

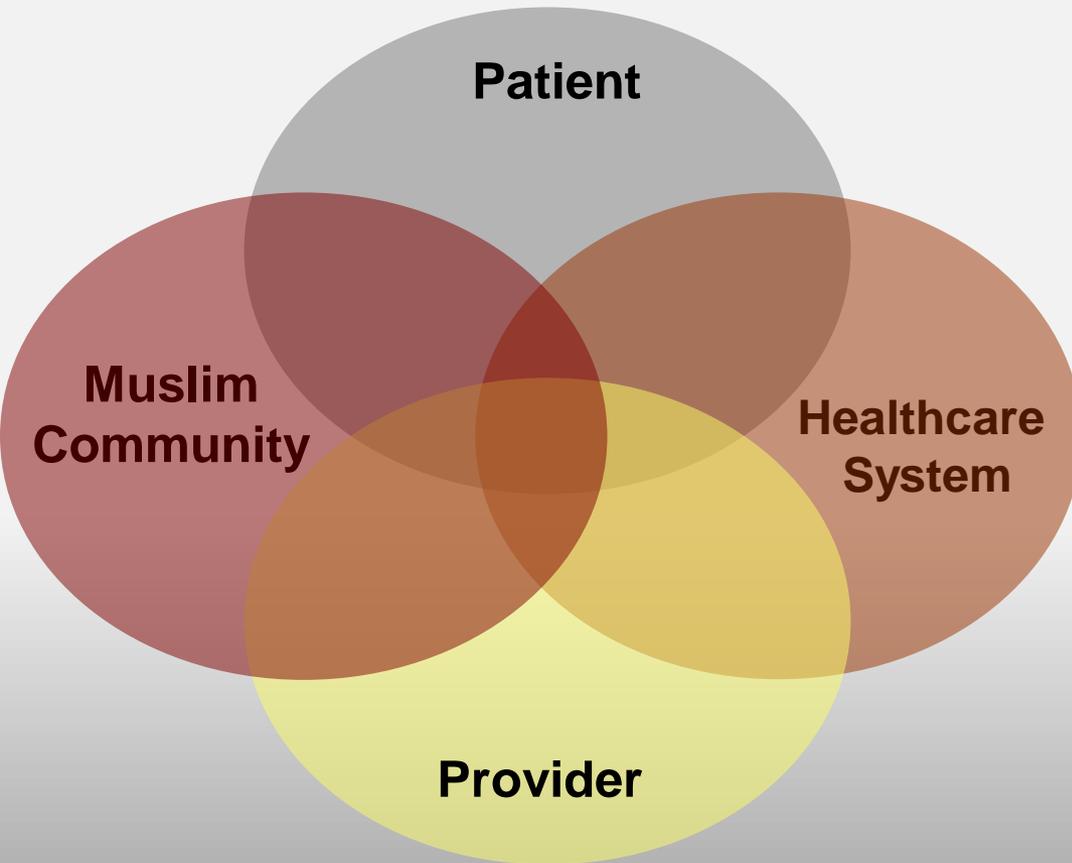
Exploring Associations Between Breast Cancer Screening Practices & Religious Concepts among American Muslims

Aasim I. Padela MD MSc
apadela@uchicago.edu

Requests

- Feedback on research proposal
 - 3 areas
 - Measures [depth]
 - Sampling [breadth]
 - Data Analysis [implications & power]
- Suggestions on next steps
 - Aims for a K-award to NCI

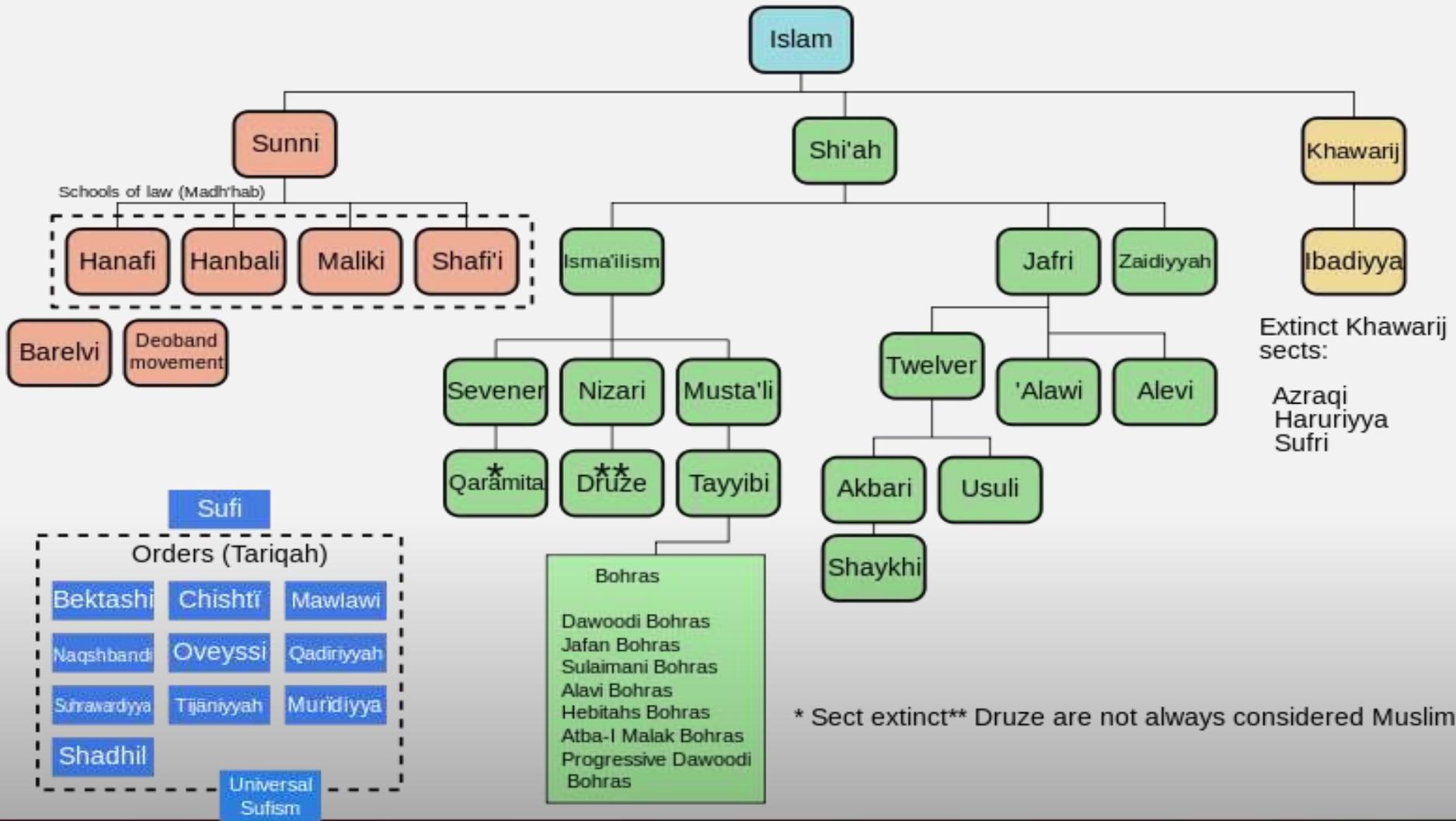
Research Interests



- Islam influences
 - Patient Health Behaviors
 - Provider Practice of Medicine
 - Bioethical decision-making
- Cultural Accommodations
 - Who [What values] ?
 - How [to what extent] ?

American Muslims

- Demographically Diverse
 - ~7 million
 - 20-24% Indigenous African American
 - 18-26% South Asian American
 - 24-26% Arab American
- Socio-economically Diverse
 - 65% Foreign-born, 35% Native
 - African Americans: lower socioeconomic strata, hx of racism
 - Arab & South Asians: skilled laborers, business owners



Islam & Health

- Gives meaning to health and disease
 - What constitutes disease
 - Pregnancy is a “blessing” → not in favor of contraception
 - Responses to disease
 - Cancer is fate → prevention not a priority

Islam & Health

- Ethico-Legal System
 - Health behaviors
 - Reduced alcohol consumption → decreased health risk
 - Manner in which healthcare is received
 - Gender concordance → influence healthcare seeking patterns

Islam & Health

- Identity
 - Post- 9/11 discrimination may influence health behaviors

What is known about Breast Cancer in American Muslim community?

Screening Guidelines

- NCI/ACS
 - Women 40 or older get mammograms q 1-2 yrs
- CDC & USPSTF
 - Women aged 50-74 get mammograms q 1-2 yrs
- Healthy 2020 Goal
 - 81.1% of females btw 50-74 get screened
- Clinical Breast Exam
 - Annually after age 40

Breast Ca in All-Muslim samples

- 226 Muslim women aged >40 in Cali – 2005
 - 54% had a mammogram in past 2 yrs
 - Irani Muslims had lower rates (47%)
- 39 Muslim women (only 6 >40 yrs)
 - None had a mammogram
 - Only 1 practiced breast self-exam in past yr [32 had heard of it]

Breast CA in Ethnic Samples

- 54 South Asian women in Canada
 - 38.5% had CBE ever
- 199 South Asian women in CHS
 - 39% had a mammogram in past 2 yrs
- 570 Arab women in MI
 - 68.9% had a mammogram in past 1 yr
- 365 Arab women in MI
 - 58.1% had a mammogram in past 2 yrs

Summary

- Breast cancer screening (mammography & CBE) is underutilized in American Muslim population
- Some sociodemographic factors (access, education) may predict higher rates
- NO EXPLICIT EXAMINATION OF RELIGIOUS FACTORS

Do Islamic Values and Beliefs Influence Breast Cancer Screening Practices?

Islamic Values

- Modesty
- Fatalistic Belief

Breast Cancer Screening

- Clinical Breast Exam
- Mammography Rates

Gender concordance & Modesty

- Integral part of Islamic values & teaching
 - Physician-choice hierarchy
 - Regulations around seclusion & physical contact
- Influences healthcare-seeking behaviors

Specific Aims

1. Determine breast cancer screening rates within the three major subpopulations of Muslims in Greater Chicago
 - Hypothesis: lower rates than recommended by Healthy People 2020

Specific Aims

- Test measures of Islamic religiosity (modesty and fatalistic belief) and examine their associations with breast cancer screening
 - Hypotheses
 - Higher gender-concordance/modesty concerns → lower rates
 - Higher fatalistic beliefs → lower rates



THE COUNCIL OF ISLAMIC ORGANIZATIONS OF GREATER CHICAGO

- Community-engaged model
 - CIOGC – umbrella organization of >40 mosques and organizations
 - Community Advisory Board
- Survey administration at partner sites
 - Mosques selected for ethnic composition
 - Social service organizations for heterogeneity on religiosity

Outcome Measures

Breast Cancer Screening Practices¹

7. Have you ever had a clinical breast exam (a breast exam performed by a healthcare practitioner to check your lumps)?

₁ Yes

₂ No

8. Have you ever had a mammogram?

₁ Yes

₂ No

If YES → Was the mammogram performed within the last two years?

₁ Yes

₂ No

Modesty

35. To what extent to you agree or disagree with each of the following statements:

	Completely agree	Somewhat Agree	Somewhat Disagree	Completely disagree
a. Maintaining modesty is important to me	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
b. My clothing demonstrates a commitment to Islamic modesty.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
c. I practice gender segregation when having a dinner party at home	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
d. An unmarried man and unmarried women should not be alone together	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
e. I always look for a female doctor for myself	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
f. Hospital gowns are not modest	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
g. I have delayed seeing a doctor when I know the doctor is male	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄

Independent Variables

- Sociodemographic predictors
 - Level of education, Marital status, Insurance status, US citizenship and length of US residency
- Islamic Religiosity measures (Organic)
 - Psychological Measure of Islamic Religiousness
 - Positive Religious Coping and Identification
 - Punishing Allah Reappraisal
 - Self-rating of Religiosity

- Which Fatalism Measures to Utilize?

Fatalistic Belief Measures

- Religious Health Fatalism Questionnaire
 - 3 dimensions
 - Divine Provision, Destined Plan, Helpless Inevitability
 - Convergent with religiosity & external LOC
 - Developed in AA church going population
 - Less educated, older, and those with less income have higher fatalistic belief (less self-efficacy)\

Religious Health Fatalism Questionnaire

36. To what extent do you agree with the following statements?

	Completely agree	Somewhat Agree	Somewhat Disagree	Completely disagree
a. If I just pray to Allah about my health, He will work it out	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
b. When I am sick, I give my burdens to Allah and let Him handle it	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
c. Allah will take care of my health because I have found favor in his sight	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
d. If Allah wants me to have better health, He will provide.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
e. I don't worry about my health because it is in Allah's hands	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
f. If I am sick, I have to wait until it is Allah's time for me to be healed	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄

Completely agree **Somewhat Agree** **Somewhat Disagree** **Completely disagree**

g. When I have a health problem, I pray for Allah's will to be done. ₁ ₂ ₃ ₄

h. As long as I stay focused in prayer, I will be healed of any sickness. ₁ ₂ ₃ ₄

i. Spiritual people should accept whatever Allah has meant for them ₁ ₂ ₃ ₄

k. I trust Allah, not man, to heal me. ₁ ₂ ₃ ₄

l. If a person has enough faith, healing will occur without doctors having to do anything ₁ ₂ ₃ ₄

m. Sometimes, Allah allows people to be sick for a reason ₁ ₂ ₃ ₄

n. If I become ill, Allah has intended that to happen. ₁ ₂ ₃ ₄

o. Whatever illnesses I will have, Allah has already planned it. ₁ ₂ ₃ ₄

p. Sometimes someone can be ill because of disobedience to Allah

_1_2_3_4

q. I don't need to improve my health because I know it is up to Allah

_1_2_3_4

r. I can control a small health issue, but only Allah can control a big health issue.

_1_2_3_4

Fatalism Measures Associated With Breast Cancer

- Modified Powe Fatalism Inventory [11 item]
 - Defⁿ –Breast cancer is a death sentence
 - Tested in African American
 - Less educated, older, and those with no health insurance have higher fatalistic belief (less self-efficacy)
 - Higher fatalism → less screening (univariate)

40. To what extent do you agree with the following statements⁶?

	Completely agree	Somewhat Agree	Somewhat Disagree	Completely disagree
a. If someone is meant to have breast cancer, it doesn't matter what kinds of food they eat, they will get breast cancer anyway	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
b. If someone has breast cancer, it is already too late to get treated for it.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
c. Someone can eat fatty foods all their life, and if they are not meant to get breast cancer, they won't get it.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
d. If someone is meant to get breast cancer, they will get it no matter what.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
e. If someone gets breast cancer, it was meant to be.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄
f. If someone gets breast cancer, their time to die is soon.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄

g. If someone gets breast cancer, that's the way they were meant to die.

 1 2 3 4

h. Getting checked for breast cancer makes people scared that they may really have it.

 1 2 3 4

i. If someone is meant to have breast cancer, they will have breast cancer.

 1 2 3 4

k. Some people don't want to know if they have breast cancer because they don't want to know they may be dying from it.

 1 2 3 4

l. If someone gets breast cancer, it doesn't matter whether they find it early or late, they will still die from the breast

 1 2 3 4

Completely
agree

Somewhat
Agree

Somewhat
Disagree

Completely
disagree

cancer.

m. If someone has breast cancer, and gets treatment for it, they will probably still die from the breast cancer.

 ₁ ₂ ₃ ₄

n. If someone was meant to have breast cancer, it doesn't matter what doctors and nurses tell them to do, they will get breast cancer anyway.

 ₁ ₂ ₃ ₄

o. If someone is meant to have breast cancer, it doesn't matter if they eat healthy foods, they will still get breast cancer.

 ₁ ₂ ₃ ₄

p. Breast cancer will kill you no matter when it is found and how it is treated

 ₁ ₂ ₃ ₄

Fatalism Measures Associated With Breast Cancer

- FATE Index [7-item summed score]
 - Defⁿ -Health issues are beyond human control
 - Tested in Chinese sample
 - Less educated, older, and those with less income have higher fatalistic belief (less self-efficacy)
 - Higher fatalism → less screening

Analytic Plan

- Distribution of Breast Cancer Screening outcomes [binary]
- Internal consistency and correlations of
 - 3 fatalism measures
 - 4 measures of Islamic religiosity
 - 1 scale of modesty
- Bivariate analysis of sociodemographics and outcomes

Analytic Plan

- Stepwise multivariate logistic regressions
 - Adding in measures of modesty, religiosity and fatalism
 - Adjusting for significant sociodemographics

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Questions

- Outcome measures
 - Ever had CBE or mammogram vs. guideline adherence?
 - Both guidelines?
- Fatalism measures
 - Different religious domains/construct
 - Untested in this population
 - Some correlate to breast cancer behaviors

Questions

- Sampling and Population Diversity
 - Diversity in race/ethnicity
 - Religiosity
 - Gestalt vs. empirical
- Measure/Scale Refinement
 - How much pilot-testing for validity?

Possible Next Steps

- Qualitative studies on Intervention Possibilities
 - Mosque-sermons about fatalism
 - Mosque-based mobile mammography vans

Possible Next Steps

- Refine fatalism vs. determinism
 - FGs/interviews on teasing out construct and influencing of choices
 - In-depth study of theological basis underlying constructs → ? Mosque-sermons

Possible Next Steps

- Pilot interventions?
 - Pre-post design?
 - Knowledge interventions?
- Population-based sampling
 - Construct dual-frame sampling models [census+community organizations?]
 - Naming algorithms+ ethnicity?
 - Use Pew studies