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ORIGINAL PAPER

Religion and Disparities: Considering the Influences of Islam on the Health of American Muslims

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Abstract Both theory and data suggest that religions shape the way individuals interpret and seek help for their illnesses. Yet, health disparities research has rarely examined the influence of a shared religion on the health of individuals from distinct minority communities. In this paper, we focus on Islam and American Muslims to outline the ways in which a shared religion may impact the health of a racially, ethnically, and socioeconomically diverse minority community. We use Kleinman's "cultural construction of clinical reality" as a theoretical framework to interpret the extant literature on American Muslim health. We then propose a research agenda that would extend current disparities research to include measures of religiosity, particularly among populations that share a minority religious affiliation. The research we propose would provide a fuller understanding of the relationships between religion and health among Muslim Americans and other minority communities and would thereby undergird efforts to reduce unwarranted health disparities.

Keywords Health disparities · Health outcomes · Healthcare accommodations · Cultural competence · Healthcare inequity

Introduction

The influence of religion on health disparities remains obscure. To date, religion and health research has tended to focus on the impact of generalized religiosity (e.g., religious

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importance and attendance at religious services), and in a limited way, specific religious practices on health outcomes without much attention to the way religion shapes health behaviors of individuals from a minority community (Levin et al. 2005). Health disparities research, on the other hand, typically groups individuals by race, ethnicity, and socioeconomic status, assuming that relevant health-related beliefs, social experiences, and cultures aggregate by these categories. As many have noted, this assumption can be only partially true (Aspinall and Chinouya 2008; Karlsen and Nazroo 2010; Nazroo and Karlsen 2001).

A shared minority religion is one health-related factor that often cuts across and often unites individuals from disparate racial, ethnic, and socioeconomic categories. Empirical research provides ample evidence that religions shape their adherents' understanding of disease and illness, their health-related behaviors, their interactions with and expectations of the healthcare system, and their adherence to medical recommendations (Ahmed et al. 2006; Carroll et al. 2007; Padela and Del Pozo 2010; Suwaidi et al. 2004). Moreover, well-established theories of health behavior, such as Arthur Kleinman's "cultural construction of clinical reality," make sense of how a shared religion might impact the health of minority communities (Kleinman et al. 1978). Despite both theory and data to support the influence of religion on health, little research has systematically examined the extent to which religious factors contribute to health disparities. The few studies that have tried to tease out the relationship between religion and health in minority communities suggest that religion exerts an independent influence upon health indicators when people from the same ethnic but different religious groups are compared (Karlsen and Nazroo 2010).

American Muslims are one minority group for whom a shared religious identity may have important health impacts that are independent of race, ethnicity, and socioeconomic status. American Muslims represent a growing minority population in the US that numbers between 5 and 7 million persons and is racially, ethnically, and socioeconomically diverse (American Muslims Demographic Facts 2009; Obama 2009; Smith 2002). While estimates vary, the largest subgroups within this community are native-born African Americans, immigrants from South Asia, and immigrants from the Middle East (American Muslims Demographic Facts 2009; Muslim Americans: Middle Class and Mostly Mainstream 2007). Each subgroup carries its own social and cultural history and is characterized by its own distribution across socioeconomic strata. While socially, culturally, and economically diverse, the American Muslim community shares a religious worldview that shapes its members' health-related behaviors and their interactions with the healthcare system. Few studies have sought to identify religion-associated health disparities among American Muslims, but those that have done so suggest Muslim religiosity can both hinder and promote the health of American Muslims (Laird et al. 2007a). American Muslims therefore constitute an ideal population for considering how a shared religion might independently influence the health of a minority community and might lead to health disparities that are not accounted for by racial, ethnic, and socioeconomic categories.

This paper focuses on American Muslims to make the case that health disparities researchers should expand their scope of study to include religious measures, particularly those of minority religious communities. Toward that end, we begin by using Kleinman's theory of the "cultural construction of clinical reality" (Kleinman 1980) and data from the available studies of American Muslim health to outline several pathways by which Islamic religiosity may shape how American Muslims evaluate and respond to their illness experiences. We then propose a research agenda that would extend current studies of health disparities to examine the impact of Islamic religiosity on American Muslim health, independent of race, ethnicity, and socioeconomic status. The research we propose will

have to overcome challenges that make it difficult to identify and collect reliable data regarding American Muslims. It will also need to elicit patients' and community leaders' accounts of why American Muslims make the decisions they do, and how those decisions relate, if at all, to a shared religious understanding.

Before proceeding further, we offer several qualifications. First, we do not argue that the influence of religion on the health of American Muslims is more important than the influence of race, ethnicity, or socioeconomic status; nor that the influence of religion can be fully separated from these and other factors. Rather, we suggest that Islam gives rise to distinctive values, ideas, and practices that cut across the categories of race, ethnicity, and socioeconomic status. We also recognize that Islamic religiosity—like any social force—acts on American Muslims in varied and partial ways. That colon cancer rates are higher among Black Americans does not imply that every Black American carries a higher risk of colon cancer. Similarly, that Islamic religiosity gives rise to health-impacting values and practices does not imply that Americans Muslims will be impacted by Islamic religiosity to the same extent or in the same ways. Moreover, groups that are predominantly Muslim also engage in cultural practices that have little or no relation to Islam. In this vein, we will use the terms *Islamic religiosity* to refer to the values and practices that are described in the sacred texts that Muslims generally recognize as authoritative. We will use the term *Muslim religiosity* to refer to the health-related actions of individuals and groups based on their interpretations of those texts. Our goal is to describe and make sense of the relationship between Muslim religiosity and health, not to make normative judgments about how Islam is interpreted by one group or another. Finally, insofar as possible, we speak about American Muslims and cite data from the United States; Muslims living in other contexts will have different social experiences and interact with different healthcare systems.

Constructing the Relationship Between a Minority Religion and Health

Arthur Kleinman's work on the "cultural construction of clinical reality" (Kleinman 1980; Kleinman et al. 1978) provides a particularly useful framework for thinking about how religion may influence health and healthcare-seeking behaviors. Kleinman argues that the illness experience is shaped by cultural factors that govern the way individuals perceive, label, evaluate, and seek help for their ailments within an overarching healthcare system. For Kleinman, a healthcare system represents the totality of socially organized responses to illness. Existing outside of individuals and discrete institutions, healthcare systems are culturally informed social realities that legitimate illness, construct the illness experience, and define social roles for both patients and healers (Kleinman 1980). Kleinman describes three structural domains of any healthcare system: popular (family, social network, and community), folk (nonprofessional healers), and professional. Social roles and cultural values inform the choices individuals make to seek help from one or more of these structural domains, and they govern the interactions between healers and patients in all of them. Religions act in part to define social roles and inculcate distinctive cultural values. Religions thereby contribute to the "cultural construction of clinical reality" (Kleinman 1980) by shaping the way individuals perceive, label, and evaluate their illnesses, and by guiding individuals' choices regarding when, how, and from what domains of the healthcare system to seek help.

Islamic Religiosity and the Cultural Construction of Illness Among American Muslims

In what follows, we flesh out Kleinman's framework as it applies to the cultural construction of health among American Muslims. Although studies of Muslim religiosity and health are few, those few studies point to several ways that a shared religion influences how American Muslim perceive, evaluate, and seek help for their illnesses. Insofar as health is defined by the conventions of American medicine, this influence can both hinder and promote health (Laird et al. 2007b).

A God-Centered Framework for Interpreting Health and Illness

Several studies have found that American Muslims often interpret their experiences through an explanatory model for illness (Kleinman's terminology) that is strongly informed by Islam. Many American Muslims, then, construct their "clinical reality" in relation to Islam, and their Islam-informed explanatory model determines whether, when, and how to seek help from conventional allopathic medicine (professional domain) and when to seek help from more explicitly Islam-based modes of healing (folk and popular domains).

To begin, Islamic values shape American Muslims' judgments regarding which experiences should be seen as problems, and which problems should be addressed as illnesses. For example, a study of Somali women receiving prenatal care in San Diego found that they "did not favor contraceptive advice or practices," because they interpreted pregnancy not as a problem but as a "blessing from God" (Beine et al. 1995). Alternatively, having an undesirable appearance may be experienced as a problem, but not one to be addressed as an illness. Muslim bioethicists, for example, have expressed concern that some cosmetic surgeries may violate the Quran'ic injunction against "changing the creation of Allah" (Moosa 2009, 2012), and some Muslims avoid using cosmetic medications and surgeries for esthetic enhancement (Atiyeh et al. 2008).

A God-centered Islamic framework may at times emphasize the spiritual causes of illness, and conditions that might be treated medically are instead addressed as spiritual ills. A study of immigrant Pakistani families found that they tended to think of health as involving the physical, social, and spiritual domains, and whether they sought medical treatment for a given condition depended on which domain they thought the condition came from (Jan and Smith 1998b). In addition, like many other religions, Islam acknowledges the possibility of spiritual possession states (Glaser 1978; Leavey 2010). Some American Muslim patients and their families view altered behavioral patterns as the manifestation of *jinn* possession, and they forego psychiatric consultation in favor of spiritual treatments obtained from religious leaders (Padela et al. 2011; Sheikh 2005).

A God-centered Islamic framework may also lead American Muslims to interpret their illnesses as directly caused by God or at least part of God's will. For example, a study of African American, Arab American, and South Asian American Muslims found that participants attributed both health and illness to God's decree; human agents were thought to play a secondary but complementary role (Padela et al. 2012b). In another study, Johnson and colleagues interviewed South Asian women and found that breast cancer was often seen as a "disease of fate" decreed by God (Johnson et al. 1999). Among Somalis in Minnesota, Deshaw and Deshaw also observed a fatalistic belief that disease is primarily the will of God, and the authors commented that this notion may pose a barrier to seeking preventive care (DeShaw 2006). An American Muslim may also believe he is experiencing illness to atone for past sins and thus embrace the illness as a means of penance. For

example, in a study of Arab American immigrants in New York, respondents commented that cancer was a punishment from God for their religious failings (Shah et al. 2008). To the extent individuals see a particular illness as resulting from the will of God or from their own spiritual failings, they may decide that that illness is not a condition medicine should treat—a fatalistic response found also among adherents to other religions (Franklin et al. 2007). Yet, believing that illness is willed by God may also provide positive resources in the face of illness, as when this belief provides psychological reserve to a cancer patient undergoing an arduous course of chemotherapy (Pargament 1997; Powe and Finnie 2003).

In a God-centered Islamic framework, American Muslims might turn to Islam itself as a source of healing (Alrawi et al. 2011). First, Muslims may believe that health is constituted by, and results from, following the teachings and practices of Islam. Accordingly, Muslims may turn to worship practices in order to restore the health that is lost. A study of Afghani elders in California found that they believed an individual's health depended upon whether the individual adhered to Islamic guidelines and performed religious rituals, and the elders engaged in worship practices for the purpose of healing (Morioka-Douglas et al. 2004). Several other authors have noted that American Muslim patients experience physical and psychological benefits from practices such as prayer, fasting, and recitation of the Qur'an (Carroll et al. 2007; Jan and Smith 1998a; Morioka-Douglas et al. 2004). The empirical relationships between individual worship practices and health are not well-studied in this population, but believing that worship brings healing may move American Muslims to attend religious services and thereby derive health benefits from religious social support.

In addition to using Islamic worship practices for healing, American Muslims might turn to traditional medicinal practices that are described in the sacred texts of Islam—the Quran and the *hadith* (prophetic traditions). These practices span both the popular and the folk healing domains according to Kleinman's topology. The popular domain includes practices that are accessible to the laity, such as the use of black seed and other herbs, and special foods such as honey. The folk domain includes practices that are prescribed or conducted by specialized healers, such as cupping (Alrawi et al. 2011). Importantly, individuals may use Islamic healing practices as an addition to the treatments offered by the professional medical domain, or as an alternative to those treatments. In the latter case, by turning to Islamic healing practices, some American Muslims delay or altogether avoid seeking medical attention from which they would benefit. There is little empirical data to describe how American Muslims make these decisions or how often the decisions occur.

An Ethico-Legal Framework for Making Clinical Decisions

Aside from providing a God-centered framework through which illness is culturally constructed and interpreted, Islam also provides an ethico-legal framework to guide practical clinical decisions. As Inhorn and Serour comment, "undertaking medical care that is permissible according to Islam" is of paramount concern to many Muslims (Inhorn and Serour 2011). The Islamic ethico-legal tradition focuses on the study of sacred texts and from those texts derives knowledge to guide righteous action. Although the tradition is both deep and broad, covering an array of issues patients may face, we here gesture only to a few areas in which research has found that Muslim patients base their health-related behaviors on the Islamic ethico-legal tradition.

The Islamic ethico-legal tradition includes proscriptions, prescriptions, and permissions of health-related behaviors that impact American Muslims' health. Some of this impact occurs apart from and prior to Muslims' interactions with the healthcare system. Islam proscribes several behaviors that convey obvious health risks, including smoking and

alcohol consumption, and several studies suggest that these prohibitions convey a health advantage for Muslims (Carroll et al. 2007; Islam and Johnson 2003; Morioka-Douglas et al. 2004), much as similar prohibitions do for Mormons (Merrill and Lyon 2005). Islam also prescribes some behaviors that convey obvious health benefits, including breast-feeding. According to a *hadith*, the Prophet stated "no mouthful of milk flows from [a mother]… except that she has a reward with every mouthful and with every suck" (Maqbool 2005), and a study of Muslim American women found that they cited their faith as a motivation to breast-feed (Ghaemi-Ahmadi 1992). Insofar as these proscriptions and prescriptions are followed, Islamic religiosity may lead to improved health outcomes for American Muslims. At the same time, the Islamic ethico-legal framework may permit (even if it does not encourage) behaviors that pose health risks. For example, although a *hadith* recommends marrying outside of close lineal circles, Islamic law does not prohibit first cousins from marrying one another. How frequently American Muslims marry first cousins is not known, but a study in Montreal found that children born to such unions have a higher risk for genetic disease (Hoodfar and Teebi 1996).

Within the professional domain of the American healthcare system, the Islamic ethico-legal framework governs the treatments Muslim patients are willing to receive and the manner in which they are willing to receive them. Several therapies that are offered by conventional American medicine are problematic within an Islamic ethico-legal framework. For example, Islam prohibits consuming pork, and some Muslims will reject the use of porcine-based medications, including vaccines (Padela 2010). Islam also prohibits the use of donor gametes, and a study of Arab men presenting to an infertility clinic in Michigan found that many were concerned to observe that prohibition (Inhorn and Fakih 2006). Islamic verdicts on the permissibility of organ transplantation have conflicted, some supporting transplant and others opposing it (al-Kawthari 2004) (Padela et al. 2010). In light of this ambiguity, it is not surprising that a study of Arab Americans found that Muslims among them were less likely to endorse organ donation after death (Padela et al. 2010). Although Islam does not proscribe sedating medications, the ethico-legal tradition discourages use of mind-altering substances. As a result, some Muslims will be reticent to use narcotics and sedatives. Indeed, Davidson and colleagues observed that some Muslims are willing to limit sedatives at the end-of-life so as to facilitate prayer (Davidson et al. 2008). Each of the above examples illustrates how the Islamic ethico-legal framework influences the treatments Muslim patients are willing to receive.

The Islamic ethico-legal framework also governs the manner in which American Muslims are willing to receive treatments to which the tradition has no objection. The most common issue that comes up in this respect is receiving medical care in a way that respects the central Islamic value of modesty. Multiple studies note that American Muslim men and women often seek gender-concordant physicial examinations. (Beine et al. 1995; Matin and LeBaron 2004; Morioka-Douglas et al. 2004; Padela et al. 2012a; Reitmanova and Gustafson 2008; Simpson and Carter 2008). Concerns about modesty may prevent some Muslim patients from receiving medical treatment they would otherwise accept. For example, a study of cervical cancer screening practices found that some Muslim women believed gynecological examinations threatened their modesty and even virginity (Matin and LeBaron 2004), and Padela et al. (2012a) found that the healthcare-seeking patterns of American Muslim women are influenced by whether or not they can choose a female provider. Obviously, to the extent concerns about modesty prevent genital or breast examinations, these concerns may pose significant obstacles to routine screening for cancer and may thereby generate religion-associated health disparities.

A Socially Marginalized Identity

To this point, we have described ways that Muslim religiosity shapes the cultural construction of illness by American Muslims, but Muslim religiosity may also elicit responses from non-Muslims that adversely impact the health of American Muslims. Muslim identity has visible signs. Muslims may wear distinctive clothing such as the *hijab* (the Muslim headscarf) for women and the *kufi* (a skullcap) for men. As is true for the Hindu *bindi* or the Jewish *kippah*, these articles allow their wearers to be identified with a specific religion. Apart from clothing, Muslims engage in practices such as praying at regular intervals, which make their relationship to Islam visible. These signs and practices convey a social identity that at times elicits Islam-directed prejudice and discrimination.

Indeed, data suggest that since September 11, 2001, Islam-directed discrimination and social marginalization has led to adverse health outcomes for those who are socially identifiable as Muslims in America (Abu-Ras and Abu-Bader 2009; Inhorn and Serour 2011; Lauderdale 2006; Padela and Heisler 2010). For example, in a representative sample of 1,016 adult Arab Americans living in greater Detroit, Padela and Heisler (2010) found that one-quarter reported personal or familial abuse following the 9/11 attacks, with higher rates among Muslims than Christians. Reports of abuse were associated with higher levels of psychological distress, lower levels of happiness, and lower self-reported well-being (Padela and Heisler 2010). Similarly, women in California with Arabic names had significantly higher risk of delivering preterm and low-birth-weight infants in the 6-month period following the attacks as compared to the same period the year prior (Lauderdale 2006). In a focus group study of immigrant Arab Americans, women commented that wearing the *hijab* led to discrimination and abuse that took a toll on their physical and mental health (Shah et al. 2008). Studies in other minority populations have demonstrated that perceived discrimination and abuse may lead to psychological ailments such as depression or to maladaptive behavioral patterns such as smoking, both of which diminish health (Brown et al. 2000; Williams et al. 2003). Moreover, to the extent that the experience of hostility in the public arena makes it difficult for American Muslims to develop a robust communal life, religion-directed discrimination deprives American Muslims of the health-promoting aspects of social connection and communal solidarity.

Unfortunately, American Muslims also often experience discrimination in their interactions with the healthcare system, making it harder for them to access the medical care they seek. Among Arab American immigrants in New York, Shah and colleagues' found that women who wear the *hijab* said their healthcare providers often presumed they were ignorant and had abusive husbands, and at times refused them medical care (Shah et al. 2008). Another study of American Muslim women found that many reported that their clinicians treated them as if they were "stupid" and misinterpreted their concerns for modesty as shame regarding their bodies (Reitmanova and Gustafson 2008). Similar experiences were found in a small study of Muslim women in the rural South, who "did not feel their experiences with local healthcare providers were comfortable or beneficial" (Inhorn and Serour 2011; Simpson and Carter 2008).

Studying Religion-Associated Disparities in the Health of American Muslims

To this point, we have made the case that Islamic religiosity impacts the social construction of illness by American Muslims enough to substantially impact their health behaviors and outcomes. This case is supported both by Kleinman's well-established theory of the

cultural construction of clinical reality and by the limited data available regarding the American Muslim health behaviors and outcomes. Yet, much more research is required to fill in the many gaps in our understanding of how a shared religion impacts the health outcomes of diverse American Muslim communities. In the remainder of this paper, we outline an agenda for studying religion-associated disparities in the health of American Muslims, highlighting how the research we propose would undergird efforts to reduce health disparities among American Muslims and other minority communities in the United States.

Extending the Health Disparities Research Paradigm

The agenda we propose would extend the current paradigm of disparities research to include measures of religiosity, particularly among populations that share a minority religious affiliation (e.g., Islam). Studying religion-associated differences in health outcomes would represent a paradigm shift for traditional health disparities research, which until now has focused on three factors: race, ethnicity, and socioeconomic status. Indeed the legislation that authorizes the Agency for Healthcare Research and Quality (AHRQ) to conduct disparities research asks the agency to report on "prevailing disparities in healthcare delivery as they relate to racial factors and socioeconomic factors,"(Kelley et al. 2005) and the AHRQ's National Healthcare Disparities Report measures access and quality of care across these three dimensions. Religion is mentioned in the National Healthcare Disparities Report only as a potential "cultural barrier" to medical care that sometimes tags along with minority race and ethnicity.

In contrast, the agenda we propose would treat religiosity as an independent health factor, reducible neither to ethnicity nor to "cultural barrier." As Beckford et al. note, especially among minority groups, "there are often clear areas of overlap between aspects of religion and aspects of ethnicity in both the self-understanding of people and their experience of unfair treatment, disadvantage, and discrimination," but "the dimension of "religion" should not be completely collapsed into that of "ethnicity" nor vice versa. Rather, their complex relationship needs to be borne in mind and teased out in each specific context that is under consideration" (Beckford et al. 2006). In addition, while the concept of "cultural barrier" might apply to not receiving cervical cancer screening because of concerns about modesty, or avoiding vaccines because of concerns about ingesting pork, it does not adequately describe the ways Islamic religiosity leads to a God-centered framework for interpreting illness. Moreover, if health care includes "the timely use of personal health services to achieve the best health outcomes," as the Institute of Medicine asserts (Kelley et al. 2005), then Islamic religiosity can also act as a facilitator of health, by discouraging unhealthy behaviors such as smoking and by encouraging healthy behaviors such as breast-feeding, sexual monogamy, and seeking professional medical help when indicated.

In addition, thinking of Islamic religiosity as merely a cultural barrier to healthcare obscures, the way that religion-directed discrimination may impact American Muslim health. As such, measuring Islamic religiosity fits within what some call fourth-generation disparities research (Thomas et al. 2011). Advocates of this research argue that the "shift away from race to ethnic group (in disparities research) minimizes the health impact of racism for populations subjects to social prejudice" (Thomas et al. 2011). They worry that disparities researchers are neglecting to use the tools needed to measure the impact of discrimination and racism. Insofar as racism includes "the state-sanctioned and/or extra-legal production and exploitation of group differentiated vulnerability to premature death"

(Gilmore 2007), one could argue that the social marginalization that many American Muslims experience exposes them to the health-diminishing effects of racism. However, until researchers measure Muslim religiosity, they cannot assess the extent to which religion-directed discrimination impacts the health of American Muslims.

For all of these reasons, the health disparities research paradigm should be extended to include measures of religiosity, at least among populations for whom being part of a minority religion may confer particular health challenges. American Muslims are one prominent example of such populations.

Challenges that must be Overcome

In order to study religion-associated health disparities among American Muslims, researchers must overcome several methodological challenges. The first challenge is identifying American Muslims within existing healthcare databases. Because few healthcare databases include measures of religious affiliation, some investigators have tried to develop algorithms that use available data to identify people who are *likely* to be Muslim. For example, Curlin and colleagues have used lists of typically South Asian or Arabic surnames to identify physicians who are more likely to be Muslim. The limitation of this strategy is that the majority of Arabs and South Asians in the United States are not Muslim. Indeed, Curlin and colleagues have found that only 40–53 % of physicians with an Arabic surname identified themselves as Muslim, and the proportions were even lower (3–16 %) among those with South Asian surnames (Curlin et al. 2009, 2010, 2011). Moreover, 20 % of American Muslims are indigenous African Americans, who, unless they or their parents have Arabicized their names, will not be captured by such algorithms (Muslim Americans: Middle Class and Mostly Mainstream 2007). It is possible, however, that researchers could develop more precise algorithms by combining surnames with measures of race, ethnicity, immigration history, neighborhood characteristics, and other variables. The purpose of such algorithms would be to generate a measure of the likelihood that an individual with a specific set of characteristics will identify their religious affiliation as Islam. Such algorithms would enable investigators to use existing databases to look for differences between American Muslims and other populations—at least insofar as those differences are large enough to appear despite the imprecise identification of American Muslims.

Measuring Islamic religiosity directly has many advantages, but here lies a second challenge. Although measuring religious affiliation among Muslims—Sunni or Shiite—is fairly straightforward, measuring religious commitment and practice is not. Many researchers use frequency of attendance at religious services as a proxy for general religiousness. This construct appears to distinguish more and less religious individuals among Jews and Christians of different denominations. Attending public worship services, however, does not have the same significance for Muslims as it does for Christians or Jews, since daily prayers can be performed at home and need not be clergy-mediated. Moreover, women are not obligated to attend communal prayers; indeed, some religious authorities teach that praying at home is more meritorious for women (Ansari 2006; Usmani 2012). For these reasons, frequency of attending religious services may be a problematic measure of Islamic religiosity. At the same time, few Islam-specific measures of religiosity have been developed, and none have been validated within diverse ethnic and racial subgroups of American Muslims. The research agenda we propose depends on developing such measures—ideally including measures of the extent to which a Muslim embraces Islam as a God-centered framework for evaluating and responding to illness, and the extent to which a Muslim tries to live in accord with Islamic ethico-legal traditions. Developing such

constructs and their measures will be a crucial first step for any program of research to quantitatively assess religion-associated health disparities among American Muslims.

The third challenge that must be overcome is to better understand the etiology of religion-associated health disparities among American Muslims, wherever those disparities exist. This requires studying Islam as a lived religious tradition in order to better understand how this tradition shapes its adherents' health-related behaviors and health outcomes. Such research would require ethnographic studies that evoke patients' and community leaders' accounts of why American Muslims make the decisions they do, and how those decisions relate, if at all, to a shared religious understanding.

If researchers can overcome these challenges, they will begin to understand how Muslim religiosity independently influences American Muslims' health and healthcare-seeking behaviors. Moreover, studies of the American Muslim experience might provide a model for mapping out the influence of religious practices and behaviors on the health and healthcare-seeking behaviors of other minority populations that share a religion but are otherwise ethnically and racially diverse. Ultimately, this research will help to ground efforts to improve American Muslim health.

Conclusion

Both theory and data suggest that a shared religion can shape the cultural construction of illness enough to substantially impact the health outcomes of a minority population. With respect to American Muslims, Islam provides a God-centered framework for interpreting health and illness and an ethico-legal framework for making clinical decisions. Muslim religiosity also conveys a socially marginalized identity to American Muslims, which may elicit Islam-directed discrimination both outside and inside the healthcare system.

In order to better understand how Islam impacts the health outcomes of diverse American Muslim communities, health disparities researchers should expand their domain of inquiry to include measures of Muslim religiosity. By doing so, researchers will generate a fuller understanding of how diverse social and cultural factors impact health outcomes among minority communities in the United States. At the same time, this research promises to help healthcare stakeholders and leaders in American Muslim, and other minority communities identify practical steps to improve health while respecting religious values and concerns.

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