



INITIATIVE ON
ISLAM AND MEDICINE

THE UNIVERSITY OF CHICAGO

THE INFLUENCE OF RELIGION UPON AMERICAN MUSLIM MAMMOGRAPHY BELIEFS AND PRACTICES

Aasim I. Padela MD MSc

Assistant Professor of Medicine

Director, Initiative on Islam & Medicine

Ha Vu, Hadiyah Muhammad, Farha Marfani, Saleha
Mallick, Monica Peek, Michael Quinn



**American
Cancer
Society®**

OBJECTIVES

- Persuade you to accept that religion influences American Muslim mammography practices across racial/ethnic/socioeconomic lines (albeit in varied ways)
- Assure you that our research and intervention strategy relating religion to health is a valid and robust one
- Encourage you to accept that the religious tailoring of healthcare messages can impact health behavior changes

AMERICAN MUSLIMS

■ Ethnically/Racially Diverse

- ~5-7 million
 - 20-24% Indigenous African American
 - 18-26% South Asian
 - 24-26% Arab

■ Socio-economically Diverse

- 65% Foreign-born, 35% Native
- African Americans: lower socioeconomic strata
- Arab & South Asians: skilled laborers, business owners

Ba-Yunus I. *Muslims of Illinois, A Demographic Report*. Chicago: East-West University;1997.

Smith TW. The Muslim Population of The United States: The Methodology of Estimates *Public Opinion Quarterly*. 2002 2002;66:404-417.

Muslim American Demographic Facts. 2000; <http://www.allied-media.com/AM/>. Accessed July 10, 2009.

Muslim American Demographic Facts. [cited 10 July 2009]. Available from:

Muslim Americans: A National Portrait - An In-depth Analysis of America's Most Diverse Religious Community. The Muslim West Facts Project. Washington, DC: Gallup; 2009.

RELIGION INFLUENCES HEALTH

■ Islamic Beliefs

■ Perceptions of Illness & Disease

- Pregnancy is a “blessing” → attitudes towards contraception
- Cancer is based on God’s decree → attitudes towards prevention

■ Islamic Values & Ethics

- Reduced alcohol consumption → decreased health risks
- Gender concordance → influences healthcare seeking patterns

■ A Muslim Identity

- Discrimination → Delayed healthcare seeking patterns

AMERICAN MUSLIMS & MAMMOGRAPHY RATES

- All Muslim samples (4 studies)
 - Mammogram Ever- 69-73%
 - Biennial (past 2 years or adherence) – 52-61%
- Decreased Mammogram Utilization linked to access and education
 - Muslims are as likely as the general population to have household incomes of > \$100,000 and have higher than average levels of education
 - >80% are English-literate and have access to a physician
- No formal assessment of the impact of religion upon screening behaviors

Boxwala FI, Bridgemohan A, Griffith DM, Soliman AS. Factors associated with breast cancer screening in Asian Indian women in metro-Detroit. *Journal of immigrant and minority health / Center for Minority Public Health*. Aug 2010;12(4):534-543.

Gomez SL, Tan S, Keegan TH, Clarke CA. Disparities in mammographic screening for Asian women in California: a cross-sectional analysis to identify meaningful groups for targeted intervention. *BMC Cancer*. 2007;7:201.

Ponce N. A. GM, Brown R.E. *Health Policy Fact Sheet: Cancer Screening Rates Among Asian Ethnic Groups*. University of California;2003.

Kagawa-Singer M, Pourat N, Breen N, et al. Breast and cervical cancer screening rates of subgroups of Asian American women in California. *Med Care Res Rev*. Dec 2007;64(6):706-730.

RESEARCH DESIGN

Community Partnership Building

- Council of Islamic Orgs of Greater Chicago
- Muslim Women Resource Center
- Arab American Family Services

Evidence Gathering

- Phase 1-Surveys
- Phase 2a-Focus Groups
- Phase 2b-Individual Interviews

Mosque-Based Community Intervention Development

- Sermons
- Peer health education workshops

Associations Between Religion-Related Factors and Breast Cancer Screening Among American Muslims

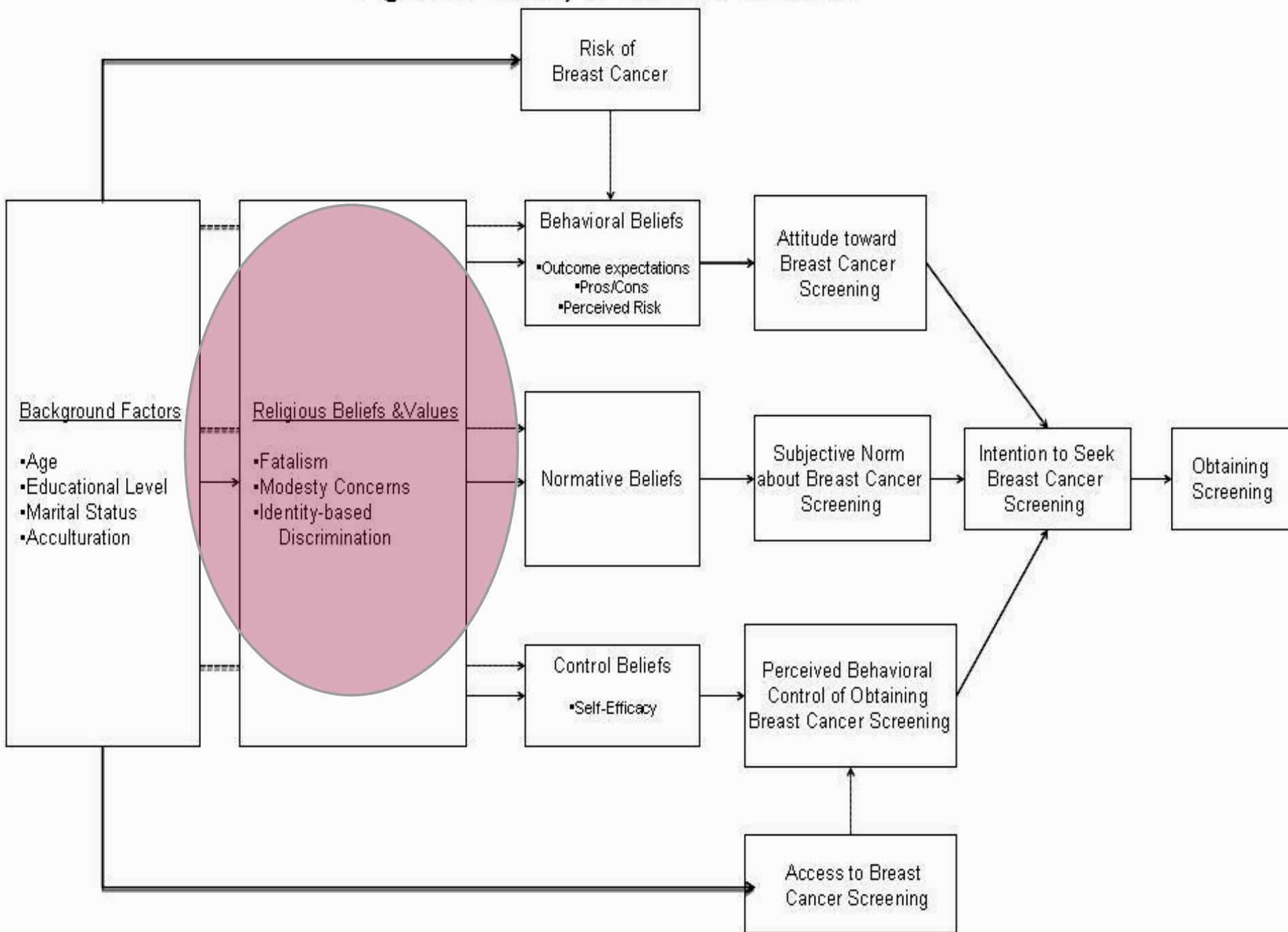
Aasim I. Padela • Sohad Murrar • Brigid Adviento •
Chuanhong Liao • Zahra Hosseinian •
Monica Peek • Farr Curlin

- 240 African American, Arab, & South Asian Muslim participants (>40 yrs age, purposive sampling)
 - Recruited from 11 mosques and Muslim community organizations
 - **37% of the women did NOT have a mammogram in the past 2 yrs**
- Religion-Related Predictors
 - **Perceived Religious Discrimination in Healthcare (OR=0.74; $p < .05$)**
 - **Positive religious coping (OR=0.21; $p < .05$)**
 - **“I remember that Allah commanded me to be patient.”**
 - **“I do what I can and put the rest in Allah's hands.”**

PHASE 2 – FOCUS GROUPS & INTERVIEWS

- **123 African-American, Arab, & South Asian women aged 40+ recruited from mosques**
 - **50 women attended 6 focus group sessions**
 - **19 additional women recruited for semi-structured interviews to clarify focus group findings**
- **The Theory of Planned Behavior used to develop interview guide and analytic domains**
 - **What are the salient normative, behavioral and control beliefs regarding mammography screening**
 - **In what ways does Islam relate to those beliefs?**

Figure 2: Theory of Planned Behavior



Qualitative Analysis Illustration

Focus Groups

Islamic Foundation School
Predominantly South Asian

Masjid Al-Ihsan
African American

Orland Park Prayer Center
Arab

Mosque Foundation
Predominantly Arab

Muslim Education Center
South Asian

Nigerian Islamic Assoc. of USA
Nigerian

Salience is defined as the discussion of a particular theme in three or more focus groups.

Dominance is defined as the discussion of a particular theme by half or more participants within each focus group.

Beliefs highlighted in red are both salient and dominant. They are also influenced by religion.

Theory of Planned Behavior Behavioral Beliefs & Belief Statements

Peace of mind: A negative mammogram result gives me peace of mind.

Positive experiences with technicians: I believe that I will have access to a nice technician.

Getting screened for the sake of family: I believe my family should know my health status.

Family history leading to an increased risk of breast cancer: I should get screened because breast cancer may run in my family.

Fear of mammogram results: Fear makes it difficult for me to get mammogram.

Physical pain: I believe mammograms are painful.

Primary prevention actions: I believe certain health behaviors can help prevent disease.

Secondary prevention actions: I believe breast self-exams and mammograms can help prevent disease.

Feeling of obligation to care for one's health: I believe it is my responsibility, as a Muslim, to take care of my body.

Methods of preventing illness: I believe certain religious practices can help prevent disease.

Theory of Planned Behavior Normative Beliefs & Belief Statements

Cultural taboo: I believe it is difficult to speak about mammograms and breast cancer in my community.

Positive influence from family: I believe my family members will support me getting a mammogram.

Positive influence from friends: I feel comfortable talking to my friends about mammography.

Normative beliefs: Community members support my getting a mammogram.

Theory of Planned Behavior Control Beliefs & Belief Statements

Insurance: Insurance policies or the lack of insurance makes getting a mammogram difficult.

Family over self: I put my family's needs and priorities over my own.

Fatalistic beliefs: It is by Allah's will whether I am sick or cured.

Other Beliefs & Belief Statements

The comfort of gender concordance: I am more comfortable with a female provider.

RELIGION-RELATED THEMES

- **Perceived duty to care for one's health**
 - I believe it is my responsibility, **as a Muslim**, to take care of my body (6/6 FGs dominant in 2)
- **Methods of Disease Prevention**
 - I believe certain **religious practices** can help prevent disease (4/6 FGs; dominant in 2)
- **Fatalistic Notions about Health**
 - It is by **Allah's will** whether I get sick or am cured of illness (5/6 FGs; dominant in 5)
- **Comfort with Gender Concordant Healthcare**
 - I am more comfortable with a female provider (5/6 FGs; dominant in 1)

PERCEIVED DUTY TO CARE FOR ONE'S HEALTH

“Allah says you have to take care of yourself. Part of taking care of yourself is visiting the doctor, checking out yourself... you can also pray spiritually, but you still need to take your medicine.”

(Nigerian Participant)

“As Muslims we should really be taking care of ourselves and our body because that’s – it’s a loan from Allah and we should really be taking care of that loan because we have to return it too.”

(South Asian Participant)

“Allah gave us a body to take care of... we call (it-concept) “amana” which is you know and like if someone gives you like a gift or something you take care of it.”

(Arab Focus Group Participant)

METHODS OF DISEASE PREVENTION

“You have to take medicine and then pray to God to give you a speedy recovery .”

(Nigerian Participant)

“I pray regularly even if I go to the doctor, asking for good health – that’s one, number one in the list.”

(South Asian Participant)

“I pray to Allah every day...heal this body in line whatever it is needs healing.”

(African American Participant)

FATALISTIC NOTIONS ABOUT HEALTH

“They told me I might have cancer on my liver. Blah, blah, blah. I said, “Look, if this is what Allah (Arabic word for God) wants, I’m ready.”

(African American Participant)

“I mean if Allah’s going to give it to you, he’s going to give it to you.”

(African American Participant)

“I believe in God 100%. What’s going to happen is going to happen.”

(Arab Participant)

COMFORT WITH GENDER CONCORDANT HEALTHCARE

“If I went in there and I found out it was going to be male physician, I’ll probably just walk right back out or I’ll stay there until they find me somebody who’s going to be a [lady].”

(South Asian Participant)

“Like if I had a male doctor, I couldn’t talk him... because he’s a stranger to me. Probably if it was a female, I would open up and tell everything.”

(South Asian Participant)

PUTTING IT ALL TOGETHER

Survey

- Religious Coping → Decreased Mammography
- Fatalism not associated with mammography

Interviews

- Religious Practices are a Form of Prevention
- Fatalism ~ Determinism but not lack of Agency nor excludes seeking healthcare

Intervention Messaging

- Highlight religious “duty to care for body as God’s gift”
- Present mammography as an action that coheres with this duty

PUTTING IT ALL TOGETHER

Survey

- Perceived Religious Discrimination in Healthcare → Decreased Mammography
- Level of modesty not associated with mammography utilization

Interviews

- No mention of discrimination experiences informing behavioral, normative or control beliefs
- Gender concordant care is “more comfortable”

Intervention Messaging

- Patient-centered and culturally competent care delivery is an objective for healthcare system
- Patients should feel empowered to ask about gendered care provision regarding mammogram (most services are) and to share aspects of their religious beliefs with providers

OTHER IMPLICATIONS FOR THE INTERVENTION

Sermon Content Messaging

Teach the religious concept that the body is a trust

Educate community about destiny and free will

Remind community about the importance of prioritizing one's health concerns

Pain and Fear should not be barriers to fulfilling religious duties

Peer health educators

Provide information about the process of getting a mammogram to dispel myths

Provide social support to reduce shame of talking about breast cancer and women's health within community settings

ACKNOWLEDGMENTS

Academic

Funmi Olopade MD
Zahra Hosseinian, MA
Caitlin Ajax, BA
Alia Azmat, BS
Hina Muneeruddin, BS
Maha Ahmed, BS
Tasmiha Khan, BS

Funders

American Cancer Society
(Institutional Research Grant
#58-004, Mentored Research
Scholar Grant in Applied and
Clinical Research)
NCI Cancer Center Support Grant
(#P30 CA14599)

Community Advisory Board

Council of Islamic
Organizations of Greater
Chicago (Ahlam Jbara, Dr.
Zaher Sahloul, & Dr.
Mohammed Kaiseruddin)

Muslim Women Resource
Center (Sima Quraishi)

Arab American Family
Services (Itedal Shalabi)

Chicago Metropolitan
Educational Center for
Community Advancement (Dr.
Bambade Shakoor-Abdulla)

QUESTIONS

TPB BEHAVIORAL BELIEF

Theory of Planned Behavior Behavioral Beliefs & Belief Statements

Religious obligation: I believe it is my responsibility, as a Muslim, to take care of my health.

Religious prevention actions: I believe certain religious practices can help prevent disease.

Fear of mammogram results: Fear makes it difficult for me to get mammogram.

Physical pain: I believe mammograms are painful.

Primary prevention actions: I believe certain health behaviors can help prevent disease.

TPB NORMATIVE BELIEF

Theory of Planned Behavior Normative Beliefs & Belief Statements

→ **Cultural taboo:** I believe it is difficult to speak about mammograms and breast cancer in my community.

Positive influence from family: I believe my family members will support me getting a mammogram.

Positive influence from friends: I feel comfortable talking to my friends about mammography.

Normative beliefs: Community members support my getting a mammogram.

TPB CONTROL BELIEF

Normative beliefs: Community members support my getting a mammogram.

Theory of Planned Behavior Control Beliefs & Belief Statements

Religious fatalism: It is by Allah's will whether I am sick or cured.

Family over self: I put my family's needs and priorities over my own.

Insurance: Insurance policies or the lack of insurance makes getting a mammogram difficult.