Health Risk Assessment: Examining the Reasoning Exercises of Medical Experts and Islamic Legists

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Talk in Four Parts

• Critical Concepts Within Islamic Law & Epistemology – Sh. Omar
• Medical Evidence & Prognostication- Dr. Ahsan
• Exploring the Juristic Discourse- Sh. Omar
• Critical Reflections- Dr. Aasim
Background & Context
Healthcare System
Seminary
Muslim Community
Academy
American Muslim Health
Translation
Islam
Program on Medicine and Religion
The University of Chicago
Islam Biomedicine

High-Quality Research

High-Quality Education
Islamic Theology & Biomedical Science

Traditional ulema  Clinicians  Academicians

Basic Human Needs & Wants

To be HEALTHY  To have FUN  To Be Free From PAIN
To Eat Delicious FOOD  To be LIKED  To Be SAFE
To Be ATTRACTIVE  To Be SUCCESSFUL and CONFIDENT

JOHN TEMPLETON FOUNDATION
SUPPORTING SCIENCE INVESTING IN THE BIG QUESTIONS
Who is an Islamic Bioethics Expert? And What is an “Islamic” Bioethics?
Islamic Bioethics Experts?

• Knowledge Requisites
  – Medical Science
    • Muslim MDs and Professional Organizations
  – Islamic Ethics & Law
    • Imams who counsel Muslim populace
    • Professors of Islamic Studies
  – Bioethicists
    • JDs, PhDs, MDs
Current State of Discourse

- Many different disciplines engage with different goals and expertise
  - “Silo” problem with little cross-talk
  - Each discipline has its own bias and shortcoming
Current State of Discourse

- Many different disciplines engage with different goals and expertise
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Reporting on Islamic Bioethics in the Medical Literature: Where are the Experts?

Shanawani & Khalil

• Reviewed Pubmed from 1950-2005
  – “Islam or Muslim” & “Bioethics” → 146 papers
  – Content:
    • Only 11 mention more than 1 ‘universal’ Islamic position
    • 5 mention concepts/sources of Islamic law
  – Implication
    • Writings lack depth and do not meet scholarly and practical needs
Islamic Bioethics Discourse
What are Islamic ethico-legal perspectives on....?

Qur'ān, Sunnah, Maqasid (objectives), Qawa'īd (maxims)

“Fatwa”

Obligatory

Permissible

Forbidden

Supererogatory

Discouraged
Ethico-Legal Question

• What is the moral status of a Muslim patient seeking medical treatment?
  – If and when it is morally obligated for a Muslim to seek out medical treatment?
The Islamic Tradition

• In answering these questions, we will be examining the legal, theological, and ethical school of Sunni Muslims.

• This consists of:
  – Legal schools: Ḥanafī, Mālikī, Shafīʿī, and Ḥanbalī.
  – Theological schools: Ashʿarī, Māturīdī

• Of total 1.57 billion Muslims, 10-13% are Shia Muslims and 87-90% are Sunni Muslims.
The Objectives of the Sharīʿah

• Sharīʿah (Sacred Law) - “the way or path to well-being or goodness, the life source for well-being and thriving existence, the fountain or source of nourishment, and the natural and innate ways and order created by God.”

• Five higher goods (maqāsid al-sharīʿah) which the Sharīʿah aims to secure and preserve: religion (dīn), life (nafs), intellect (ʿaql), lineage (nasal), and wealth (māl). These five goods constitute human well-being (maṣāliḥ al-ʿibād).
### Ethico- Legal Classification of Acts

#### Table 3. Moral Status of Actions in Shari’ah

<table>
<thead>
<tr>
<th>Status</th>
<th>Meaning in this life</th>
<th>Consequence in Hereafter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wajib or Fardh – Obligatory</strong></td>
<td>Minimum actions needed to be performed to be considered part of the Islamic community</td>
<td>Reward for performance</td>
</tr>
<tr>
<td><strong>Mandub or Mustahabb – Recommended</strong></td>
<td>Commendable actions</td>
<td>Punishment for neglect</td>
</tr>
<tr>
<td><strong>Mubah – Permitted</strong></td>
<td>Indifferent</td>
<td>Reward for performance</td>
</tr>
<tr>
<td><strong>Makruh – Discouraged</strong></td>
<td>Should be avoided as a way to piety</td>
<td>No consequence for neglect</td>
</tr>
<tr>
<td><strong>Haram – Prohibited</strong></td>
<td>Performance of certain of these acts or legitimacy of performing them takes one out of Islamic community</td>
<td>No reward or punishment</td>
</tr>
</tbody>
</table>

Conception of Harm (*al-ḍarar*)

- Lexically the term *maṣlaḥa* is a noun whose root verb denotes a thing being proper, sound, upright, good, just, and thriving, whereas the term *mafsadah* denotes its opposite, a thing being corrupt, bad, wrong, unrighteous, impaired, evil, waste and ruin.

- “The Sharī‘ah in its entirety is comprised of securing all types of goods (*maṣāliḥ*) … and warding off all types of detriments (*mafāṣid*).”

- In this sense, the term *maṣlaḥa* is employed by Islamic legal theorists to refer to the higher goods of religion (*dīn*), life (*nafs*), intellect (*ʿaql*), lineage (*nasal*), and wealth (*māl*).

- While *mafsadah* refers anything that is detrimental to achieving and maintaining the higher goods.
Conception of Harm (al-ḍarar)

• In Ibn ʿAbd al-Salām’s scheme of maṣāliḥ and mafāsid, each is further classified into those maṣāliḥ and mafāsid that relate to human existence in this world as well as the hereafter (al-ākhira), the world after death.

• The goods of this world do not imply a secular conception of the human existence where God’s ordinances do not enter into. Rather, Sharīʿah ordinances relate to the worldly and the hereafter dimensions of human existence.

• Worldly maṣāliḥ and mafāsid are discernible to reason,

• The maṣāliḥ and mafāsid that relate to the hereafter are known only through revelation to Prophets.
Conception of Harm (*al-ḍarar*)

- Harm has been defined as “inflicting something detrimental (*al-mafsada*) to others” and “harm is [that which results in] detriment (*al-mafsada*).”
- The opposite of harm, benefit (*al-manfa* `), refers to securing the previously mentioned *masalih*
Epistemological Considerations

• Knowledge (al-ʿilm), in the Islamic tradition refers to propositional knowledge and has been defined as, “a firm conviction (al-iʿtiqād al-jāzim) that corresponds to the thing in itself (al-muṭābiq lil-wāqiʾ).”

• The term al-ẓann refers to a conviction that is probable or presumptive and has been defined as “a preponderant conviction (al-iʿtiqād al-rājiḥ) with the possibility of its contrary (al-naqīd) being true.”

• Al-ẓann refers to a belief that is not held as firmly as in the case of knowledge which creates the possibility of the conviction not being true, i.e. not corresponding to the thing in itself.
Epistemological Considerations

• If we were to quantify this possibility, it would signify a certitude of less than 50%
• *Ghalabat al-ẓann* is a highly probable proposition (> 50%)
• Doubt or uncertainty (*al-shakk*) refers to indeterminacy between two contradictory propositions
Doubt

Certainty - false

al-ẓann al-marjūḥ

al-ẓann /al-mawhūm

Doubt

Ghalabat al-ẓann

Certainty - True

al-ẓann
Certain Knowledge

• Empirical propositions are known through sensory perception (*al-maḥsūsāt*) by means of the external senses.
  – Examples are ‘the snow is white’ and ‘the sun gives light’.

• The second type of empirical propositions, *al-mujarrabāt*, are empirical propositions that are known through experience (*al-tajribāt*) of the unchanging course of events in the natural world (*ittirād al-ʿādāt*).
  – Examples are propositions such as ‘fire burns’, ‘bread satiates’, ‘wine is an intoxicant’, and ‘scammony is a laxative’.
• Dr. Ahsan will now address:
  – What are the expected outcomes if a patient seeks or does not seek clinical treatment?
• Presenter is an employee of Astellas Pharma, Inc.

• Views and opinions expressed in this presentation are those of the presenter and should not be considered as a position of Astellas Pharma.

• This presentation does not involve Astellas Pharma in any manner.
• **Introduction**

• Expected outcomes – incorporates medical notions of benefits/risks along with levels of evidence

• Variety of evidence sources
  - How to advise patients
  - How to advise on population-level

• Common methodology uses four steps:
  - Formulating the precise clinical question
  - Conducting a literature review
  - Appraising the evidence
  - Applying the evidence to the scenario
Step 1 - Formulate the Question

- Clearly define the clinical question.
- For example with respect to the “need” to seek medical care one may ask “what is the chance of morbidity and mortality for a given clinical condition if medical treatment is not sought?”
- Case example – Determining the expected outcome in two opposing scenarios – seek or not seek clinical treatment.
- Do the benefits outweigh the risks of clinical treatment

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• Obtaining evidence from the biomedical research literature – publication bias
• The “best” evidence depends on the type of question being asked.
• RCT evidence from studies in the target population
  • Allocation of treatment
  • Blinded reporting of risks
  • Results may not be generalizable
• Meta-analysis
• Observational studies
• Assessment of bias-- the degree to which the result is skewed away from the truth
• Causal inferences are usually reserved for evidence from randomized, clinical trials
• Conclusions from cohort studies and case series are usually limited to associations or correlations that stop short of conclusive causality
• Statistics include ‘p values’ which a measure of probability that a result is due to change
• Confidence intervals estimate the range of values that likely to include the real value
• Step 4 – Applying the Evidence

• Applying the evidence to the clinical question.
• The level of certainty (or uncertainty) of the evidence – may be different for benefits/risks
• Ability to make a clear recommendation may be limited
• Identifying gaps in the evidence
• Prioritizing future research efforts.
The Juristic Discourse

• The Prophet said, “They have never allowed themselves to be treated by cauterization... Rather, they have put their trust in God alone.”

• He also said, “Seek medical treatment... for God has not created an illness except that He also created its cure”
Tawakkul

- *Tawakkul* or trust and reliance on God is defined as one having “confidence in God’s providence and renouncing what people possess.”
- Does taking clinical treatment entail a violation of placing one’s trust in God?
- Many ascetics have understood trust to entail that a person *must not take any means* to alter a condition they may be in because it is acting against the decree of God.
Tawakkul

• Medical treatment (al-tadāwī) has created a tension between taking medical treatment and the virtue of relying on God.

• While all scholars agree that seeking medical treatment is a permissible act, different positions were taken on the issue of what is the preferred course of action a Muslim should adopt in light of the effectiveness of the treatment and the strength of person’s trust in God.
The Juristic Discourse

Moral Status of Seeking Medical Treatment

- The Virtue of Trust (Ethics)
- Law
- Medical Science
<table>
<thead>
<tr>
<th>Legal Ruling</th>
<th>Ḥanafī</th>
<th>Shafiʿī</th>
<th>Mālikī</th>
<th>Ḥanbalī</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissible</td>
<td>Recommended</td>
<td>Permissible</td>
<td>Permissible</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Obligation</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

| Violate Trust | No | No, seeking treatment is an act of trust. God created the sickness and its cure. | No | No |

<table>
<thead>
<tr>
<th>Other Details</th>
<th>Obligation if effectiveness of treatment is certain. -Determination is made by individual or doctor</th>
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<th>Obligation if effectiveness of treatment is certain. -Determination is made by doctor</th>
<th>Always preferable to place trust in God. -Determination is made by individual or doctor</th>
</tr>
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<tbody>
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<td></td>
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Points of Reflection

• Religion & Science
  – Misplaced conflict thesis
    • Different ways of scientific “knowing” are incorporated within juristic discourse and indeed inform religious obligations
    • Jurists rely on medical expert witness & testimony
  – Avoiding Reductionism (Scientism)
    • Widened epistemology and schema for certitude based on ontological framework extending to unseen and the afterlife
• Sin (afterlife) weighed versus human benefit
• The comparative word used in ‘akbar’ signifying a epistemic defect in human ability to assess afterlife ramification
Points of Reflection

• Physician’s role
  – Humble approach
    • Limits of evidence in addressing clinical question
    • Limited expertise in addressing religious-moral questions because religious opinions DEPEND on medical understandings

• Jurist’s role
  – Must be literate of scientific ways of knowing in order to offer nuanced positions
Points of Reflection

• Intellectual capacity and resources exist
  – Challenge of coordination and durable funding to produce outputs
Islamic Bioethics Intensive: Dissecting the Ethics of Organ Donation
June 5th- 7th 2015