

Spirituality and Religion as a Social Determinant and Social Mediator of Health

By

Christopher Lee Gross

Thesis

Submitted to the Faculty of the
Graduate School of Vanderbilt University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

in

Medicine, Health and Society

August, 2015

Nashville, Tennessee

Approved: Jonathan Metzl, M.D., Ph.D.

Approved: JuLeigh Petty, Ph.D.

To my God and my family, for getting me here

and

To my friends, my mentors and my favorite coffee shops, for keeping me afloat.

“You don’t have a soul. You are a soul. You have a body.”

C.S. Lewis

Gloria Patri.

TABLE OF CONTENTS

	Page
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
ABSTRACT	vii
LITERATURE REVIEW	
Introduction	1
Spirituality and Religion as Social Mediator of Health	3
Spirituality and Religion as Social Determinant of Health	5
Training Physicians	8
PROGRAM EVALUATION	
Introduction	11
Methods	12
Data Collection	15
Data Analysis	18
Results	19
Discussion	20
Recommendations and Conclusion	24
APPENDIX	
Organization Background	28
References	33

LIST OF TABLES

Table	Page
1. Table 1.1. Sample Demographics	14
2. Table 2.1. Program Results; Spiritual History	18
3. Table 2.2. Program Results; Prayer	19
4. Table 3.1. Prayer by Faith Affiliation.....	20
5. Table 3.2. Spiritual History by Faith Affiliation.....	20
5. Table 4.1. Religion Influences Practice of Medicine by SFHC Request (YES).....	22
5. Table 4.2. Religion Influences Practice of Medicine by SFHC Request (NO)	22

LIST OF FIGURES

Figure	Page
1. 1.1. Description of Variables	17
2. 2.1. Primary Care Preceptorship Program Chronology	31

ABSTRACT

In recent years, the Association of American Medical Colleges (AAMC) has placed significant attention on social determinants of health (SDH) as making significant contributions to patient health and outcomes (AAMC, 2012). Although the medical community has long understood the influence of a patient's lived environment on health, medical education has only recently incorporated SDHs into its curriculums, generally defining them as the social, political and economic influence on race, ethnicity, poverty level, socioeconomic status and education level. I contend that this definition is incomplete. Spirituality and religion (SR) informs behaviors that have health implications to at least an equal degree, and therefore should be included as a social determinant of health, and given equal weight to the aforementioned (Idler, 2014).

Currently, most relevant literature focuses on the ethicality of SR and medicine or the specific health benefits associated with various religions. Future research should go beyond these questions and address SR as a SDH because SR can inform patient health beliefs, practices and behaviors (Idler, 2014). Not only does SR act as a social determinant of health, it acts as a social mediator of health (SMH). Although certain religious practices promote common behaviors among groups that have health specific implications (i.e. following a SR that proscribes alcohol influences health behaviors in regard to alcohol consumption), individuals in the same group might understand or respond differently to illness (health beliefs). In this way, SR can act as social mediator of health during an illness experience.

Given its ubiquity, all physicians should be educated to better understand a patient's SR, and its relationship to medical practice and patient health. This means that providers should be open to the possibility that a patient's SR might be influencing a patient's health beliefs and

behaviors as it relates to the lived experience, day-to-day life practices/routines, as well as their response to suggested healthcare treatment. If a clinician desires to include SR care, as a part of pastoral care, into her own practice of medicine, she should have the opportunity and resources to be well-educated and well-trained to do so. Since SR in medical education is limited, I will present a program evaluation of a community-based health clinic that incorporates SR for healthcare trainees.

"IN patients' interactions with clinicians and medical practitioners, they do not cease to be human beings with deep and wide-ranging needs. Indeed, it is in times of illness, crisis and transition that life, death and other spiritual matters may loom all the more strongly in a patient's consciousness. Recognising patients' spiritual concerns could be seen as an essential part of the patient-centered medicine that is increasingly thought to be crucial for high-quality patient care" (D'Souza, 2007, p. 57).

LITERATURE REVIEW

Introduction

The congruence between biomedical and lay expectation of the medical encounter has decreased in the past century. Kleinman et al. (1998) suggests that one possible reason for this discordance is due to the biomedical lens itself: physicians treat *diseases* (abnormalities in biophysical processes) while patients suffer from *illnesses* (the human experience of sickness). And although the biomedical paradigm correctly expresses disease in a scientifically objective manner, illness is also shaped culturally, representing varying personal and interpersonal responses to disease. Illness, therefore, is a product of cultural construction, making an illness experience primarily based on individual explanatory models of sickness that vary cross-culturally. Incongruence between patient and provider explanatory models of illness may cause significant misunderstandings that lead to frustration and mismanagement of care (Kleinman et al., 1978). As a physician, eliciting a patient's explanatory model is essential to great care. This act of teasing out gives the physician knowledge about:

"The beliefs the patient holds about his illness, the personal and social meaning he attaches to his disorder, his expectations about what will happen to him and what the doctor will do, and his own therapeutic goals. Comparison of the patient's model with the doctor's model enables the clinician to identify major discrepancies that may cause problems for clinical management" (Kleinman et al., 1978, p. 256).

Clearly, culture matters in the clinic. Obvious and nuanced cultural factors become vital to effective "diagnosis, treatment, and care... [because] they shape health related beliefs, behaviors,

and values... [which are] inseparable from economic, political, religious, psychological and biological conditions" (Kleinman & Benson, 2006, p. 1673). What Kleinman addresses in this last statement is the simultaneous independence and interdependency of certain social and cultural factors, like religion. For example, an individual's health beliefs about contraception can sometimes be inseparable from their religious beliefs instilled by cultural and/or social upbringing. The way in which an individual is socialized to understand his/her health, wellness and illness influences health behaviors and beliefs. This determines in part external determinants like lifestyle decisions (i.e. diet, exercise, alcohol consumption) and when and how a person will access health care, as well as internal mediators such as his/her responses to illness (Idler, 2014). Understanding that SR is a subcomponent of an individual's social and cultural background is necessary for providing comprehensive and effective cross-cultural care. This consideration becomes increasingly important, as the diversity in the United States continues to increase. It is projected that in the next 35 years, over 50% of the U.S. population will be multi-ethnic and/or a part of a previously non-dominant ethnic group (Juckett, 2005). Knowing that as the social and cultural milieu (which includes patient SR) is becoming more diverse, it is necessary for future physicians to ascertain some level of cultural proficiency and competency, particularly in the area of SR.

To do so, medical professionals first need to better understand concepts of SR before they can meaningfully understand them in a health or patient-care context (Hall et al., 2004). This begins with a distinction between religion and spirituality. Most simply defined, spirituality is an individual's habitual behavior in relation to the question of transcendence, while religion is a set of beliefs and practices that a group of people share in relation to the transcendent (Sulmasy, 2009). One aspect of spirituality that bears noting is its variability: the individual conception and

relation to transcendence is personally defined. A person can define their religiosity and/or spirituality in a variety of ways: religious and spiritual, religious but not spiritual, spiritual but not religious, or neither religious nor spiritual (Koenig et al., 2004). Likewise, the degree to which either is felt varies enormously. For example, an individual may reject all attachment to a religious community but still might observe religious traditions and practices as a part of their culture (i.e. not eating pork). In practice, especially during illness, each category of identification might bring with it a special set of needs for a medical professional to address.

Spirituality and Religion as a Social Mediator of Health

There are a variety of practical reasons a physician should gain SR fluency: one is its influence on patient treatment. For example, certain faith traditions have particular restrictions for care, particularly at the end of life. Commonly cited are Jehovah's Witnesses that might refuse blood transfusions, while some Hindus believe autopsies will disturb the soul of their recently deceased loved one (Hall et al., 2004). Cases such as these demonstrate how a patient's worldview directly mediates their care and treatment options. It is also reasonable to infer that these scenarios bring forth a cascade of ethical and clinical decisions for a provider. Furthermore, death often provokes specific spiritual and religious needs for a patient or family members. For example, Buddhist patients may want an opportunity to chant sometime before passing, or a Muslim patient may want to die facing Mecca.

Another way in which SR acts as a social mediator of health is how it influences patient understanding of disease etiology. Individual SR plays a part in defining boundaries for what is appropriate for an individual to believe in the context of their health. As a brief example, some orthodox Muslims (as well as other religions) understand mental illness as being caused by a spirit called "Jinn" which is able to possess the human body. These doctrinal

beliefs state that Jinn are able to attack those who are weak willed, greedy, or struggling to find their identity. Once Jinn has inhabited a person, then that individual will exhibit symptoms that align with those of various mental illnesses (i.e. depression, anxiety, etc.). To protect oneself from Jinn, Islamic obligations -- like fasting, prayer, and doing right -- must be followed (Dein, 2013). This case demonstrates how SR have specific implications for patient care and outcome. If a patient is Muslim and they believe in Jinn, boundaries are created for how they understand illness and what they are “allowed” to accept as etiology and outcome. For example, if a patient believes his/her depression is a result of a spirit, and not a result of malfunctioning neurons, they are less likely to accept a physician’s advice about medication or even accept that the illness has a biological origin.

Although SR can play a significant role in directing and comforting patients during times of illness toward positive meaning, there are instances when religious coping is not positive (Hall et al., 2004). Spiritual or religious issues might also directly impact and complicate care through negative religious coping (i.e. “I will refuse treatment for my ovarian cancer because this is punishment from God for my abortion years ago”). In such cases, an experienced physician could recognize the complex emotional and spiritual processes motivating the behavior and then be able to refer the patient to a clergy or faith-community family member who could provide assistance in the form of therapeutic counseling (Sulmasy, 2009). However, not all negative religious coping is simple to identify. Yet, as a healthcare provider, recognizing subtle or complicated signs of negative religious coping is vital to patient care. A more complicated example is if a patient (or family member) is close to death but refuses treatment because of their belief in miracles. This refusal can either be "an expression of deep religious faith" or simply psychological denial that requires religious and/or therapeutic counseling (Sulmasy, 2009,

p.1638). Being able to judge between positive and negative religious coping states can help physicians navigate through these difficult situations.

Caring for the religious needs of patients is complicated. It might even be more complex to address the needs of patients who are spiritual but not religious, or neither, because of the idiosyncratic nature of their value system. This means that nonreligious persons still wrestle with the meaning of illness, making it just as important to provide support during this time (Sulmasy, 2009). Therefore, given the substantial impact SR beliefs have on the experience of illness, it is necessary for medical professionals to assess its magnitude and impact (LaRocca-Pitts, 2009). In fact, much of the reviewed literature supported the notion that as a health care provider, it is unethical to omit SR care from clinical patients if they desire (Polzer, 2012). Establishing trust and “empower[ing] patients to express their own values,”—including SR issues -- is vital for good health care (Polzer, 2012, p.2103). This narrative style of medicine is exceedingly important for clinicians in America as the cultural and religious diversity increases (Juckett, 2005).

Spirituality and Religion as a Social Determinant of Health

The World Health Organization defines social determinants of health (SDH) as “the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life... [which include]... include economic policies and systems, development agendas, social norms, social policies and political systems” (WHO, 2015). Although this definition captures many of the factors that influence individual health, it can be credibly argued that it is still incomplete. In her book “Religion as a Social Determinant of Health,” Ellen Idler (2014) describes how individual religious behavior, faith communities and religious institutions can be principal instigators of health interventions as well as promoters

and mediators of individual health practices and beliefs. For some, SR is a lived reality that is expressed through habitual individual practice and embodied by social institutions (Idler, 2014). Unfortunately, SR is often consigned to being an abstract concept with little clinical relevance, without tangible consequences on population or public health. In fact, religion is a vital aspect of human experience and should be included as a SDH (Idler, 2014).

Social determinants of health, particularly SR, can “influence every moment of the life course, beginning even before birth” (Idler, 2014, p. 9289-9292). Idler continues, “religion is present in most societies both downstream and upstream and should be considered alongside its social, political, and economic counterparts if we are to have a complete framework of the social determinants of health” (p. 9289-9292). SR practices (daily, weekly, annually) have a practical impact on individual health status, behaviors and beliefs. In other words, specific human behaviors (like religious practices) have specific health consequences (Fuchs, 1974). The daily practices of individuals by many world religions have rituals/disciplines that intersect at the point of many aspects of daily life including exercise, clothing and diet (Idler, 2014). For example, Seventh-Day Adventists adhere to fairly rigid vegetarian dietary practices, which are associated with lower cardiovascular disease rates. Latter-Day Saints strictly prohibit alcohol and tobacco use. Hindus frequently practice meditation, which is correlated with improvements in a variety of health conditions such as depression, anxiety, chronic pain and heart disease (Idler, 2014 & Grossman, 2004).

At the community level, faith institutions like churches, synagogues, temples and mosques can inform populations through spoken values by religious leaders or unspoken mores, both of which are passed intergenerationally through shared values and traditions (Gaydos & Paige, 2014). These institutions play a significant part in shaping how a community understands

or responds to certain issues, including matters of health. For example, mental and reproductive health, for ill or for good, are often heavily influenced by religious narratives and institutions. It is also at this point where the proximity of religion to social, cultural and economic factors become muddled and are difficult to untangle (Idler, 2014). For example, African-American women in the Southeastern United States have higher infant mortality rates and unintended pregnancies. In this region, many African-American women belong to black Protestant churches that prohibit the use of contraception, family planning and/or abortion practices (Idler 2014). This example demonstrates that religion may make a significant contribution towards an individual's health choices and beliefs among other factors (Idler, 2014). In other words, religion is acting as a SDH in this case.

Another example of how an individual's SR can influence both individual and population health is found in Victor Fuchs book, "A Tale of Two States." He compares all-cause, all-age mortality rates between Nevada and Utah in 1974 (Idler, 2014). Despite having relatively homogenous population with similar size and physical climate, mortality rates among Nevadan women were 69% higher than Utahans. Additionally, there was a 45% increased risk for infant mortality when compared to Utah. Further, smoking- and alcohol-related deaths were much higher in Nevada as well. Fuchs (1974) contends that Utah generally had healthier lifestyles because of daily life habits that promoted healthy living. In the case of many Utahans, these daily habits were informed, in part, by their SR. Mormonism, or the Church of Latter-Day Saints (LDS) prohibits smoking and alcohol consumption, while encouraging social practices like marriage and childbearing (Idler, 2014). These practices often resulted in Utahans residing in Utah longer than Nevadans staying in Nevada. Fuchs posits that the LDS lifestyle implicates a less transient, more "stable, quiet" life than their Nevadan counterparts (Idler, 2014). In a follow-

up study forty years later, these figures remained consistent. Presently, Utah ranks as the second healthiest state in the country while Nevada is close to the bottom. These statements are not promoting an LDS lifestyle as being superior to any other religious or non-religious group; rather, this standpoint contends that religious practices significantly intersect at the point of daily life, which in turn profoundly influence health behaviors and outcomes (Idler, 2014). For many, SR is an essential element of the human experience. Spirituality is both a social determinant of health (lifestyle choices, health behaviors) and a social mediator of health (health beliefs). When understood in this manner, it becomes much easier to accept SR as a legitimate factor for affecting individual health and wellbeing, and worthy of equal consideration to any other social determinant of health (political, cultural, and economic) (Idler, 2014). Objectively speaking, all physicians should be able to take a patient's SR seriously and its relationship to medical practice and patient health.

Training Physicians

For physicians who personally find it important to include SR in their clinical spectrum of care, it is important for them to be well-trained. In 1992, only three medical schools had curricula covering patient SR (AAMC, 2014). Currently, 75% of all medical schools have included topics of SR into the curricula. As part of the Medical School Objectives Project (MSOP), the AAMC published spiritual-based competences aimed at standardizing concuss among the medical education community concerning knowledge, skills and attitudes developed by graduating medical students (2014). Rob Whitley (2015) describes religious competence as “skills, practices, and orientations that recognize, explore, and harness patient religiosity to facilitate diagnosis, recovery, and healing.” Further, AAMC more broadly recognizes SR core competencies as “[medical students] knowing how to apply knowledge about spirituality in

patient care; integration spirituality into clinical practices; establishing compassion and communication with patients, families, and colleagues ; and incorporating spirituality into professional and personal development” (AAMC, 2014). In short, religious competence involves asking open-ended questions to elicit -- sometimes sensitive -- SR information useful for facilitating recovery (Whitley, 2015). Two popular clinical tools used to draw out patient SR beliefs are FICA and HOPE. These items stand for:

F – Faith and Belief (i.e. do you consider yourself spiritual or religious?)
I – Importance (i.e. what importance does your faith or belief have in your life?)
C – Community (i.e. are you involved with a faith community?)
A – Address in Care (i.e. how would you like me to address your faith and health?)
(GWISH, 2015)

H – Spiritual Resources (i.e. where do you find sources of hope during difficult times?)
O – Organized Religion (i.e. Are there any religious practices that you find personally important?)
P – Personal Spirituality (i.e. Do you have spiritual beliefs as well?)
E – Effects on care (i.e. Do you hold any beliefs that might interact with the care I might give?) (Pearson, 2007).

These tools are designed to allow the physician to remain objective and inquire in a non-judgmental fashion. And, since SR can be an extremely personal aspect of a patient’s illness experience, it is vitally important for students to navigate this topic competently and sensitively, and without crossing any ethical boundaries. Developing SR fluency for this extension of care is necessary to avoid harm. For example, praying with patients is a topic that commonly surfaces in these scenarios. This is obviously a very controversial topic and should be accompanied by a substantial amount of ethical and clinical training before implementation. In short, physicians should respect a patient's request to have prayer, either assisting in retrieving a clergy member or acquiescing the request themselves -- if the provider feels comfortable (D’Souza, 2007 & Polzer, 2012). Under no circumstances should clinicians use this time to force prayer or proselytize.

Having didactic courses and clinical exposure by trained professionals is useful for mitigating risk and improving proficiency. In a study by Tervalon (1998), introducing medical students into community clinic sites was the most effective form of teaching extra-clinical practices that consider SR, such as taking a spiritual history as a part of a larger social history. In order to demonstrate a practical method for teaching, I will present a program evaluation of a local faith-based community health clinic that organized a program for educating medical students and residents about cross-cultural spiritual care.

PROGRAM EVALUATION

Introduction

Although there is necessary and requisite objectivity required by physicians to meet current pathophysiological and biological standards of care, emerging literature suggests that the inclusion of spirituality and religion (SR) with medicine improves patient outcomes, particularly in mental health (Koenig et al., 2004). The likely differential outcomes in patient health, patient satisfaction, and long-term clinical economy that will be had through an incorporation of patient SR beliefs makes the topic particularly salient given the status of the American healthcare system (D'Souza, 2007). In order to address this potential avenue for improving the standard of care for patients, researchers and clinicians are urging medical educators and fellow clinicians to consider reincorporating SR into the medical paradigm (Barnett, 2006). Since it is best to introduce models of SR inquiry during medical school training, one method for enculturation is to familiarize medical students into community sites (Tervalon, 1998). Community-based health clinics may provide an educational experience that can increase physician awareness of social aspects of medicine.

This paper presents a case-study of the efficacy of a faith-based community health clinic's educational paradigm. This study is significant because of its primary care rotational curriculum "overlay." This overlay combines a three-tiered theoretical, holistic approach to medicine (poverty medicine, cross-cultural medicine and whole-person care) with an interdisciplinary team (physicians, chaplains, social workers and translators) available to students, which serves to reinforce each component of holistic care. This approach to educating healthcare professionals -- involving the extra-clinical curricular overlay, clinical experience, and simultaneous exposure to a community-based clinic -- may significantly improve students'

awareness of the social aspects of medicine and a patient's individual [SR] culture. In short, if effective this educational paradigm could be a potential praxis for equipping health care professionals to overcome cultural, linguistic and religious barriers to care.

Methods

Rationale

Siloam Family Health Center (SFHC) was selected as a case study because of its diverse patient population, connection to a medical education center, coursework dedicated to social and spiritual aspects of patient health, and interdisciplinary health service team. Altogether, this model of health service delivery and intrinsic educational platform (explicit curricular overlay, clinical rotation experience, clinic environment) seems to provide a unique take on holistic medicine that, if proven to be effective, might be able to scaled and applied to other areas of medical education.

Aims

The primary goal of this study is to determine if the curricular overlay component of the primary care rotation at SFHC is effective in increasing medical trainee's awareness of the social and spiritual dimensions of medical care. Therefore, formally, a sub-aim of this study is to determine if participation in a primary care rotation at SFHC had any demonstrable effect on medical trainee's perceived comfort with spirituality and religion's relationship to medicine. The data was collected by self-report survey.

Study Location and Background

The sample occurred at Siloam Family Health Clinic (SFHC) in Nashville, TN. SFHC is a 501(c) (3) non-profit Christian health ministry that works with underserved populations, including refugees and uninsured peoples. Although it is a faith-based community health clinic,

volunteers, patients, and medical trainees from all faith perspectives are eligible. The clinic primarily works in conjunction with Vanderbilt University Medical Center, Vanderbilt University Medical School, Belmont School of Pharmacy, and Trevecca University Physician Assistant Program. SFHC offers intensive primary care rotations for residents, 4th-year medical, 4th-year pharmacy, family nurse practitioner, and physician assistant students. All trainees accepted for rotations at SFHC are enrolled into an internally developed primary care “curricular overlay” designed by SFHC’s Institute of Faith, Health and Culture. This extra-clinical curricular component of the rotation experience was designed to deepen a participant’s understanding of three main domains of holistic caregiving as defined by SFHC: Poverty Medicine, Cross Cultural Health Care, and Whole Person Care.

Practically, the curricular overlay includes surveys (intake and exit), and several brief online trainings aimed at reinforcing key learning points in each core aspect (SFHC Data, 2014). Accepting a primary care rotation at SFHC obligates the participant to complete in-person surveys (intake and exit), brief training modules, and a 1-2 page reflection paper. Data secured by survey was marked as confidential and did not play any part in the formal grading or evaluation by a student’s training institution. A research assistant, not the preceptor, handled the data entry after a participant completed a survey instrument.

As an alternative to the common primary care rotation, students are also eligible to apply to the Primary Care Preceptorship Program (PCPP), which explores delivering health service within the context of the Christian faith tradition. A PCPP participant completes the same surveys and modules as other rotating students as a self-reported behavioral survey. Additionally, PCPP participants are matched with a preceptor that works closely with the student during clinic time and does pre- and post-patient observation forms. Selection for PCPP preceptorship gave

explicit preference to individuals who intended to pursue primary care with underserved populations. Attachment to a faith community was not in the selection criteria for the standard SFHC rotation or the PCPP rotation (Siloam Family Health Center [SFHC], 2014).

Study population

The data for this study was administered in-person via self-report questionnaire across 100 health care professionals (HCP) in training, including resident physicians (n=26), physician assistant (n=3), nurse practitioner (n=6), pharmacy (n=40), and 4th-year medical students (n=25). Rotation participants ranged in age from 18 to 40 years old, 66% of which were female (n=66). The sample was reasonably diverse. The self-report ethnicity assay described the sample population as follows: Asian (14%), Black (10%), Hispanic (4%), other (4%) and White (68%). Affiliation with a faith community was also collected, revealing 76% of participants identified with some denomination of the Christian faith tradition (Orthodox, Catholic, Protestant, Greek Orthodox, and Evangelical). Other faith affiliations included agnostic (1%), Buddhist (1%), Hindu (2%), Jewish (3%), Muslim (3%), no faith affiliation (7%) and spiritual, non-religious (7%). Of this sample 66% (n=66), requested SFHC as their primary care rotation (SFHC, 2014). See Table 1.1 for sample demographics.

Table 1.1. Sample Demographics	
Gender	Percentage (N=100)
Male	34
Female	66
Ethnicity	
Asian	14
Black	10
Hispanic	4
Other	4
White	68
Faith Affiliation	
Christian	76
Agnostic	1
Buddhist	1
Hindu	2
Jewish	3
Muslim	3
No Faith	7
Spiritual, Not Religious	7
Education Status	
Resident Physician	26
Physician Assistant	3
Nurse Practitioner	6
Pharmacy Student	40
Medical Student	25
Requested SFHC	
Yes	66
No	34

Data collection

Surveys and training modules were administered via in-person, hard-copy format at the start and end of a participant’s rotation. Participant end time points were calculated by total hours in clinic and ranged from 30 to 280 hours. A research assistant entered data into an Excel spreadsheet for later analysis. Respondent data was held confidential; attending physicians did not have access to the data.

Four instruments were used for data collection 1) Intake survey; 2) Exit survey 3) Trainee Behavioral Self-Assessment 4) Observed Patient Encounter Form; and 5) Training module quizzes. These instruments were internally designed and have not been externally validated by literature. Brief summaries are listed below.

Intake Survey (20-item)

This instrument gathered basic demographic variables, baseline perceived comfort and previous experience with clinical skills associated with SFHC's expression of holistic care. Skills are listed below.

Binary assessment of skills for during the medical encounter was conducted. Skills included negotiating with a patient across a culture gap, using an interpreter, taking a spiritual history (a religious and spiritual background) as a part of a larger social history and praying with a patient who gives permission. Likert scales were employed to gauge comfort with the above skills as well as the respondent's likelihood of working with underserved populations in the future, their religion's influence on personal life and medicine, and their comfort with SFHC's faith-based mission statement. Lastly, in order to measure experience working with an interdisciplinary team, students were asked if they had ever requested consultation or observed pastors/chaplains, counselor behavioral health consultants, or social workers while in a clinical setting. The survey was administered at the start of student rotation and was given to both PCPP and common primary care rotation participants.

Exit Survey (18-items)

All intake survey items were duplicated, demographics omitted. Additions included a binary assessment about whether or not participant's personal biases influenced their patient care, as well as a narrative reflection that asked for significant learning moments during the

rotation that the participant considered to possibly influence their future practice. Reflections were submitted via email. Survey was administered at the end of student rotation and was given to both PCPP and common primary care rotation participants; end time points varied among students, depending on number of shifts worked. This exit survey was duplicated and sent to all graduated participants.

Trainee Behavioral Self-Assessment (20-item)

This instrument was administered to PCPP rotation students only. The first 18-items included various Likert scales to measure behavioral changes associated with SFHC's three domains of holistic care. Two short-answer questions were free-response items for respondents to articulate largest perceived behavioral changes during the clinical encounter. Survey was administered at the end of student rotation; end time points varied among students depending on number of shifts worked. This exit survey was duplicated and sent to all graduated participants.

Observed Patient Encounter Form

This instrument was administered to PCPP rotation students only. This 14-item observational Likert scale (2=Done Well, 1=Needs Improvement, 0=Not Done, N/A), assessed trainee clinical proficiency at including Poverty Medicine, Cross-cultural Health, Behavior Health & Spiritual Care. SFHC established formal clinical proficiencies for each domain. These are listed below in Figure 1.1. Since the sub-aim is to measure long-term program efficacy, graduate participants received a composite survey combining the Exit Survey and behavioral self-assessment. This follow-up composite survey was administered via email to all SFHC primary care rotation participants. Participants were informed that completion of the survey will add \$5 USD to a charitable organization.

Data Analysis

After the SFHC research analyst obtained the data set, it was cleaned and checked for omitted variables. Simple demographic frequencies were run via Excel in order to determine primary inclusion criteria. Those eligible for the data analysis must have successfully completed the SFHC rotation, including all didactic material (modules and quizzes), surveys and reflection essays and spent minimum of 80 hours inside the clinic.

Since this study examines internal efficacy, the dependent variables are “Perceived comfort with taking a spiritual history” and “Perceived comfort praying with a patient upon their request.” Requesting a rotation at SFHC might be a confounder as it suggests self-selection. Furthermore, the variable “SR influences a provider’s practice of medicine” might color the respondent’s answers in a certain direction. Currently, only descriptive data analysis is possible. When all of the data is collected (intake, exit *and* follow-up), a more in-depth analysis can occur. In this case, if the dependent variables are linked a multivariate analysis will be necessary. Since there are multiple explanatory variables, a multiple linear regression might be required. For binary variables such as participation in the PCCP rotation versus the common primary care rotation, a logarithmic regression would be appropriate. To confirm these relationships, variables will be selected via manual, backward elimination.

Figure 1.1. Description of Variables

Dependent Variables	Independent Variables	Possible Confounding Variables
Comfort taking spiritual history	Faith Affiliation	Requested SFHC Rotation
Comfort praying with patient	Primary Care Preceptorship Program	Self-report score for SR influencing his/her practice of medicine

Results

Comfort Taking a Spiritual History

Since the follow-up survey has not been collected fully, data analysis is limited. For comfort with taking a spiritual history a 5-unit length Likert-scale was employed (4= Very Comfortable, 3= Fairly Comfortable, 2= Fairly Uncomfortable, 1=Very Uncomfortable, 0=Not Applicable). Twelve of 100 participants (common and PCPP rotation) positively differed on this intake and exit survey item. In other words, 12% (n=12) of students became more comfortable with taking a spiritual history. Two respondents changed scores from “Fairly Uncomfortable (2)” to “Very Comfortable (4)” and one student reported an increase from “Very Uncomfortable (1)” to Fairly Comfortable (3).” However 8% (n=8) negatively differed between intake and exit survey. These results may indicate a weak instrument or that the program itself actually makes participants uncomfortable. Lastly, 52% (n=52) did not differ between intake and exit with the remaining 28% (n=28) were considered not applicable. See Table 2.1 for program results concerning spiritual history below.

Table 2.1. Program Results; Spiritual History	
Comfort Taking a Spiritual History	Percentage (N=100)
More Comfortable	12
Less Comfortable	8
No Change	52
Not applicable	28

Comfort Praying with Patients

Since the follow-up survey data has not been collected fully, data analysis is limited. For comfort praying with patient upon request, a 5-unit Likert-scale was employed (4= Very

Comfortable, 3= Fairly Comfortable, 2= Fairly Uncomfortable, 1=Very Uncomfortable, 0=Not Applicable). Zero of 100 participants (common and PCPP rotation), positively differed on this intake and exit survey item. In other words, 0% (n=0) of students became more comfortable the concept of praying with patients. However 8% (n=8) negatively differed between intake and exit survey. These results may indicate a weak instrument or that the program itself actually makes participants uncomfortable. Lastly, 92% (n=92) did not differ between intake and exit. See Table 2.2 for program results below regarding prayer with patients.

Table 2.2. Program Results; Prayer	
Comfort Praying with a Patient	Percentage (N=100)
More Comfortable	0
Less Comfortable	8
No Change	92
Not applicable	0

Discussion

The negative findings in the preliminary study does not necessary negate the efficacy of the program itself. Rather, these results may be indicative of how the questions were worded. For example, “Comfort Praying with Patients” and “Comfort with Praying with Patients” is ambiguous. This could be taken by participants to mean whether or not the provider is comfortable with these questions as concepts or if the provider is personally comfortable performing these actions. Further, SFHC does not hold a formal, introductory information session that outlines the purpose or definition defines of each term. This means that a student taking the intake survey might have been unclear as to what was meant by spiritual history and therefore answered too high or too low on their perceived comfort according to their own personal definition of the terms. Reformatting the questions to target behavior would mitigate

variance and improve accuracy. Rather than asking participants about their comfort about a task, identifying trainee behavior might be more appropriate. For example, asking questions like, “In the past month, how many times did you ask a patient about their SR?” or “How many times did you pray with a patient this month?” provides discrete, quantifiable data that can be captured in a simply frequency or a Likert-scale (i.e. Every patient encounter, Most patient encounters, Few Patient encounters, etc.). These data points are valuable because they measure actual outcome rather than trainee perception. For example, a participant might be uncomfortable doing a spiritual history but they still do one regardless (or vice-versa).

Table 3.1. Prayer by Faith

Comfort Praying with Patients (%)	Totals (N)	Very Comfortable	Fairly Comfortable	Fairly Uncomfortable	Very Uncomfortable	Not Applicable
Totals (N=100)	100	25 (25)	34 (34)	16 (16)	4 (4)	21 (21)
Christian	76	24 (31.6)	30 (39.5)	10 (13.2)	1 (1.3)	11 (14.5)
Muslim	3	0 (0)	0 (0)	0 (0)	0 (0)	3 (100)
Buddhist	1	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
Agnostic	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)
Spiritual, not Religious	7	1 (14.3)	2 (28.6)	1 (14.3)	1 (14.3)	2 (28.6)
No Faith	7	0 (0)	1 (14.3)	2 (28.6)	1 (14.3)	3 (42.9)
Jewish	3	0 (0)	0 (0)	2 (66.7)	0 (0)	1 (33.3)
Hindu	2	0 (0)	0 (0)	1 (50)	1 (50)	0 (0)

Table 3.2. Spiritual History by Faith Affiliation

Comfort Taking Spiritual History (%)	Totals	Very Comfortable	Fairly Comfortable	Fairly Uncomfortable	Very Uncomfortable	Not Applicable
Totals (N=100)	100	20 (20)	37 (37)	22 (22)	3 (3)	18 (8)
Christian	76	19 (25)	29 (38.2)	16 (21.1)	1 (1.3)	11 (14.5)
Muslim	3	1 (33.3)	1 (33.3)	0 (0)	0 (0)	1 (33.3)
Buddhist	1	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
Agnostic	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)
Spiritual, not Religious	7	0 (0)	3 (42.9)	2 (28.6)	1 (14.3)	1 (14.3)
No Faith	7	0 (0)	2 (28.6)	2 (28.6)	0 (0)	3 (42.9)
Jewish	3	0 (0)	1 (33.3)	1 (33.3)	0 (0)	1 (33.3)
Hindu	2	0 (0)	0 (0)	1 (50)	1 (50)	0 (0)

In a brief review of the breakdown of relative percentages, it is clear to see that the participants who reported a Christian faith affiliation were far more likely to be very or fairly

comfortable praying with a patient 31.6% (n=24) and 39.5% (n=30), respectively. Further, Christians had a high percent of participants who felt very or fairly comfortable taking a spiritual history 25% (n=19) and 38.2% (n=29), respectively. However, these data still could be influenced by the wording of the question. Although Christians may be more comfortable to pray or take a spiritual history does not mean that they are actually more likely to pray or take a spiritual history. In the same way, non-Christian faith affiliations may be as likely to take or not to take a spiritual history. Until behavioral data is collected and the sample sizes increase, this question (and others) cannot be answered with any reasonable amount of confidence. However, it is interesting to ask the question, why are Christians in this sample more frequently rate higher comfort levels (“Very Comfortable and Somewhat Comfortable”) taking a spiritual history and/or praying with a patient than being uncomfortable (“Somewhat Uncomfortable” or “Very Uncomfortable”). Is this a function of the patient background being supported or congruent by their clinical environment (i.e. Christians working in SFHC that is a Christian health clinic) or this phenomena associated with the doctrine, teachings and/or culture of the Christian faith. For example, physicians who are also Christians may feel their work in medicine is divinely inspired, making it a *calling* (Curlin, 2006). Whatever the cause, and whatever the religious affiliation, it is important that physicians be open to a patients spiritual and religious beliefs in order to provide the best care possible.

REQUESTED SFHC (%)	Totals	Requested SFHC	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
Totals (N=100)	100	66 (66)	29	22	5	8
Christian	76	55 (72.4)	28 (50.9)	22 (40)	3 (5.5)	2 (3.6)
Muslim	3	1 (33.3)	0 (0)	1 (100)	0 (0)	0 (0)
Buddhist	1	1 (100)	0 (0)	1 (100)	0 (0)	0 (0)
Agnostic	1	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Spiritual, not Religious	7	3 (42.9)	0 (0)	0 (0)	0 (0)	3 (100)
No Faith	7	3 (42.9)	1 (33.3)	0 (0)	1 (33.3)	1 (33.3)
Jewish	3	2 (66.7)	0 (0)	0 (0)	0 (0)	2 (100)
Hindu	2	2 (100)	0 (0)	1 (50)	1 (50)	0 (0)

DID NOT REQUEST SFHC (%)	Totals	Did not Request	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
Totals (N=100)	100	34 (34)	8	9	8	7
Christian	76	21 (27.6)	8 (38.1)	6 (28.6)	5 (23.8)	2 (9.5)
Muslim	3	2 (66.7)	0 (0)	0 (0)	1 (50)	1 (50)
Buddhist	1	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Agnostic	1	1 (100)	0 (0)	0 (0)	1 (100)	0 (0)
Spiritual, not Religious	7	4 (57.1)	0 (0)	2 (50)	0 (0)	2 (50)
No Faith	7	4 (57.1)	0 (0)	1 (25)	1 (25)	2 (50)
Jewish	3	1 (33.3)	0 (0)	0 (0)	1 (100)	0 (0)
Hindu	2	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

The last part of the brief analysis, Tables 4.1 and 4.2 describe participants who requested SFHC for clinical rotations (self-selection) and the degree to which religion influences that participant’s practice of medicine (bias). Approximately 72% (n=55) of Christians requested SFHC; of which, 50.9% (n=28) strongly agreed and 40% (n=22) somewhat agreed that religion influences their practice of medicine. Only 5.5% (n=3) somewhat disagreed and 3.6% (n=2) strongly disagreed. For Christian participants who did not request SFHC for clinical rotations (27.6%, n=21), 38.1% (n=8) strongly agreed and 28.6% (n=6) somewhat disagreed that religion influenced their practice of medicine. Approximately 23.9% (n=5) and 9.5% (2) of Christians somewhat disagreed and strongly disagreed – respectively – that religion influenced their practice of medicine. Although the small sample size makes prevents credible assumptions, it is interesting to note that Christians, no matter if they requested SFHC or not, were more likely to answer “Strongly Agree” or “Somewhat Agree” that their religion influences their practice of

medicine than “Somewhat Disagree” or “Strongly Disagree.” Again, it interesting to ask why Christians in this sample, independent of self-selection, seem have their practice of medicine more strongly influenced by their religion than not. [Requested SFHC 50.9% strongly agreed, (n=28) and 40% somewhat agreed (n=22); Did not Request SFHC 38.1% strongly agreed (n=8) and 28.6% somewhat agreed (n=6).] Did these providers enter the medical field due to a “calling”? Does their religious background provide a cultural context and familiarity with spirituality and/or religion that makes it less difficult to broach SR topics with patients? These are questions for the future that could discovered with an additional survey instrument and more participants.

Limitations

The limitations of these data are clear. The small sample makes the results non-generalizable and non-statistically significant. Also, the limited diversity in the sample may have skewed the results. Seventy-six percent (n=76) of the participants identified as Christian and of those, 55 (83%) specifically applied to be in the program. This presents an obvious issue of self-selection. With a larger and more diverse sample size, the effect of this confounder could be lessened. Lastly, the measures are not established in literature or consistently worded among instrument and should be adjusted slightly to more closely mirror survey questions in literature, which would allow their results to be compared to other studies outside of SFHC.

Recommendations and Conclusion

Evaluating SFHC’s clinical teaching methods and comparing them to literature is a sound way for improving their pedagogy and strengthening this program. Educational research indicates that students learn best when they identify content as relevant to their future work or their current degree (Hutchison, 2003). In order for SFHC to maximize the impact of their

curricular overlay, it is in their best interest to convey the clinical relevance of its component parts to their students early on, especially in regard to SR. This should be done in a variety of ways including mini-lectures, discussion, and observation of the attending physicians (Barnett, 2006). Currently, SFHC does engage students through multiple modalities (i.e. quizzes and observation). However, there is no “introductory” course that explicitly describes the history of SR and medicine or significant evidence for incorporating SR into clinical practice. One example of how this course could be operationalized comes from the Barnett (2006) study that designed a curriculum for medical students that followed this layout. Definitions of SR were discussed as well as the demographics of SR in America. Next, research suggesting the clinical relevance of SR was introduced as well as common barriers to care and a mnemonic for conducting a spiritual assessment. Following this mini-lecture, a hospital chaplain discussed pastoral services and its role in patient care in both the inpatient and outpatient settings (Barnett, 2006, p.482). The benefit of having a standardized introductory course is that it helps control for variance in baseline knowledge among the entering students (D’Souza, 2007).

Within the curriculum, SFHC could benefit primarily from an educational critical perspective that addresses both the epistemology of medical knowledge and ethics of SR and medicine. I believe courses that educate students on the epistemology of medical knowledge will help them understand how SR has gradually been separated from Western medicine and allow them to critically re-examine their thoughts on the issue. Then, this perspective might help normalize SR and medicine for students, making the topic seem more accessible. (Also, presenting basic facts on clinical significance would hopefully provide added relevance to the topic). The other necessary component of education during the rotation is the ethics of SR. Since SR can be an extremely personal, yet important aspect of a patient’s illness experience, it is

vitaly important for students to navigate this topic competently and sensitively, and without crossing any ethical boundaries. Outside of an informal curriculum, I do not think SFHC has established a formal educational component discussing the basics of SR ethics. For example, one aspect of the PCPP spiritual overlay is learning when and how to pray with patients. This is obviously a very controversial topic and should be accompanied by a substantial amount of ethical training before being attempted in the clinic. Koenig (2007) outlined criteria for determining when it is appropriate to pray with a patient. If these stipulations have not been made explicit to participating students, SFHC should consider adopting similar guidelines for educating their students at the start of the rotation.

In order to better answer the question of permanence or knowledge "decay" in regard to SR, I recommend that SFHC evaluate at days 1 and 30 (during rotation) and days 90 and 365 (after rotation). These standardized units of time will represent a more stable change in knowledge, skills, and attitudes (Barnett, 2006). From this point forward, SFHC can elect to contact physicians beyond these units of time for further analysis of knowledge retention/decay.

As mentioned before, adding a control group is essential. The AAMCs "Social Aspects of Medicine" survey instrument should be introduced into the current survey battery, which would allow external comparison between learners in a community-based clinic (i.e. SFHC) versus another type of clinical settings. This standardization would convert all the intake and exit surveys to a common length Likert-scale; (1-5) or (1-3). Also, this additional survey also sets up SFHC to determine whether primary care rotation participants who are attuned to SR are more or less aware of "strictly" the social aspects of medicine (as defined by AAMC survey). Lastly, having an "off-session" with new learners to determine what they know, what they want to know and what they expect to learn might enhance the learning

experience (and provide valuable data). Hutchison (2013) stated this practice “shows respect for the learning and encourages them to invest in the session” (40). Currently, SFHC directly asks students through surveys what they know but as far as I know they do not formally ask at the beginning of the rotation what they would like to know or what they expect to learn during the rotation. Maybe introducing an “off-session” might improve the impact of the rotation (Hutchison, 2013).

In the end this project is simply an experiment. It is a dynamic time in medical education and content for topics like SR and health have not been established in literature, nor has there been much discussion on how to most effectively operationalize these educational initiatives (Barnett, 2006). This project, if carefully considered and thoroughly evaluated, might help shape the next generation of education that physicians receive. And, although it has little to do with basic medical science, makes it no less important. This type of physician education is long overdue.

APPENDIX

Organization Background

Siloam Family Health Center

A description of Siloam's philosophy of care, patient demographics, and educational initiatives are necessary to understand the context of the medical trainee's learning environment.

Philosophy of Care

Siloam Family Health Clinic (SFHC) is a faith-based community healthcare clinic. Their expression of holistic health service delivery is described by the phrase "Whole-Person Care," which attempts to integrate biomedicine with the spiritual and psychosocial aspects of health. In order to achieve this holistic expression of medicine, SFHC uses interdisciplinary team model composed of physicians, nurses, nurse practitioners, physician assistants social workers, pharmacists, behavioral health specialists, counselors, pastors, medical assistants and receptionists. SFHC believes this approach to primary care "promotes flourishing of...patients and their communities" (Siloam Family Health Center [SFHC], 2014).

Patient Demographics

Siloam recorded more than 18,000 clinical visits in 2013-2014. All patients seen in clinic were uninsured and had an average income of \$23,662 (family of four). In terms location, patients predominantly resided in Davidson County, TN and represented 81 countries and 71 native languages. Patients most frequently cited Mexico as their "homeland", followed by the USA, Egypt, Iraq, Burma, Bhutan, Somalia, El Salvador, Iran and lastly Honduras. The two most common languages spoken by patients are Spanish and Arabic, followed by English, Nepali, Somali, Burmese, Kurdish, Tedim, Vietnamese and Farsi (SFHC Online).

This diversity in patient population predominantly arises from the immigrant and refugee populations that SFHC serves. SFHC directs the Tennessee Refugee Medical Screening Program which conducts medical evaluations for both refugees and asylum-seekers. Every year World Relief and Catholic Charities – which are refugee resettlement agencies -- coordinate 600 refugees to Siloam (SFHC, 2014).

Payment

Siloam works solely with uninsured patients and does not bill health insurance companies. Patients are charged for services according to household size and income. According to SFHC, patients pay \$15 per visit, on average, while the actual cost per visit is approximately \$165. The remaining amount is covered by fundraising efforts, in-kind donations from community members, discounted services and volunteer hours by staff and community members. Despite patient contribution towards care, patients are not turned away if they are unable to pay (SFHC, 2014).

Primary Care Preceptorship Program

In an effort to influence future health care professionals, the Siloam Institute of Faith, Health and Culture, started an educational initiative called the Primary Care Preceptorship Program (PCPP). This program involves practicum-based training in cross-cultural medicine, poverty medicine, and behavioral and spiritual care in the Christian Faith tradition. Each trainee is matched with a SFHC preceptor who supervises the student during direct patient caregiving and informally encourages/reviews the three core aspects of PCPP. Preceptorship positions are available for social work, pharmacy, behavior health, and outpatient medicine (PGY-III/IV and 4th-year medical students). Trainees pursuing primary care are given preference and faith

affiliation is not a requirement for participants. Lastly, participants are required to complete all educational surveys and training modules (SFHC, 2014).

The intake survey (discussed in earlier sections) is administered to all participants before exposure to any SFHC clinical rotations or assigned readings. After orientation, training module I (cross-cultural care) involves a didactic portion on working with an interpreter and conducting a cross-cultural interview. The theory is formally explained via PowerPoint module and then a brief quiz is given; this format applies to Modules I-III. The aim of Module I is to develop competence when using resources to overcome linguistic and cultural barriers to care such as a medical interpreter (SFHC, 2014). Practically, this means trainees are taught about when it is appropriate to use an interpreter, how to appropriately use an interpreter (i.e. using a medical interpreter rather than a family member to ensure patient privacy), and how to use an interpreter most effectively (speaking clearly with normal speed and intonation).

Module II – poverty medicine – outlines the culture of poverty and examines how health literacy/numeracy affects patient care. The aim of this module is develop “awareness of the real-life limitations of patients living in poverty, improve flexibility and creativity in [treatments]” and improve communication (SFHC, 2014). Trainees are given practical examples that demonstrate how patient non-compliance can often be a function of literacy/numeracy and economic circumstance. For example, a patient might not understand the medication dosing schedule when it is abbreviated on the label. In regard to patient economic circumstance, an example might be that the medication prescribed is too expensive for the patient to purchase regularly, or at all. Providing physicians with knowledge of how to practice medicine most cost-effectively, adherence to treatment can be improved.

To promote cross-collaboration that gives a patient the full-spectrum of care, participants observe a patient consultation by each member of SFHC's interdisciplinary team which includes a behavioral health consultant, social worker, pastor, pharmacist and a primary care provider. This shadowing familiarizes the trainee with other allied-health professionals that service a full spectrum of patient care thereby reinforcing the theme of holistic care (physical, mental, spiritual).

The last module is behavioral health and spiritual care (Whole-Person Care), which is the focus of this paper. The goal of this module is to maximize the likelihood of the healing of the "whole person" by developing fundamental skills of the provider that humanize and contextualize the clinical encounter (SFHC, 2014). The core framework includes teaching providers how to engage the clinical encounter in more personal terms to make patient feel comfortable. For example, asking about a patient about their background and how they arrived at SFHC or potentially asking about a personal hobby or interest that might be affected by their health condition (SFHC, 2014). The next core competency is considering the emotional and spiritual processes during a visit. This might mean that a provider takes a non-judgmental spiritual history. For this case, a spiritual history is a component of a larger social history that inquires about patient faith affiliation. These data help providers understand their faith-community as a social support network and/or potential mediator to their illness experience. In regard to emotional processes, a provider might ask open-ended questions to provide space for the role of stress and/or social relationships to surface); these answers might come verbally or non-verbal, both of which give information to underlying reasons that might be complicating the illness experience. Lastly, trainees are given experience including behavioral and spiritual dimensions in the plan of care. This can be accomplished by facilitating a meeting with a

behavioral health consultant or pastoral caregiver and emphasizing the importance of the patient's relationship with friends, family and, when appropriate, God during the recovery process. To help fully contextualize the patient experience, participants make a home visit with a SFHC provider. This exposes them to the lived environment of the patient.

Common Primary Care Rotation

As an alternative to the PCPP, students are eligible to apply to a common primary care rotation. This rotation involves the same material, with the exception that it does not follow caregiving in the Christian faith tradition. Therefore both the common primary care rotation and the PCPP at Siloam cover cross-cultural healthcare, poverty medicine and whole-person care.

Figure 2.1. Primary Care Preceptorship Program (PCPP) Chronology

The PCPP lasts a minimum of 80 clinical hours and follows this chronological order:

- Intake Survey
- Whole Person Care Reading
- Orientation to Siloam
- Training Module I (Cross-cultural Healthcare)*
 - Working with an interpreter
 - Cross-cultural interview
- Module II (Poverty Medicine)*
 - The culture of poverty
 - Health literacy/numeracy
- Individual observation of patient consultation by SFHC's interdisciplinary staff:
 - Behavioral health consultant, social worker, pastor, pharmacist and primary care provider.
- Module III (Whole-person care)*
 - Reading
 - Home visit with provider
- Exit survey and reflection essay

Note: Each training module includes course material, pre/post quizzes and a follow-up lesson to reinforce learning (SFHC, 2014).

REFERENCES

- Association of American Medical Colleges | Beyond Hospital Walls: Teaching Students about Social Determinants of Health (2012). Retrieved July 10, 2015, from <https://www.aamc.org/newsroom/reporter/sept2012/303664/hospital-walls.html>
- Association of American Medical Colleges | More Than a Diagnosis: Medical Schools and Teaching Hospitals Address Patients' Spiritual Needs (2014). Retrieved July 12, 2015, from <https://www.aamc.org/newsroom/reporter/march2014/374624/spiritual.html>
- Association of American Medical Colleges | Understanding the Role of Spirituality in Medicine - A Resource for Medical Students AAMC – OSR Committee on Student Affairs (2015). Retrieved July 12, 2015, from <https://www.aamc.org/download/300720/data/osrspiritualityresources.pdf>
- Armbruster, C. A., Chibnall, J. T., & Legett, S. (2003). Pediatrician beliefs about spirituality and religion in medicine: Associations with clinical practice. *Pediatrics*, *111*(3), 227–235.
- Barnett, K. G., & Fortin, A. H. (2006). Spirituality and Medicine. *Journal of General Internal Medicine*, *21*(5), 481–485.
- Barroso, C. (2013). Epistemology of Medical Knowledge. In R. Seising & M. E. Tabacchi (Eds.), *Fuzziness and Medicine: Philosophical Reflections and Application Systems in Health Care* (pp. 123–132). Springer Berlin.
- Berlin, E. A., & Fowkes, W. C. (1983). A Teaching Framework for Cross-cultural Health Care--Application in Family Practice. *Western Journal of Medicine*, *139*(6), 934–938.
- Berry, W. (2002). Health is Membership. *The Art of the Commonplace: The Agrarian Essays of Wendell Berry* (144-158). Berkeley, CA: Counterpoint.
- Charon, R. (2012). At the Membranes of Care: Stories in Narrative Medicine. *Academic Medicine*, *87*(3), 342–347.
- Curlin, F. A., Serrano, K. D., Baker, M. G., Carricaburu, S. L., Smucker, D. R., & Chin, M. H. (2006). Following the Call: How Providers Make Sense of Their Decisions to Work In Faith-based and Secular Urban Community Health Centers. *Journal of Health Care for the Poor and Underserved*, *17*(4), 944–957.
- Dein, S., & Illaiee, A. S. (2013). Jinn and mental health: looking at jinn possession in modern psychiatric practice. *The Psychiatrist Online*, *37*(9), 290–293.
- Elliot, A. (2005). Guidelines for Conducting a Focus Group. *Duke University: Assessment*, 1-13. Retrieved from https://assessment.trinity.duke.edu/documents/How_to_Conduct_a_Focus_Group.pdf

- Forster, M. R. (2001). The New Science of Simplicity. In A. Zellner, H. A. Keuzenkamp, and M. McAleer (eds.) *Simplicity, Inference and Modelling* (83-119). Cambridge, England: Cambridge University Press.
- Fuchs, V. (1974). A Tale of Two States. Idler (2014), Religion as a Social Determinant of Health [Kindle Edition] (pp. 4485 – 4874).
- D'Souza, R. (2007). The importance of spirituality in medicine and its application to clinical practice. *Medical Journal of Australia*, 186, 57-59.
- Gaydos, L., & Paige, P. (2014). Religion and Reproductive Health. Idler (2014), Religion as a Social Determinant of Health [Kindle Edition] (pp. 3873 - 11215).
- Gross, C. (Interviewer) & Snader, B. (Interviewee). (2015). *Vanderbilt Thesis Research* [Interview transcript].
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57(1), 35–43.
- GWISH (George Washington Institute for Spiritual Health. (2015). FICA Spiritual Assessment in Clinical Practice. Retrieved July 11, 2015 from, <https://smhs.gwu.edu/gwish/clinical/fica/spiritual-history-tool>
- Hall, D. E., Koenig, H. G., & Meador, K. G. (2004). Conceptualizing “religion”: How language shapes and constrains knowledge in the study of religion and health. *Perspectives in Biology and Medicine*, 47(3), 386–401.
- Hartzband, J. G. (2011). The New Language of Medicine. *The New England Journal of Medicine*, 365(15), 1372–3.
- Juckett, G. (2005). Cross-cultural medicine. *American Family Physician*, 72(11), 2267–2274.
- Koenig HG. (2004). Taking a spiritual history. *JAMA*, 291(23), 2881–2882.
- Kleinman, A., Eisenburg, L., & Good, B. (1978). Culture, Illness, and Care: Clinical Lessons from Anthropologic and Cross-Cultural Research. *Annals of Internal Medicine*, 88(2), 251–258.
- Kleinman, A., & Benson, P. (2006). Anthropology in the Clinic: The Problem of Cultural Competency and How to Fix It. *PLoS Med*, 3(10), e294.
- LaRocca-Pitts, M. A. (2009). FACT: Taking a Spiritual History in a Clinical Setting. *Journal of Health Care Chaplaincy*, 15(1), 1–12.
- Mossop, L., Dennick, R., Hammond, R., & Robbé, I. (2013). Analysing the hidden curriculum: use of a cultural web. *Medical Education*, 47(2), 134–143.

- Pearson (2007). HOPE Approach to Spiritual Assessment. Retrieved July 11, 2015 from, http://wps.prenhall.com/wps/media/objects/2791/2858109/toolbox/Table5_1.pdf
- Pallai, E. L., & Armijo, C. (2013). Narrative Medicine: A Pilot Program Integrating Creative Writing Pedagogy into Orthopaedic Medical Education. *UNM Orthopaedic Research Journal*, 2(0).
- Platt, F. W., Gaspar, D. L., Coulehan, J. L., Fox, L., Adler, A. J., Weston, W. W., Stewart, M. (2001). "Tell Me about Yourself": The Patient-Centered Interview. *Annals of Internal Medicine*, 134(11), 1079–1085.
- Polzer Casarez, R. L., & Engebretson, J. C. (2012). Ethical issues of incorporating spiritual care into clinical practice. *Journal of Clinical Nursing*, 21(15-16), 2099–2107.
- Ross, A., & Thomas, S. (2010). The Health Benefits of Yoga and Exercise: A Review of Comparison Studies. *The Journal of Alternative and Complementary Medicine*, 16(1), 3–12.
- Siloam Family Health Center. (2014). About. Retrieved from <http://www.siloamhealth.org/html>
- Spencer, J. (2003). Learning and Teaching in the Clinical Environment. *British Medical Journal*, 326(7389), 591–594.
- Ssebunnya, G. M. (2013). Beyond the hidden curriculum: The challenging search for authentic values in medical ethics education. *South African Journal of Bioethics and Law*, 6(2), 48–51.
- Starks, H., & Trinidad, S. B. (2007). Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, 17(10), 1372–1380.
- Suiter, S. (2015a). *Focus Group Protocols* [PowerPoint slides]. Retrieved from <https://blackboard.vanderbilt.edu/webapps/portal/frameset.jsp>
- Suiter, S. (2015b). *Interview Protocols* [PowerPoint slides]. Retrieved from <https://blackboard.vanderbilt.edu/webapps/portal/frameset.jsp>
- Suiter, S. (2015c). Lecture on Focus Groups. Personal Collection of S. Suiter, Vanderbilt University, Nashville, TN.
- Suiter, S. (2015d). Lecture on Interview Protocol. Personal Collection of S. Suiter, Vanderbilt University, Nashville, TN.
- Sulmasy, D. P. (2009). Spirituality, religion, and clinical care. *CHEST*, 135(6), 1634–1642.
- Tervalon, Melanie, & Murray-García, J. (1998). Cultural Humility versus Cultural Competence: A Critical Distinction in Defining Physician Training Outcomes in Multicultural Education. *Journal of Health Care for the Poor and Underserved*, 9(2), 117–125.

Vergheze, A. (2008). Culture Shock — Patient as Icon, Icon as Patient. *New England Journal of Medicine*, 359(26), 2748–2751.

Whitley, R., & Jarvis, E. (2015). Religious Understanding as Cultural Competence: Issues for Clinicians. Retrieved July 10, 2015 from, <http://www.psychiatrytimes.com/special-reports/religious-understanding-cultural-competence-issues-clinicians/>

World Health Organization | Social determinants of health. (n.d.). Retrieved July 10, 2015, from http://www.who.int/social_determinants/en/

Young, M. F. (1993). Instructional design for situated learning. *Educational Technology Research and Development*, 41(1), 43–58.