to facilitate changes in medical students' attitudes toward social responsibility. The global disparity between the wealthy and poor continues to perpetuate inequitable healthcare to the most vulnerable members of society (Ponka et al., 2017). Although accrediting standards mandate the use of SL in medical education to foster transformative learning, there is little evidence that SL experiences elicit life-long medical professionals committed to social responsibility and action (Stewart & Wubbena, 2015). The purpose of this study was to explore, from the students' perspective, descriptions of SL experiences that influenced their development of social responsibility. The following section provides a description of the methodology and research design chosen to explore SL and social responsibility.

Section 2: The Methodology

Introduction

The purpose of this study was to explore, from the students' perspective, their descriptions of SL experiences that influenced their development of social responsibility. This section includes descriptions of the research design and approach as well as the criteria for selecting and protecting participants. Descriptions and justifications for data collection and analysis, including data collection instruments and coding procedures, are provided. The section ends with how and when the data were analyzed, evidence of quality, and discrepant cases.

Qualitative Research Design and Approach

This study used a basic qualitative design. According to Merriam (2009), qualitative research seeks to understand “how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (p. 5). Qualitative research is useful when a researcher seeks to understand an experience from the participants' perspective (Creswell, 2012). Beninger (2019) stated that the only way to understand the effect of SL on internal beliefs and values (e.g. social responsibility) is from the perspective of the SL participant. The purpose of this study was to explore, from the students' perspective, descriptions of SL experiences that influenced their development of social responsibility. This study was designed to elicit descriptions of medical students' experiences during an SL project related to their development of social responsibility. A basic qualitative design aligned with the conceptual framework, the purpose of the study, and the research question.

Justification of the Research Design

According to Lambert and Lambert (2012), “The goal of [basic qualitative] studies is a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals” (p. 255). Basic qualitative design is appropriate when the researcher seeks to understand an experience from the participant’s perspective (Caelli, Ray, & Mill, 2003). The primary goal of a basic qualitative study is to explore and understand the meaning attributed to an event by the participant. In this study, I sought to better understand the influence of SL from the students’ perspectives and how, or if, SL influenced their attitudes toward social responsibility.

Procedures for Gaining Access to Participants

Before contacting potential participants, I obtained permission to conduct the study from the Walden University Institutional Review Board (IRB) on June 10, 2020, approval number 06-11-20-0256266. I confirmed that IRB approval was not necessary for the university where the SOM exists. I ensured that the SOM was willing to participate by meeting with the associate dean for rural health and the associate director of rural health programs to request permission to study the SL project. During this meeting, I explained the need for the study and the potential contributions of the research to the study of SL in medical education. Written permission was granted from the SOM on April 16, 2020. The associate director of rural health programs was my contact at the SOM and provided me with the names and contact information for the 152 medical students who participated in the SL project.

Researcher-Participant Working Relationship

Establishing a researcher-participant working relationship required that I be respectful, nonjudgmental, and nonthreatening throughout the study (see Merriam & Tisdell, 2015). Creswell (2012) cautioned that sufficient trust must be developed so that participants are able to fully describe personal details of their experiences. I did not engage in deception and the details of the study, the participant's rights to review the collected data, and ownership of the data were fully disclosed (see Creswell, 2012). I disclosed my role in the research as an employee of the SOM. None of my job duties put me in a position of power over any students. Creswell (2012) recommended reciprocity (i.e. equality) between the researcher and participant; I established reciprocity with the participant by acknowledging that their participation was voluntary, confidential, and that they could decline to participate in the study at any point without fear of reprisal. This information was disclosed in the informed consent, and a copy was provided to the participant for their record prior to the interview.

Protecting Participant Rights

Once Walden University IRB approval was attained, perspective participants were contacted through an email invitation (Appendix B). I used my Walden student email account to send the invitations. Within the email invitation, I provided an overview of the study and included an attachment of the consent form. In the consent, I addressed the participant's confidentiality, protection from harm, and voluntary participation. Additionally, I addressed how to withdraw from the study and how to contact me.

Participants were asked to respond to the email with questions about the consent form, if needed, and if they were willing to participate to respond to the email with “I consent”.

Data Collection

Data Collection Instrument

Data to answer the research question was collected by me through semistructured interviews. A semistructured interview allowed me to be flexible and use probes as needed to fully explore and understand the participant’s story (see Lodico, Spaulding, & Voegtle, 2010). Semistructured interviews were appropriate because it was assumed that individual participants would share and define their experiences (see Merriam, 2009). Lodico et al. (2010) recommended the use of a semistructured interview if the researcher desired to explore each participant’s responses in depth. This method supported the purpose of my study because deep, rich descriptions of the individual’s experiences were the objective.

I ensure that the interview protocol document (Appendix C) contained space to record the date, time, place, and the participant’s unique identifier for the interview. I also included a brief statement explaining the purpose of the study, the reporting of results, a statement of confidentiality, and a request for questions from the participant regarding the statement (see Lodico et al., 2010). I left space in the interview protocol document for me to record notes and observations throughout the interview.

Using Kiely’s (2005) model of TSL as a framework, I developed questions for each stage in the model (i.e. contextual border crossing, dissonance, personalizing, processing, and connecting). Afterward, I consulted dissertations and current articles that

used Kiely's model to frame interview questions to ensure that my questions were consistent with the model. My next step was to establish credibility of my questions by consulting with faculty members and administration at the local SOM. After the development of the questions was complete, I conducted practice interviews with family and friends to gain experience in interviewing.

Data Collection Process

Establishing processes for data collection and recording ensured that the quality of data was consistent for each interview (see Macfarlan, 2015). Prior to the interview I printed a copy of the interview protocol that had been prepopulated with the time, date, place, and unique participant identifier. The Zoom conferencing application was tested and I ensured that all equipment (microphone, video, audio) was in working order. Once the participant arrived in the Zoom meeting room, I reassured the participant that their interview recording would only be used for the purpose of this study.

The interview began with reading the brief statement that begins the interview protocol document. Time was then allowed for the participant to ask any remaining questions. I began the interview. Observations and interview discrepancies were recorded directly on the interview protocol document (see Macfarlan, 2015). During the 45- to 60-minute interview, I encouraged the participant to ask questions at any point and I displayed active listening to show interest in the participant (see Merriam, 2009). A closing statement from the interview protocol included my thanks to the participant and I reiterated that the interview was confidential (see Creswell, 2012).

After the interview, all information that I wrote on the protocol document was recorded in a spreadsheet that was stored on a password protected hard drive that only I can access. Creswell (2012) recommended creating a spreadsheet or matrix to help organize interviews. The interview protocol documents are kept in a locked filing cabinet in my home, which only I can access.

Role of the Researcher

Although I am employed by the SOM, in my role I have no direct contact with students. I had no power over any of the potential participants. Data were stored on a password-protected hard-drive kept in a fire-resistant safe located in my home that only I can access. Hard copies of any documents (e.g., informed consents, interview protocol documents, research journal) are kept in the same safe. All required information will be kept for 5 years from the date of completion of this study and will then be destroyed.

I acknowledged that I have personal biases that could affect study results if not addressed. Caelli et al. (2003) stated, “A researcher’s motives for engaging with a particular study topic are never a naïve choice” (p. 5). There is no such thing as a neutral observer. Areas of bias were addressed in my research journal and this reflective practice continued throughout data collection (see Merriam & Tisdell, 2015).

Data Analysis

Data analysis included the constant comparative method and began during the interview as I recorded notes on the protocol document and interacted with the participant (see Merriam & Tisdell, 2015). After the interview, I recorded my personal reactions to the interview, ideas that occurred during the interview, and reflections on any biases that

surfaced in the research journal (see Miles, Huberman, & Saldaña, 2020). I then prepared the data for coding by transcribing the interview verbatim using a word processing application.

Miles et al. (2020) stated that codes are prompts for deeper reflection and that they provide a method to detect recurring patterns. I used In Vivo Coding, Emotional Coding, and Values Coding to guide construction of my codes (see Miles et al., 2020). All codes and their definitions were recorded in the research journal; codes were reviewed frequently.

Miles et al. (2020) and Creswell (2012) recommend creating a matrix in a text document or spreadsheet. I used an Excel spreadsheet matrix to display and analyze my notations and reflections as well as the codes and their related snippets of data. Although I attempted the use of two different computer-aided qualitative analysis software applications, I did not find them useful and found hand coding of the data to be the most beneficial for my study.

Evidence of Quality

Establishing quality and trustworthiness in qualitative research requires evidence of credibility, transferability, dependability, and confirmability (Krefting, 1991). Krefting (1991) described credibility as the truthfulness of the processes and findings.

Transferability is the provision of sufficient descriptive data about the research process so that the study can be transferred to another researcher and location. For a study to have dependability, it must show consistency between the findings and the research processes.

Krefting also stated that confirmability ensures that the findings of the study can be verified by others.

As part of establishing credibility for this study, I emailed each participant a copy of their transcript (see Creswell, 2012). The participant was asked to review the document and make changes and comments to confirm that I understood their words. Participants were given one week to return the transcript; the email stated that if nothing were returned to me then I would assume there were no changes requested by the participant (see Lodico et al., 2010). To address transferability, the second aspect of trustworthiness in qualitative research, I fully described the contexts and assumptions of my study in a research journal (see Krefting, 1991). In the journal, I made notes as codes developed or planned processes changed to describe accurately the evolution of my study.

Much like transferability, dependability and confirmability depend on the detailed account of the research processes that I kept in the research journal, a password-protected Microsoft OneNote notebook (see Merriam & Tisdell, 2015). Dependability was ensured through my consistent recording of changes, thoughts, ideas, and discrepancies as well as through the recording of reflections related to biases (see Krefting, 1991). Detailing the evolution of the codes and themes shows confirmability because it ensured that my analysis can be verified by others.

Discrepant Cases

The purpose of this study was to explore, from the students' perspective, descriptions of SL experiences that influenced their development of social responsibility.

There was no assumption that these students experienced anything related to social responsibility during the experience or because of the SL project. According to Merriam (2009), discrepant cases that may provide alternative explanations improve the credibility of the study. Participant 04 was a discrepant case that is included in the data analysis; this case is discussed further in section Theme1: Community Integration.

Data Analysis Results

Walden IRB approval was obtained on June 11, 2020, approval number 06-11-20-0256266. Upon receiving approval from Walden, I sent an email to my research site contact requesting the email addresses for the medical students who have participated in the SL project. I was provided 152 email addresses.

The first step in data collection was to invite the students to participate in the study. On June 23, 2020, I sent the email invitation (Appendix B), which included an attached copy of the consent form sent to the 152 email addresses. To meet selection criteria for this study, the medical student must have participated in an extracurricular SL project during their third year of medical school. Of the 152 emails, 29 emails were returned as undeliverable and one person responded that they did not participate in the SL project. These thirty were eliminated from participating. I assumed then that 122 emails were received by medical students who had participated in the SL project.

In the email and consent form, students were instructed to email back "I consent". I received 14 consents to participate and all 14 met selection criteria. The next step was to email my availability for interviews with a request for the participant to select a time that would be convenient for them; I offered interviews daily, Sunday through Saturday

beginning at 5:00 AM CST and ending at 10:00 PM CST. Two of the 14 consents never responded to requests for availability after two attempts at contact spaced three days apart. This reduced the participant number to 12.

Interviews were schedule via Zoom and were audio recorded. Interviews began on June 25, 2020 and continued until July 8, 2020. Two participants failed to keep their first interview and chose not to reschedule. As a result, 10 interviews were completed. Each interview followed the interview protocol in Appendix C. Each interview was transcribed by me and the transcript was sent to each participant for review and approval. The email sent with the attached transcript included the instruction that if no updates were received by me within seven days, I would assume the transcript was approved as written. Participants 01, 06, 08, and 10 emailed indicating their transcripts were correct as written. Transcripts for Participants 03, 04, 07, and 09 were assumed correct as written. Participants 02 and 05 made changes; Participant 02 corrected a name and Participant 05 clarified a statement.

The problem that prompted this study was the need to understand medical student perceptions about how the SOM's voluntary SL project influenced the development of social responsibility. The purpose of my study was to explore, from the students' perspective, descriptions of SL experiences that influenced their development of social responsibility. A single research question was posed.

Research Question 1. How do medical students describe their experiences during an SL project?

Coding

After transcribing the first interview, I read through the document in its entirety. I began coding using Kiely's five processes to identify if/how the participant experienced the process which led to the development of the themes eye-opening and future practice. I was not able to identify specific themes with the first interview; however, once I was able to compare one interview to another, codes became easier to identify. From codes, themes began to emerge through the common experiences and/or phrases each participant used (Miles et al., 2020).

I chose to print hard copies of each transcript to facilitate the coding processes. I read through the transcript while listening to the recording of the interview to ensure accuracy of transcription. Next, I re-read the transcript, and wrote notes and coding ideas in the margin. I used this process with all 10 interviews while constantly comparing one transcript to another. I used different colored pens and highlighters to differentiate my notes making it easier to see patterns once all interviews were coded this way. I continued to read and re-read transcripts eliminating and combining codes. This resulted in many codes that I compiled with their definitions and examples into a matrix using Excel. The matrix allowed me to see all codes at once and to further narrow down the number of codes. Next, I went back through the transcripts several more times further refining and combining codes while also referring to the matrix as commonalities evolved and more examples emerged.

My next step was to develop themes from the identified codes. I read through the Excel matrix, grouping codes that were similar. For example, when I noticed that

Participant 02 used the phrase “opened my eyes” and that Participant 04 and Participant 05 both used the phrase “eye opening” to express surprise at a social condition, I went back through all of the transcripts to finding other examples of surprise.

By using the constant comparative method, I was able to identify six of seven themes. At this point, I used a spreadsheet to reorganize the transcripts by question so that the interview question was the column heading and the responses for that question were listed beneath. I became so familiar with each interview that I thought this might provide either confirmation of my findings or an alternative view of the data. The themes that I had already identified were confirmed. Another theme, however, began to emerge from analyzing the data in this format.

During the interview, I asked participants to describe in one word what they expected to gain from participating in the extracurricular SL project. Participant 07 surprised me by answering “gratification”. No one else used the word and so I did not initially include it in my code book; however, it puzzled me, and I made note of that in my research journal. Participant 07 went on to explain how the project was gratifying. The participant found deep, meaningful pleasure in meeting the needs of the people served and found the work of the project pleasurable. When I began to look at the other answers to that question, a pattern of joy emerged. I took this theme, gratification, and went back through the original interview transcripts. Related words, such as “joy,” “enjoy”, “awesome”, become apparent throughout the interviews.

Research Findings

Analysis of data resulted in the development of seven themes. Participants described SL experiences as benefiting them as they integrated into the community outside of the clinical setting and as an important opportunity to provide education to others. My analysis of the data also suggested that students did not know if their projects were beneficial to the community. I also found that students described the SL experience as gratifying and eye-opening. Participants described how their compassion and caring increased toward the community members. Finally, participants stated that their SL experiences impacted their current and future practice of medicine.

Theme 1: Community integration. Medical students value SL experiences due to the deeper understanding of the resources and of SDOH the experience provided. For example, Participant 01 stated,

I looked at the project as a way for me to become more familiar with the community. For a doctor to be able to best help their patients they really need to know about the resources available to the patient in that community.

Other participants stated that learning how to integrate into the community and discover assets were beneficial to their future practice. Additionally, participants stated that the opportunity to interact with community members outside the clinical setting was valuable to them. Participant 02 explained,

I think it was helpful because it got me outside of the hospital and interacting with people outside of a provider setting. It gives you a sense of who these people are and what they do outside the physician-patient/office type relationship. It

gives you more of a sense of how important keeping these people doing the activities they love to do is.

Seven of the 10 participants mentioned community integration in their interviews. Of the three that did not mention community integration, Participant 04 was a notable discrepancy. This participant revealed that they are currently a faculty member at a School of Medicine and that they were responsible for developing an SL project there. The participant was happy to help but was more focused on discussing SL as an educational method than their personal SL experiences that were “ten years ago”. The participant explained, “I want to emphasize that this was a long time ago so I’m going to do the best I can to recollect”. Similar statements were made throughout this interview. I see two possible strategies for future research. First, in future studies on this topic I will consider including “current faculty member” as part of the exclusion criteria. Second, I may have built rapport differently with this participant because of their knowledge and experience with SL. For the purposes of the current study, I included Participant 04 because they did meet inclusion criteria and did provide valuable data regarding medical students and SL.

Theme 2: Educating others. The SL project that all ten participants completed was during the third year of their medical school. This means they completed the first 2 years, which focus on learning the science of medicine, with no unsupervised contact with patients. The third year was the first time that medical students could actively participate in patient care. Essentially, the medical students had acquired specialized medical knowledge but no skills in patient care experientially. Participants in this study

expressed educating others through statements such as Participant 09 who said, “[I]t allowed me to use my knowledge in medicine to benefit the community”. The focus of most of the SL projects carried out by this subset of students was on educating community members, including local doctors and other healthcare providers, outside the clinical setting. Participants 05, 06, 07, and 08 designed projects with the purpose of educating others in substance abuse, healthy living, starting a career in healthcare, and nutrition and wellness respectively. These participants expressed enjoyment of sharing their specialized knowledge with others.

Theme 3: Lack of knowledge of project outcomes. The SL project was 3 to 6 months in duration. Participants were assigned to assess the resources available in their rural community and to develop a project that would benefit a community group. Projects included working with children in the schools, teaching them topics such as basic life skills (handwashing, dental hygiene), how to pursue a career in healthcare, and how to identify skin lesions that indicate skin cancer. Other projects worked with groups of adults who were in substance use treatment, who were living in a family shelter, or who were interested in a health topic. Finally, others informed local doctors about new research in human papillomavirus vaccines, trauma-informed interviewing, and their comfort discussing substance use with patients.

When asked during the interview to recall a single encounter where a community member was negatively impacted, nine of the ten participants stated that they could not recall an individual encounter; only Participant 01 was able to recall an encounter that

was related to their project. Furthermore, when asked what value they believed the community received from their project, Participant 10 responded,

I don't know objectively, if more people have been vaccinated. I didn't look at rates before and after. I know subjectively the physicians I worked with expressed that they felt better about their knowledge. But I don't know if they actually changed anything.

Participant 03 expressed enthusiasm about having worked with school-aged children but when asked the outcomes of the project could only state, "Hopefully we helped them."

The nine participants who were unable to recall a specific individual or encounter expressed concern that they did not know how the community was impacted by their service.

Theme 4: Gratification. This theme was a surprise to me; however, when I began to read the interviews looking for snippets of pleasure in serving others, the evidence abounded. Seven of ten participants described their SL experiences using words such as "gratification", "enjoy", "enjoying", "loved", "glad", "happy", and "fun" as well as through expressions of laughter when describing interactions that were pleasurable . The importance of gratification in serving others for a physician was summed up in Participant 05's statement,

I feel like sometimes when we go through med school, students feel completely disconnected from the communities that they want to serve. That disconnect can eventually lead to burnout or just feeling like you are not involved in the work you originally wanted to do.

The seven who expressed gratification in the SL experiences attributed their joy in being able to authentically serve community members not only in clinic but also in the community itself.

Theme 5: Eye-opening. Participants frequently related experiences they described as eye-opening or startling during interviews. Using Kiely's (2005) TSL model to frame interview questions allowed me to realize that participants were expressing dissonance through these experiences. Dissonance refers to the process in which the participant reflects on their frames of reference by comparing their beliefs to the startling or dissonant encounter with the community member. Participant 01 stated "That disconnect and divide between those that can and cannot adequately access healthcare was startling to me". Participant 02 reported recognizing their own power and privilege through the SL project work stating,

[I]t gave me a greater understanding of the difficulties that people have. We always say [to eat a healthy diet] and do all these things when people come to see us if they have diabetes or that kind of thing. It really opened my eyes to how it's not really as simple as you might think.

Participants in this study revealed that they found these experiences led to changes in their frames of reference.

Theme 6: Compassion. Eight of ten participants revealed their deepening care and compassion for the community members. Participant 06 described their interactions with children in an after-school program as gratifying and went on to state,

There were a lot of fun projects you can do with kids. They think it's awesome. I

think kids look back on things like that and think about it, for example, before they start smoking. I hope they remember, and it steers them away from those types of things.

Participant 02 related their deepening compassion through the care and concern about a community member's hospitalization,

I saw his home situation, he was disabled and had diabetes, living alone; it was interesting to see the kind of things he had to do to care for himself. He ended up in the hospital while I was there. He got very hyperglycemic and ended up being on an insulin drip and that sort of thing. If he had people with him to help him monitor his medicines he might not have ended up in that situation.

Participant 02 later stated that the SL project helped them understand “how important keeping these people doing the activities they love to do is”. All eight who expressed personalizing believed that they were more compassionate toward rural populations and cultures because they participated in SL.

Theme 7: Future practice. According to Kiely (2005), students who participate in SL projects often experience what he termed *chameleon complex*. Chameleon complex is the phenomenon in which an SL student expresses intent to continue with service activities immediately after the SL experience but in interviews six months to a year later that intent decreased to a great extent or no longer existed at all. In this study, six of ten participants related not only the intent to continue serving their communities of practice in the future but also evidence that they are serving their communities today. Participant 08 made sense of the SL experience stating that community service “forces you to not

just practice cookbook medicine and give cookbook advice; you have to think outside the box sometimes and be ready to provide creative solutions for your patients”. Participant 01’s interview concluded with a description of an eye-opening encounter that “made me really want to be a doctor who actively works to address [social inequities] in my career”. Participant 03 revealed that the impact of the SL experience continued to the present day to influence their practice of medicine, “Now that I am in practice and have graduated..., it is still so important to take a role in service to the community.”

Evidence of Quality

According to Krefting (1991), establishing quality and trustworthiness in qualitative research requires evidence of credibility, transferability, dependability, and confirmability. Krefting described credibility as the truthfulness of the processes and findings. Transferability is the provision of sufficient descriptive data about the research process so that the study can be transferred to another researcher and location. For a study to have dependability, it must show consistency between the findings and the research processes. Krefting also stated that confirmability ensures that the findings of the study can be verified by others.

As part of establishing credibility for this study, I emailed each participant a copy of their transcript (see Creswell, 2012). Participants were instructed to review the transcript for accuracy and to add to or delete their comments as needed. They were instructed that if I did not receive a response within seven days, I would assume the transcript was correct as written. I received responses from Participants 01, 02, 05, 06, 08, and 10. Only two were edits; one of these pointed out an error in a name and another

corrected wording on a particular answer; otherwise they stated that it was accurate as written. The remaining transcripts were assumed to be correct as is.

To address transferability, the second aspect of trustworthiness in qualitative research, I fully described the contexts and assumptions of my study in a research journal (see Krefting, 1991). In the journal, I made notes as codes developed or planned processes changed to describe accurately the evolution of my study. For example, the theme community integration evolved from the codes become more familiar with the community, understand the needs of the community, understand the resources/assets of the community, and work with community members outside the clinical setting.

Dependability was ensured through my consistent recording of changes, thoughts, ideas, and discrepancies as well as through the recording of reflections related to biases (Krefting, 1991). Additionally, I have archived all of my notes either on my password-protected hard-drive or in a locked file cabinet inside my home. I am the only person who has access to these artifacts. Finally, detailing the evolution of the codes and themes shows confirmability because it ensured that my analysis can be verified by others.

Conclusion

The purpose of this study was to explore, from the students' perspective, their descriptions of SL experiences that influenced their development of social responsibility. Through interviews with medical students from one SOM who participated in an extracurricular SL project, I obtained deep understanding of the ways medical students describe the value of participating in an SL project aligned to their development of social responsibility. A basic qualitative design facilitated semistructured interviews with 10

participants to gather data to answer the research questions. Participants identities were protected through using participant identifiers (i.e., a numbering system, 01 through 10) and by removing specific names of individuals and locations that participants mentioned during their interviews.

Analysis of data revealed that students valued participating in the SL project because it was an effective way to integrate into the community, it allowed them to educate others, and it was gratifying to them to participate in serving others. Criticism of the project in that participants did not know the outcomes of their projects was expressed by 9 of the 10 participants. Data analysis also showed that students frequently expressed transformative learning through experiences they described as startling and eye-opening..

After analyzing the data, the results of this doctoral project study led me to conclude that a curriculum plan is the most appropriate deliverable. This decision is based on the results of analysis, specifically, that the project is valuable to the participants in this study and they believe it would benefit all medical students to participate. Additionally, a curriculum plan was chosen because the participants expressed frustration and concern that they do not know the outcomes of their projects.

Section 3: The Project

Introduction

The purpose of this study was to explore from the students' perspective, descriptions of SL experiences that influenced their development of social responsibility. I analyzed interviews with 10 medical students. I found that medical students who had an SL experience during their third year of medical school continue to be socially responsible physicians and community members. Additionally, these students found pleasure in serving and educating others. Students related transformation through experiences they described as eye-opening and revealed their deepened connection to the community through stories of their pride and concern for the community members they served. Finally, participant description of their current medical practice revealed that they continue to value social responsibility.

A curriculum plan (Appendix A) was developed in response to the analysis of data. The curriculum plan uses principles of community organizing to address the lack of reciprocity with the community in the current curriculum and to address the lack of knowledge of outcomes expressed by students. In Section 3, I describe the rationale for selecting the curriculum plan, a review of the literature, a project description, evaluation of the project, and project implications.

Rationale

Through a basic qualitative design, I used interviews to examine the experiences of medical students who participated in an SL project, specifically those experiences that

were related to social responsibility. Additionally, data from the interviews were used to analyze whether learning was transformative. I chose a curriculum plan to address criticisms that the SL project lacks reciprocity between the university and the community. Additionally, the participants in this study were concerned that they did not know the outcomes of their projects. An evaluation of project outcomes is a valuable skill, especially when considering healthcare disparities and the SDOH. The curriculum plan can help ensure that the SL project continues to provide experiences that are gratifying to the student, that allow them to educate others, and that integrate them into the community.

I considered and ultimately rejected several other genres for this project. I eliminated an evaluation report as a study outcome because the study design, basic qualitative, was not appropriate for this genre. I also eliminated policy recommendation because SL in medical education is already a requirement for accreditation (see LCME, 2017). After careful consideration of the findings of the study, I eliminated a professional development curriculum because the SL project occurs during the third year of medical school and the faculty, called preceptors, are community-based volunteer physicians. This type of faculty cannot, and should not, be expected to also provide supervision for an SL project. The third year of medical school is discussed further in the review of the literature.

Review of the Literature

This review of the literature begins with a description of the search process. Next, I present the most common type of clerkship design which has been in use for over a

century. I include criticisms of this clerkship design, including its purported contribution to medical student burnout, to provide context to the decision for the design of my curriculum plan. Finally, I describe the clerkship design that will be used to frame my curriculum plan as well as an overview of SL in longitudinal integrated clerkships (LIC). The review of the literature ends with specific elements of high-quality SL projects in medical education.

The Literature Search Process

To develop the most effective SL project for my curriculum plan, I focused my literature review on the design of the clerkship year. Using Google Scholar and Walden Library database search, I searched for *clerkship curriculum plan* and *design*. I found two primary types of clerkship design; the most common was the *block clerkship*, which is the traditional clerkship design, and the newer method called LIC. I included *clerkship design criticisms*, and this led me to search *medical student burnout*. After careful consideration, I chose to embed an SL project curriculum into an LIC. Although I searched for SL in LICs, there was no current literature that specifically addressed this search combination.

To address SL in my curriculum design for an LIC, I focused the search on the critical elements of SL curriculum design. The first search conducted was *SL* and *curriculum development*, also *curriculum plan* and *design*. I searched *transformative SL*, *SL*, and *gratification* and *SL* and *future practice*. Additionally, the search for *SL* and *community integration* led me to *SL* and *community organization*.

Block Clerkships

Clinical experiences and skills training are necessary parts of the education of any healthcare professional. In medical education, the 4 years of training are halved into the preclinical and clinical years. The third year is the beginning of clinical rotations or clerkships for medical students. The student begins rapid rotations through six or more core medical specialties that are designed to provide a basic overview of the practice of medicine. The fourth year is dedicated to shorter electives in medical subspecialties such as ophthalmology or radiology.

The SL project considered in this study occurs during the clinical year of medical school. The traditional design for this year is to divide the instructional activities into 4- to 8-week blocks, also called rotations or clerkships (Dubé, Schinke, & Strasser, 2019). Each clerkship is dedicated to a specific, although siloed, medical specialty (e.g., child health, family medicine, internal medicine, neurology, obstetrics/gynecology, psychiatry, surgery). Clerkships, more recently, have begun to include both in-patient and out-patient experiences although the primary setting is the urban teaching hospital (Hudson, Poncelet, Weston, Bushnell, & Farmer, 2017).

Block clerkships have been criticized due to their insular approach to medical care (Gheihman et al., 2018). According to Gaufberg et al. (2017), the 100-year-old block clerkship design no longer meets the needs of the 21st Century healthcare system which is focused on patient-centered care. Patient-centered care includes valuing the patient's perspective and culture and clear lines of communication between the patient and providers as well as between providers (Mylopoulos, Kulasegaram, Weyman, Bernstein,

& Martimianakis, 2020), all of which, according to Evans, Henschen, Poncelet, Wilkerson, and Ogur (2019), are not possible to experience meaningfully in single patient encounters in block rotations. Furthermore, siloed, physician-centric clerkships are not designed to foster coordination of care between various healthcare providers, such as between physicians, nurses, and physical therapists (Bartlett, Couper, Poncelet, & Worley, 2020).

The clinical years of medical school are highly criticized and scrutinized due to the rapid increase in student burnout and depression as well as the simultaneous plummet in student frames of reference such as altruism, empathy, and social responsibility (Gaufberg et al., 2017). In this context, Gaufberg et al. (2017) stated that block clerkships are particularly inhumane. Every 4 to 8 weeks, the student must begin again as a novice in another specialty with barely enough time to learn objectives to pass that specialty's exam requirements and certainly not enough time to establish meaningful relationships with community-based faculty. Gheihman et al. (2018) added that patient care, due to time constraints of the clerkship design, is reduced to episodic encounters that do not typify the patient-physician relationship in current medical practice.

The loss of qualities such as social responsibility and altruism in medical students during the clinical years is a well-known phenomenon; this also includes increased depression, burn-out, and other mental health concerns (Dubé et al., 2019; Hudson et al., 2017). Hudson et al. (2017) stated that the hidden curriculum and fragmentation of patient care and clinical training are the primary causes of these changes in medical students. Block clerkship design prohibits continuity in patient care increasing the

likelihood of student depression and burn-out (Dubé et al., 2019; Trowbridge, Ford, Carwile, Bullis, & Bing-You, 2019).

Longitudinal Integrated Clerkship

Hudson et al. (2017) stated that one solution to the fragmentation of patient care and clinical training is to design a single LIC. According to Dubé et al. (2019), an LIC is designed as one continuous clerkship, typically an academic year, that intentionally and concurrently integrates the core medical specialties (e.g., child health, internal medicine, surgery). Gheihman et al. (2018) stated that the LIC design emphasizes continuity of care with an assigned panel of patients over episodic encounters with a convenience sample of the patients on the day's schedule. The patient panel provides continuity for both the student and the patient because the student follows the patient regardless of the clinical setting (Gheihman et al., 2018).

The following hypothetical scenario exemplifies the above-described continuity in LIC design. A medical student is in the pediatric clinic observing a new patient exam when they receive word that a pregnant patient on their panel has reported to the emergency department and has asked for them. As soon as they can, the medical student arrives in the emergency department to observe and participate in the patient's care as appropriate. The student has a unique opportunity to learn about emergency care as it intersects with obstetrics care in real time. If the patient is found to require an emergency appendectomy, the student has the opportunity to observe a surgical procedure on a pregnant patient. The student will continue to check on their patient throughout her stay in the hospital and will follow up with her at ambulatory clinic appointments. The student

is also developing a deep, meaningful relationship with the patient as opposed to only understanding her based on a single diagnosis code. Not only is this more satisfying for both student and patient, it is also far more representative of the relationships that build over time between physician and patient (Bartlett et al., 2020). Gaufberg et al. (2017) stated that the longitudinal design increases student understanding of the disease process as well as improves the patient's experience of the healthcare system.

The student-faculty relationship has been shown to be stronger and more positive when clinical training occurs in an LIC. Although student evaluations are more frequent in the LIC design, they are provided by fewer practitioners who will follow the student throughout the academic year as opposed to a 4- to 8-week block (Dubé et al., 2019). Trowbridge et al. (2019) found that LIC faculty were significantly more likely to trust their students to perform professional activities (e.g., performing an evaluation) than were block clerkship faculty, even when students showed no differences in knowledge as measured by a standardized exam. According to Dubé et al. (2019), students in LICs perceive that they contribute more to patient care and that they are a help to their faculty in clinic as opposed to in the way when compared to student perceptions of worth in block clerkships.

Service-Learning Curriculum Design Critical Elements

According to Playford et al. (2019), a critical curricular element of high-quality SL projects in medical education is that they are credit-bearing and not extracurricular or volunteer project. Currently, the SL project that was studied is an extracurricular activity that does not provide any credit or merit to the student other than personal learning.

Johnson et al. (2019) and Playford et al. agreed that SL projects are more interesting and attractive to students when students receive course credit. While access to SL opportunities is a mandated curriculum requirement, most medical schools offer them as extracurricular activities due to the already crowded clinical schedules of third year students (LCME, 2017). The curriculum plan in this study will make the SL project required and credit-bearing.

Requiring all students to complete an SL project for credit makes developing appropriate assessments necessary. Assessment in SL is difficult because change occurs in the student at a tacit level in frames of reference (Hand et al., 2018; Laks et al., 2016). Trigos-Carrillo, Fonseca, and Reinoso (2020) stated that assessment of critical reflection is vital to highly effective SL projects, although measurement can be difficult. Bringle, Ruiz, Brown, and Reeb (2016) recommend using the DEAL model for critical reflection in SL projects. DEAL stand for describe, examine, and articulate learning. Students describe their service experiences objectively and then examine the experience through one of three categories (personal growth, civic engagement, academic enhancement). Finally, students articulate their learning by describing what was learned, how it was learned, why it is important, and how the new learning affects the student going forward. The DEAL model is used to make critical reflection assignments both meaningful to the student and assessable (Bringle et al., 2016).

Secondly, the SL project will be designed to foster community integration. The results of this study showed that students benefited from participating in the SL project because it took them out of the clinical setting and provided social connection within the

community. Boles, Benedict, Lui, Wright, and Leung (2020) and George-Paschal, Hawkins, and Graybeal (2019) stated similar results in their studies of SL in medical and higher education, respectively. According to Subica, Grills, Douglas, and Villanueva (2016), principles of community organizing can be used to deepen the positive effects of community integration for students. These principles include empowering members of the community to contribute their expertise and resources to address health disparities (García et al., 2020; Pastor, Terriquez, & Lin, 2018) and careful analysis of local culture and context with emphasis on community strengths (Subica et al., 2016).

A third critical element of the SL curriculum is that it will continue to foster gratification. Analysis of data for this study revealed that gratification in participating in the SL project was present in 7 of 10 participants. May (2017) explained that gratification in SL for engineering students comes from the focus of the project on the community's needs and not the student's education. This focus placed higher value on the service contributions of the student thereby increasing student sense of self-efficacy as well as the value of the experience itself. In their study of anthropology majors participating in SL, Schalge, Pajunen, and Brotherton (2018) found that tangibility and relevance of the project to course objectives made the SL experience pleasurable for the students.

Fourth, experiences from the SL project will continue to inform future practice. There is ample evidence in the literature that SL participation informs future practice and career choice in medical and higher education. Chang, Karin, Davidson, Ripp, and Soriano (2019) found that half of medical students in their study expressed that the SL experience would influence the way they practice medicine. Lawson and Firestone (2018)

found that participation in SL influenced teacher education students toward careers in special education. Both Pritchard and Bowen (2019) and Risisky, Goldson, and DeMezzo (2020) found that students, even years after the SL project, expressed participation continued to influence their dedication to community service and reducing inequities.

Finally, the SL project will be framed by TSL to ensure transformative learning continues to occur. Participants in this study stated that their attitudes and beliefs were changed as a result of the SL project. Carnicelli and Boluk (2017) found that for frames of reference to be impacted, students needed to be challenged intellectually, creatively, innovatively, and politically. Their study of TSL in higher education in the events and tourism, business and enterprise, and applied health sciences academic disciplines showed that SL produces transformation of frames of references including social responsibility, social accountability, and social justice. Similarly, Naudé (2015) found that TSL in psychology majors produced psychologists who reported that the experience prepared them to deal effectively with ill-structured problems.

Conclusion

This review of the literature provided insight into the traditional design of the third year of medical school and the criticisms of this design which include concerns that the design contributes to medical student burnout. Next, an alternative method of clerkship design, the LIC, was described including its contributions to continuity in patient care and in relationship building between student and faculty. The literature review concluded with discussion of the specific characteristics of the SL project of study

that were revealed through data analysis to be important to social responsibility development.

Project Description

Findings from my study resulted in creating a curriculum plan for an SL project for medical students that is embedded in a rural LIC. The purpose of the plan is to provide a clerkship experience for students that addresses continuity in patient contacts and in faculty/preceptors. The project will be a credit-bearing, required SL project for third year medical students that meets a community-identified need. Appendix A provides the curriculum and includes the purpose, level, learners, scope, and sequence. The plan also describes the materials needed, units and lessons including objectives, activities, assessments, and evaluation plan.

Phase 1: Planning of the first LIC

The first step in planning the LIC is to establish the guiding coalition. A guiding coalition should be made up of key people who can take leadership roles as the vision for the LIC is established (Cox, Talley, & Irby, 2016). Cox et al. (2016) stated: “This stage in the process requires creating a compelling vision of the new clerkship, a strong rationale for change, and an urgency to change” (p. 20). Members should include respected individuals from the SOM and senior individuals from the practice/clinical sites in the rural community.

Rural LIC clerkships will be implemented in one community per year for at least the first three years. According to Cox et al. (2016), it is difficult to switch from block clerkship design to LIC; reasons include that equity in learning must be assured and that

SOM faculty and community partners may be resistant to change. Cox et al. (2016) stated that it is important to make a strong case using empirical evidence to support the change from block clerkship to LIC design. Support from SOM faculty and administration as well as support from the partnering entity from the community are the primary resources needed during Phase 1. Support will be garnered by providing education on the criticisms of the block clerkship as well as the encouraging experiences of other SOMs that have implemented LIC in their clinical curriculum.

The LIC course is designed as interleaved, parallel experiences that will include longitudinal clinics with bursts of inpatient medicine experience. Students will be assigned to a patient panel that they will follow throughout the healthcare system for the duration of the course. According to Hudson et al. (2017), this design improves both student and patient satisfaction by providing continuity of care. Students in the LIC will also be assigned to an SL project which will be intentionally designed reciprocally with the community not only to meet community-identified needs but also to meet specific course objectives including:

- Advocate for patients and their families within the healthcare system and the community
- Demonstrate a commitment to life-long learning, including participation in the creation and dissemination of new medical knowledge
- Demonstrate the ability to communicate with patients and other healthcare professionals

- Demonstrate integrity, respect, compassion, selflessness, and a commitment to the greater good encompassed by service to patients and society
- Demonstrate knowledge and in-depth understanding of the sciences of medicine

Existing supports for the redesigned clerkship experience include fully developed syllabi and objectives from the existing block clerkships. Additionally, the rural community in which the first LIC will be implemented already supports block clerkships and formal agreements are in place. The current SL project has a student handbook, which describes the requirements for the proposal as well as student expectations and responsibilities. All these documents will require modifications to fit the needs of the LIC.

The stakeholders for the LIC during phase 1 include medical students, faculty, administrative support, community partner representatives; however, embedding of the SL project adds the SL community organization(s), community members, and an SL project coordinator. Medical student representatives will attend and participate in all meetings to provide their unique perspective on clerkship design and experience. Students will also assist with equitable design between block and LIC. Faculty members will include the LIC Director and Block Clerkship Director; both will be responsible for attending all meetings and ensuring equity between the LIC and block clerkships. The LIC community partner will be responsible for attending meetings and for recruiting preceptors employed by the agency. Preceptors are physicians from the partnering community who volunteer to enter an apprenticing relationship with 1 to 2 medical

students. The LIC community partner will also provide access to appropriate clinical sites such as psychiatric experiences so that there is equity between the clerkships. The LIC community partner will also provide recommendations for appropriate community organizations for the SL projects.

For the SL project, the SL project coordinator will serve as the on-campus point of contact for the LIC community partner, students, and SL community organization. The SL project coordinator will provide administrative support for SL meetings. The SL project coordinator will maintain the student Canvas website that provides remote access to SL project materials. The SL community organization(s) will be chosen during phase 1 and so do not have roles or responsibilities at this time.

Phase 2: Development of LIC course description, objectives, and assessment of clinical learning

Action items for Phase 2 include obtaining LCME and SOM approvals for the curriculum. Because the LIC will be provided to students as an option to the traditional block clerkships, the LCME considers it a parallel curriculum that requires special consideration in order to assure students in either clerkship design receive equitable experiences and outcomes. The SOM curriculum committee and clinical experience steering committee must also approve the LIC as a part of the overall SOM curriculum.

Additionally, common barriers to implementation of the LIC in the community clinical sites must be considered and overcome. These include insufficient clinical space, increased patient visit time, and increased number and frequency of preceptor evaluation of student (Cox et al., 2016). Other SOMs have overcome space barriers by providing

students access to lockers, a work area, and group rooms in a location near the clinical site (Cox et al., 2016). Increased patient visit time is a special consideration because this can impact clinic productivity and income. Some SOMs have countered this by providing evidence of other tangible benefits such as improved patient visit time as the student becomes more skilled as well as intangible benefits such as “reshaping the clinical workforce to meet public needs and expectations more successfully” (Cox et al., 2016, p. 23).

Student evaluation by the preceptor, especially in rural, off-campus clinical sites is an existing problem for this SOM. The problem stems from university security policies requiring frequent password changes and dual identity verification measures (i.e., password and text message code). For block clerkships, formative evaluations are required mid-block and summative are required at the end of the block. Preceptors are required to login to the campus infrastructure to access evaluations. Preceptors do not teach every block and so logging in becomes quite frustrating if in the interim they have not kept their password updated. One method to overcome this barrier is to use a software package designed for use in medical clerkships that allows off-site access. Efficient and effective methods of clinic and preceptor time management are vital considerations at this point in planning and implementation.

As in phase 1, during phase 2 students will be asked to participate in planning meetings to provide their unique insight. Similarly, the faculty representatives from the university and the LIC community partner site will be invited to attend and assist with planning. LIC community partners will continue to include representatives from the site

in phase 1, however, representatives from other clinics that can provide experiences (e.g., neurology, specific surgical specialties) that the original site cannot will join meetings as they partner with the project.

During phase 2, the work on the SL project will also begin and will include separate meetings for its design. This process will also include student representatives but the number of faculty will be reduced to the LIC medical director who is the sole faculty member responsible for learning in the SL project. The LIC medical director and SL project coordinator will work closely to prepare an outline for the project including specific course objectives that will be met by participating in the SL project. Next, the SL community organizations will identify a SL site supervisor from within their organization who will work with the LIC medical director and SL project coordinator to identify relevant experiences within the organization that will fulfill the needs of the LIC curriculum. The needs of community members as well as resources within the community will be shared by the community organization. The group will identify activities that will develop the skills and attitudes necessary for appropriate professional identity development.

Project Evaluation Plan

Summative evaluation will be used to evaluate the redesigned curriculum for the SL project. At the end of the LIC, the SL site supervisor will be asked to complete an evaluation of the student's performance in the SL project. The students will be asked to evaluate the community organization, the SL experience, their concerns and criticisms,

and the benefits they perceive in themselves and to the community members they served. Finally, community-member participants in the SL project will be asked to evaluate their experiences working with students each week they participate in the SL project and an overall evaluation at the end of the project. Appendix D contains the Student Evaluation of the Service-Learning Project survey.

The goals for evaluation are to provide evidence that the SL project improved outcomes for both the student (in learning) and the community (improvement in community-identified need). The key stakeholders include representatives from the community and the SOM. Community representatives include participants in the SL project, other members of the community who are impacted by the same problem addressed in the SL project as well as the supervisor and other relevant staff of the community organization(s). Additionally, the administration of the clinical sites and the community-based faculty would be provided the results to both show the impact on their community as well as the positive effects their students reported. The stakeholders from the SOM would include the Office of Service-Learning, the administration of the SOM including the Clerkship Director and Coordinator as well as present and future students of the SL project.

Project Implications

Social Change Implications

This SL project could positively impact social change regarding access to healthcare in rural and underserved areas by increasing medical student's frames of reference toward attitudes of equity and social responsibility. Physicians who were

trained to be socially responsible in their practice may be intrinsically motivated to alleviate healthcare disparities in their communities and to base their solutions to inequities on the specific, unique needs and resources of the community (Chang et al., 2019). Chang et al. stated that socially responsible physicians are more likely to choose to work in medically underserved communities which will continue to improve healthcare access and quality of care in those areas.

Importance of the Project to Local Stakeholders

According to García et al. (2020), basing the design of the SL curriculum on principles of community organizing will act to empower the community. As community needs are met, citizens will begin to experience improved healthcare outcomes. Additionally, the community may begin to feel competent to address even more negatively impacting community needs. Successful projects may be sustained by the community and continue improving conditions long after the student graduates. Allowing students to integrate into their community will also encourage those students to return and practice socially responsible medicine locally.

The Larger Context

According to Han et al. (2019), occupational burnout is marked by three characteristics: emotional exhaustion, feelings of cynicism and detachment from work, and a low sense of accomplishment. Furthermore, they stated that 54% of physicians reported in a 2014 survey at least 1 symptom of burnout. Burnout results in depression and suicidality in physicians at a rate twice as high as the general population. Burnout also leads to practitioners leaving medical practice altogether, which contributes to the

physician shortage (Hoffman, 2019). Even more alarming are statistics showing medical students graduate medical school already feeling burned out, depressed, and suicidal (Hansell et al., 2019).

A significant outcome of the analysis of data for this study was that participants reported gratification in participating in the project. This is notable considering the tendency of medical students in the clerkship year to experience burnout as the year progresses (Hansell et al., 2019). Participant 05 in this study expressed,

I feel like sometimes when we go through med school, students feel completely disconnected from the communities that they want to serve. That disconnect can eventually lead to burnout or just feeling like you are not involved in the work you originally wanted to do.

It is possible that requiring participation in the SL project will allow all of the medical students at this SOM to experience gratification in their work that results in emotional resiliency, connectedness to their work, and high sense of accomplishment.

Section 4: Reflections and Conclusions

Introduction

The problem addressed in this study was the need to understand medical student perceptions about how the SOM's voluntary SL project influenced their development of social responsibility. Using Kiely's (2005) model of TSL to frame questions, data were gathered from participant interviews. Analysis of data revealed that TSL had occurred and that participants believed SL would be beneficial to all students of the SOM for several reasons including the projects impact on community integration, gratification, educating others, and future practice.

Project Strengths and Limitations

The strengths of this project included my close adherence to the outlined data collection steps during the data collection phase. Additionally, I carefully documented my processes in my research journal. I also used Kiely's (2005) TSL model to show that transformative learning had occurred in 7 of the 10 participants. Limitations includes the small sample size and that there was only one SOM and one SL project considered in the analysis. During analysis of the data, I discovered other limitations to the structure of my project. I realized that I had not considered the longitudinal effects of SL when developing the problem, purpose, and interview questions. As a result, I did not collect demographic information, such as their year of graduation, that would have shown the length of time the effects of the SL project continued. Another limitation was not including questions about the actual projects developed by the participants; although, many did talk about their projects in answering other questions.

Recommendations for Alternative Approaches

As I studied the relevant literature and analyzed the data for this study, I realized the disparity in access to healthcare for not only rural communities but also minority communities including racial, gender-based, and sexual identity-based communities. The immediate need for physicians who have been trained to be patient-centered has never been greater (Greer et al., 2018). The Flexner report not only focused medical education upon science, it removed the humanities from the curriculum which has resulted in doctors who were trained to be emotionless and to treat every patient the same (Shelton et al., 2017). Medical educators want to teach patient-centered care; however, they find that there is no room to include the humanities in the curriculum without removing some of the science. An alternative approach would be to consider if SL is necessary in medical education. This is relevant because of the huge time-commitment required of all participants in SL, community, faculty, and students (Playford et al., 2019). A comparative study of medical students who have and have not participated in a clerkship year SL project could be conducted to determine if the same level of transformative learning is occurring in all students.

Scholarship, Project Development and Evaluation, and Leadership and Change

I struggled greatly to develop and write my first literature review and assumed I would have the same issue as I attempted to develop the second; however, I was incorrect in this assumption. The first literature review was an adventure in discovery because I only knew that my topic was SL in medical education which is a broad and deep topic. There was so much information, I had no idea where to limit myself. The moment of

clarity came when I began moving all my highlights and scribbled notes from my paper copies of articles into an Excel matrix. Suddenly, I had a means to find connections between the articles. I read and reread my notes and as I noticed phrases similar in more than one, I would use Excel's search feature and realize that several articles covered the same issue. From this, I was able to devise an outline for my first literature review. It was exhilarating!

When I began my second literature review, I still assumed it would take months to finish. I found that compiling the appropriate articles was far easier because my analysis of data had limited the review topics for me. I had an outline ready for the process and did not find myself researching lines of thought that were not relevant. Once I had gathered several articles, I began reading, highlighting, and making notes. It took me a week to realize that I needed another Excel matrix. Again, I had the same exhilarating experience of discovering connections in the literature. I completed the second literature review in a fraction of the time it took me to complete the first because I had also learned better writing and organizing skills from the first literature review process.

I had great difficulty finding a topic and problem for my doctoral project. It took me 7 years and three failed projects before I finally found what I believed I could complete. What were the differences? First, I believed in this project and that it was worthwhile. Second, I had support from my supervisor at the institution where I worked which was not the case at the previous two institutions. Third, I tried to find a problem to study while operating out of a silo; I did not try to get help in this process at the institutions that employed me.. Although I corrected the first two missteps in my fourth

attempt at a project, I did not take full advantage of the knowledge and experience resources provided to me at the SOM where I currently work and which I studied. In the future, I plan to avoid, whenever possible, developing a project in isolation; instead, I will use a team-based method of project development.

When I completed the proposal, data collection seemed intimidating, and analysis seemed outside my skillset. I began following my own steps that I had outlined in the proposal and was still shocked when emails containing “I consent” began to arrive. Every time I logged on to Zoom, I was surprised when the interviewee appeared and answered my questions. Next was the exhilaration of finding commonalities in the interview data that could be coded and developed into themes. I was grateful that I had used an Excel matrix for the literature review and used a similar matrix for data analysis.

Despite my 7-year search for a project, I discovered that I love conducting qualitative research. I enjoyed reading and learning about all of the topics included in this paper and many, many others that were not included. Even though I am not a medical educator, there are medical educators who respect my expertise in medical education and SL. This has opened many more opportunities for collaborative research in my employment. I look forward to being a part of the positive changes that are coming to medical education in this SOM.

Reflection on Importance of the Work

One of the most important things I learned was the value community input has to an SL project. Although the medical students who participate in the SL project consider community-identified needs, the project curriculum was not designed reciprocally with

the community. Reciprocity in SL is defined as equity in the relationship and information sharing between the community and the university. Reciprocity, according to Strasser et al. (2015), will empower community members to act toward their own highest good. The benefits to the university include improved reputation and increased funding.

This work is important due to criticisms that physicians are impersonal and disconnected from their patients and the communities that they serve (Borah, 2018). Intentionally developing curriculum that can affect learning at a transformative level is vital to improving physician professional development and thereby patient outcomes (Brooks et al., 2018). Socially responsible physicians who have learned skills to recognize and alleviate disparities in healthcare are required to overcome the inequities that currently exist in the healthcare system. This work shows that SL can be used to foster transformative learning in medical education.

Implications, Applications, and Directions for Future Research

This work adds to the literature that confirms that SL is an effective means to foster transformative change at the individual student level. It is a worthwhile educational method that should be included in the medical curriculum despite the immense time-commitment required to develop and implement (LCME, 2017). This work revealed that individual students believed that participation in SL improved their social responsibility, their ability to educate others, and the way they practice medicine now. Social responsibility includes concepts of desiring to alleviate racial and other disparities in the community and healthcare system; physicians who are more socially responsible have the skills and knowledge to improve both patient and community outcomes related to SDOH.

This work adds to the literature regarding the use of Kiely's (2005) model of TSL suggesting that the model is appropriate to measure SL outcomes at the tacit frames of reference level. The participants in this study expressed that the project specifically impacted the way they practice medicine and view their responsibility within their community today. This work also confirmed that Kiely's definition of processing is correct to include problem-solving as this was the method of processing revealed in all seven participants who experienced it.

One limitation of this study was that I did not include demographic information in my analysis or research questions. Although the study only included 10 participants, they represented a decade or more of graduating classes. I would also change the design from basic qualitative to case study by including student artifacts such as their poster presentations and course evaluations. Another approach would be to compare SL participants to non-participants.

Conclusion

Analysis of data revealed that students reported increased social responsibility after participating in an SL project. Additionally, they expressed an intent to commit to serving their communities in their future practice and expressed anecdotes that proved a current and continued commitment to service. Students related gratification and joy in serving community members and felt a part of the community at the end of the experience. SL does appear to have influenced these students' social responsibility, future practice of medicine, community integration, and gratification. Consideration of student

perspectives and experiences is a worthwhile endeavor in improving student outcomes from an SL project.

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Appendix A: Longitudinal Integrated Clerkship Service-Learning Curriculum Plan

Purpose

The purpose of the LIC is to create an alternative clerkship design that will allow students to receive benefits from the continuity the design provides inpatient care and in preceptor relationship. Additionally, the LIC will include a longitudinal, required SL project that enhances development of professional identity, that meets course objectives, and that meets community-identified needs.

Level

The curriculum will be delivered during M3 or clinical year of medical school.

Learners

Medical students who have completed the non-clinical curriculum and are entering their 3rd year of medical school.

Scope

In addition to clinic rotations and assigned patient panel, the student will be assigned to work with a community organization to develop, implement, and evaluate a service learning project. The student is expected to spend 4 hours per week working on the project throughout the 9-month LIC except as noted in the Sequence below.

Sequence of the SL Project

The LIC will extend over a period of 36 weeks; the SL project will begin in week 3 and conclude in week 30 spanning 28 weeks.

Materials

- A catalog of community-identified projects and previous student projects will be compiled to aid in student selection/creation of an appropriate project.
- Online training in SL as appropriate for the various audiences (e.g., students, faculty, community)

Sequence of Service-Learning Events

Week(s)	Service-Learning Events
1	LIC Orientation - no SL
2	LIC Orientation - no SL
3	SL Community Organization Orientation (assigned SL Site Supervisor) and complete Lesson 1: What is service learning in medical education?
4	Student reviews community assessment and organization historical data. Meet with SL Site Supervisor as needed and complete Lesson 2: Role and Responsibilities
5 to 8	Meetings with community members and relevant community organization staff to establish appropriate project for the student
9 to 10	Project implementation - project promotion to recruit community participants
11 to 18	The project is implemented and contact with community participants occurs. Concurrently, data collection for evaluation is collected. Week 18 concludes the project.
19 to 21	LIC formative exams - No SL events
22 to 24	Project evaluation. Work with Coordinator (on-campus contact) and SL Site Supervisor to receive feedback on project evaluation.
25 to 30	Present project outcomes to stakeholders. At least two presentations, one to community and one to SOM. Optional presentations to national conferences. Optional publishing of results. SL activities conclude in week 30.
31 to 36	Dedicated to preparing and taking LIC end of course exams

Specific SL Lessons for Students

Lesson 1: What is service learning in medical education?

Assessment of Learning: Reflection Exercise using DEAL model

Reflection Exercise Instructions: Using the DEAL framework, describe your expectations of the SL experience in detail. Next, predict how individual differences (e.g., beliefs, values, socioeconomic status) between you and the project participants may affect project outcomes (E=Examine from personal perspective). Then construct possible solutions to any negative consequences that may result from these differences. Reflection should be 1 to 1 ½ pages long.

Lesson Objectives:

At the end of the lesson students will be able to:

- Define and explain SL in medical education and the benefits it can have for students
- Explain the benefits of reciprocity to the community and to the university
- Identify the requirements of the SL project and grading
- Explain the DEAL reflection framework

Learning Plan:

1. Define SL in medical education
2. Benefits of SL participation to medical students
3. Benefits to community when developed reciprocally
 - a. Define reciprocity
4. Past project examples
5. Designing, developing, implementing, and evaluating your SL project
6. How to complete reflection exercises using DEAL
7. Presentations
 - a. University IRB submission required if presenting at a national conference or publishing
 - b. Community Organization may require their own IRB submission
 - c. Poster requirements
 - d. Two required presentations
 - i. SOM
 - ii. Community Organization
8. Grading
 - a. Reflections, posters, and presentations – pass/fail
 - b. SL Site Supervisor evaluation of student

Lesson 2: Roles and Responsibilities

Assessment of Learning: Set up a meeting with your SL Site Supervisor and the Coordinator to discuss Supervisor's expectations of student and to get any questions you may have answered.

Objectives: At the end of this lesson students will be able to:

- Explain their role in the SL project planning, development, implementation, and evaluation
- Identify the Coordinator and explain ways she can assist with the SL project
- Identify the SL Site Supervisor and explain their supervisory role to evaluate student performance in the SL project

- Explain the role of the community organization in development of the SL project
- Explain and appreciate the role of the community members in development of the SL project

Learning Plan:

1. Role of the student
 - a. Learner
 - b. Educator of specialized medical knowledge
 - c. Co-lead in development and implementation of the project
2. Role of the Coordinator
 - a. Student, SL Site Supervisor and community organization point-of-contact on-campus
 - b. Provide assistance with University IRB (if required) and grant applications (e.g., travel grants if presenting at a national conference)
 - c. Project ideas and development
 - d. Evaluation of project ideas and expectations
 - e. Requirements of the SL project
3. Role of the SL Site Supervisor
 - a. Student's point-of-contact at the community organization site
 - b. Responsible for evaluating student performance during the SL project
 - c. Co-lead with the student in developing, implementing, and evaluating the project
4. Role of the Community Organization
 - a. Provide access to community assessments
 - b. Provide expertise on community needs
 - c. Provide insight into existing community projects
 - d. Provide guidance in developing SL project
5. Role of community members
 - a. To development of the project
 - i. Community needs
 - ii. Project ideas
 - b. As participants in the project
 - i. Consent to participate in project
 - ii. Consent to participate in evaluation of the project

Evaluation plan

Several evaluations will be necessary to evaluate this project because it will need to be evaluated from different perspectives: student, SL Site Supervisor, community organization, and project participants. The table below shows the surveys each group will need to complete. Project participant evaluation of the SL project will be developed by the student and community organization and will be analyzed by the student. The SL Site Supervisor's evaluation of student performance and completion of reflection exercises and poster presentations will be the basis of the student's SL project grade. The remaining surveys will be used by the SOM and community organization in SL project continuous improvement efforts. An example of the Student Evaluation of Service Learning Project is provided in Appendix D.

Overview of Evaluations

Evaluation Surveys Completed By	Surveys to Complete
Student	Coordinator, SL Site Supervisor, Community Organization, SL Project
SL Site Supervisor	Student
Community Organization	SL Project (emphasis on meeting a community-identified need)
Project Participants	SL Project (including weekly session evaluations and an end of project summative evaluation)

Appendix B: Email Invitation

Greetings, I am Sherry McDonald, a doctoral student at Walden University. I am conducting a study with medical students who have participated in a service learning project while they were in medical school. While you were enrolled in a rural clerkship, you completed a community integration project as part of a service learning program at your medical school. The purpose of this study is to explore, from the students' perspective, their descriptions of service learning experiences that influenced their development of social responsibility. The findings may improve medical student outcomes from participating in service learning projects.

If you choose to participate in the study, you will be asked to attend one 45- to 60-minute Zoom interview. The interview will be recorded and your decision to participate indicates that you give permission for this. As a small token of appreciation, you will be given a \$10.00 Starbucks gift card. The first 15 qualified volunteers that respond will be invited to participate in the study.

If you are willing to participate in the interview, please read the attached Consent Form and save it in your records. Any questions about the consent form may be sent to me by responding to this email. When you are ready to provide your consent, please respond to this email with "I consent". We will then work together to schedule a Zoom interview at a time that is convenient for you. I greatly appreciate your willingness to consider this request and am eager to hear from you.

Sincerely,

Sherry McDonald

Appendix C: Interview Protocol

Time of Interview:

Date:

Place:

Participant Unique Identifier:

Thank you for taking the time to meet with me today. The purpose of this study is to explore, from the students' perspective, their descriptions of SL experiences that influenced their development of social responsibility. You have been invited to participate in this study because you chose to participate in a voluntary, non-credit-bearing service learning project while you were in medical school.

As you are aware, I am recording our conversation, however I want you to feel free to ask questions or stop the interview at any point. If at any point you feel uncomfortable answering a question or wish to conclude the interview, there is no penalty.

I want to remind you that our conversation is confidential and that your identity will be protected.

Do you have any questions for me at this time?

1. What comes to your mind when I say, "the social responsibility of a physician"?
 - a. *If needed:* Can you tell me what [quote participant] means to you?
2. Why did you choose to participate in the voluntary service learning project?

- a. *If student has mentioned their hometown (or area in which they grew up) as a motivating factor, ask:* What differences did you notice between your hometown and the location of your service learning project?
 - b. *If student has mentioned values, ask:* Why is [value] important to you?
3. In one word, describe what you expected from this experience. Now, describe the images that this word brings to your mind.
4. What social determinants of health did you find in the rural location of your service learning project?
 - a. *Use the following prompts as/if needed:* socioeconomic status, education level, racism, inadequate and/or unsafe housing, tobacco/alcohol/opioid and other substance abuse, unequal distribution of money, power, and resources
 - b. If you could have only alleviated one for this community, which one would it have been?
5. When you think about that community then, what emotions were you feeling? As we discuss it now, what are you feeling?
6. Can you describe an encounter in which a community member was negatively affected by a social determinant of health?
 - a. What did you learn about the community from this?
 - b. What did you learn about yourself from this?

7. Earlier we discussed the social responsibility of physicians. How did your experience in this community influence your development of social responsibility?
 - a. *If needed to elicit more information:* Tell me more about [topic student mentioned]. What did you mean by [vague or confusing topic]?
8. When you think about that community today, what concerns do you continue to have for them?
9. What was, in your opinion, the most valuable outcome of participating in the service learning project for you personally?
10. What was, in your opinion, the most valuable outcome of your participation in the service learning project for the community?
11. Is there anything else you would like to share with me about social responsibility and service learning?

Thank you so much for taking the time to talk with me today. I want to reassure you that all your personal responses will be kept confidential, a unique identifier will be used to identify you, and no information that could reveal your identity will be used in this study.

In approximately one week, I will email you a copy of the transcript of your interview. You will be asked to review the transcript for accuracy and will be allowed to make changes or deletions to your interview. Further instructions will be included in the email.

Appendix D: Student Evaluation of Service-Learning Project

Please answer the following questions about the Service-Learning Project.

1. [text] Student Name:
2. [drop-down list] Rural Track Location:
3. [drop-down list] Community Partner Organization(s):
4. [text] Please briefly describe your project:
5. [5-Item Likert: Strongly disagree, Disagree, Somewhat agree, Agree, Strongly Agree] Please rate how much you agree or disagree with the following statements:
 - a. The Service-Learning Project helped me identify risk factors and health care disparity issues within the community through first-hand experience.
 - b. I now have the skills to conduct a similar project in my future medical practice to find best practices to address SDOH and healthcare disparities.
 - c. The Service-Learning Project helped me develop effective communication, cultural competency, and research and evaluation skills.
 - d. The Service-Learning Project helped me to write reflectively about my experience.
 - e. The learning materials were valuable and pertinent to the project.
 - f. I received adequate project supervision and training.
 - g. The project helped me feel more integrated into the community.
 - h. As a result of this experience, I am more likely to participate in future community service activities.
6. [open-ended, text] Describe an encounter with community members that you found startling or eye-opening. Do not include protected health information (PHI).

Thank you for participating in this survey.