



Artificial Intelligence in Medical Diagnosis and Islamic Legal Principles: Compatible or Incompatible?

* Dr. Tambari Sidi Yusuf

Department of Shari'ah Studies, Faculty of Arabic and Islamic Studies, Usmanu Danfodiyo University, Sokoto, Nigeria.

Corresponding author: Dr. Tambari Sidi Yusuf

Department of Shari'ah Studies, Faculty of Arabic and Islamic Studies,
Usmanu Danfodiyo University, Sokoto, Nigeria.

Received Date: 20 May 2026

Published Date: 07 July 2026

Abstract

This paper examines the compatibility of AI-driven diagnostics with core Islamic values Maqāṣid al-Sharī'ah (objectives of Islamic law), Amanah (trust/accountability), Darūrah (necessity), privacy, and human agency while addressing points of tension such as autonomy, liability, data use, and spiritual-moral judgment. Drawing on classical fiqh methodologies, contemporary fatwās, and comparative ethical analysis, the study concludes that AI is not inherently incompatible with Islamic law but requires clear constraints: it must function as an assistive tool under direct professional supervision, preserve patient dignity and rights, and be governed by accountability mechanisms consistent with Taktīf (moral-legal responsibility). The paper proposes a compliance framework to guide responsible deployment in Muslim-majority contexts.

Keywords: Artificial Intelligence, Medical Diagnosis, Islamic Law, Shari'ah; Maqāṣid al-Sharī'ah, Medical Ethics, Fiqh al-Tibb.

INTRODUCTION

AI systems including machine learning, deep learning, and computer vision now detect conditions from cancer to infectious diseases with accuracy matching or exceeding human clinicians in specific tasks. For Muslim communities, this innovation intersects with long-standing Islamic norms governing health, bodily integrity, expertise, and moral responsibility. While technology is generally permissible in Islam when it serves public good, AI's unique features algorithmic opacity, lack of moral agency, and potential to displace human judgment demand rigorous legal scrutiny.

Core Concepts and Foundations

AI in Medical Diagnosis: Scope and Characteristics

- Decision-Support Tools: Assist clinicians by highlighting anomalies, ranking possible diagnoses, or estimating risk outputs require review.
- Autonomous Systems: Generate final diagnoses or recommendations without human oversight not *Shari'ah* compliant.
- Key Traits: Processes vast datasets rapidly; prone to bias if training data is unrepresentative; operates as a "black box" with limited explainability; lacks intent, conscience, or moral agency.

Foundational Islamic Legal Principles

Maqāṣid al-Sharī'ah (Objectives of Law)

All rulings aim to protect five essentials:

1. *Ḥifẓ al-Dīn*: Preserve moral and spiritual integrity.
2. *Ḥifẓ al-Nafs*: Protect life and prevent harm—highest priority.
3. *Ḥifẓ al-'Aql*: Rely on verified knowledge and competent expertise.
4. *Ḥifẓ al-'Ird / Nasl*: Safeguard dignity, privacy, and bodily integrity.
5. *Ḥifẓ al-Māl*: Ensure fair access and avoid waste.

Key Legal Maxims (*Qawā'id Kulliyyah*)

- “*Al-umūr bi-maqāsidihā*”: Acts are judged by intentions and use.
- “*Lā ḍarar wa lā ḍirār*”: No harm or reciprocal harm.
- “*Al-ḍarūrāt tubīḥ al-maḥẓūrāt*”: Necessity permits exceptions but does not justify abandoning core principles.
- “*Man, istakhraja al-shay' min mawḍi'ihī fa-huwa dāmin*”: Whoever uses something improperly is liable.
- “Ask those who know if you do not know” (Qur’ān 16:43): Decisions depend on qualified specialists.

Technology and Tools in Islamic Law

- General rule: Permissible (*Ibāḥah*) unless proven otherwise based on Qur’an 45:13: “And He has made of service to you whatever is in the heavens and earth”.
- Tools are judged by their purpose and effect, not their essence.

Points of Compatibility: Where AI Aligns with *Shari’ah*

Advancing *Maqāsid* and Public Welfare (*Maṣlaḥah*)

- Preserving Life: Earlier, more accurate detection saves lives directly serving *Hifẓ al-Nafs*.
- Expanding Access: Bridges gaps in underserved areas, fulfilling justice and equity goals.
- Supporting Expertise: Reduces fatigue and error, helping clinicians apply knowledge better consistent with *Hifẓ al-Aql*.

Consistent with Precedent

AI is analogous to stethoscopes, MRI, or lab tests all instruments that enhance human capability, not replace authority. The OIC Fiqh Academy affirms: “The default ruling for AI is permissibility, provided it serves benefit and avoids harm”.

Valid in Necessity (*Darūrah*)

Where no specialist is available, AI-assisted triage satisfies necessity conditions, provided it is regulated and transparent.

Points of Tension: Potential Incompatibilities

Lack of Moral Agency and Final Authority

- Core Issue: Only humans bear *Taklīf* (legal-moral obligation); AI has no intent, conscience, or accountability.
- Scholarly Ruling: Egypt’s *Dār al-Iftā’* explicitly states: Relying on AI alone for diagnosis without a licensed physician’s review is *Ḥarām*.
- Rationale: Violates the principle of expertise and exposes patients to preventable harm.

Accountability and Liability Gaps

- Conflict: Islamic law requires a clear responsible party; autonomous systems blur duty between developers, hospitals, and clinicians.
- Resolution: Responsibility lies with the human who approves the diagnosis; developers/institutions are liable for design flaws or misuse.

Privacy, Dignity, and Data Governance

- Risks: Unconsented data use, cross-border sharing, or disrespect for modesty breaches *Amānah* and *Hifẓ al-‘Ird*.
- Requirement: Data collection needs informed consent; sensitive information must be protected and used only for stated purposes.

Bias, Opacity, and Holistic Care

- Bias: Systems trained on narrow data may disadvantage women, minorities, or rural groups undermining justice.
- Opacity: “Black box” decisions violate transparency needed for trust and verification.
- Holistic Gap: AI focuses on biological signs but may overlook spiritual, psychological, and social dimensions central to Islamic healing.
- Synthesis: Conditions for *Shari’ah* Compliance

AI in medical diagnosis is compatible if and only if it meets these binding conditions:

Functional Role: Assistive, Not Autonomous

- AI outputs are recommendations only, never final diagnoses.
- Every AI result must be reviewed, verified, and signed by a licensed, competent physician.
- Patients must be clearly informed that AI is an aid, not a substitute for professional judgment.

Clear Accountability and Transparency

- Systems must be explainable: developers disclose methods, limitations, and error rates.
- Audit trails link every AI use to responsible staff.

- Liability is assigned to the approving clinician for clinical judgment, and to institutions/developers for system defects.

Core Concepts: AI in Medical Diagnosis and Islamic Legal Principles

AI in Medical Diagnosis: Scope and Characteristics

AI diagnostics process medical images, lab results, and patient records to identify abnormalities, stratify risk, or suggest differential diagnoses. Key traits:

- Strengths: Reduces human error, expands access in underserved areas, analyzes large datasets rapidly.
- Limitations: “Black box” opacity, susceptibility to training-data bias, inability to exercise moral discretion or account for spiritual context.

Foundational Islamic Legal Principles Relevant to Medicine

Maqāṣid al-Sharī‘ah (The Objectives of Islamic Law)

All rulings aim to protect five essential goods:

1. *Hifẓ al-Dīn* (Faith): Preserve spiritual and moral integrity of care.
2. *Hifẓ al-Nafs* (Life): Prioritize saving lives and avoiding harm.
3. *Hifẓ al-‘Aql* (Intellect): Rely on verified knowledge and qualified expertise.
4. *Hifẓ al-Nasl* (Lineage): Safeguard identity and bodily integrity.
5. *Hifẓ al-Māl* (Wealth): Ensure fair access and avoid wasteful spending.

Key Legal Maxims (*Qawā‘id Kulīyyah*)

- “*Al-umūr bi-maqāṣidihā*”: Actions are judged by their intentions.
- “*Lā ḍarar wa lā ḍirār*”: No harm or reciprocal harm.
- “*Al-ḍarūrāt tubīḥ al-maḥẓūrāt*”: Necessity renders prohibitions permissible.
- “*Al-ḥukm ‘alā al-shay’ far‘an ‘an tasawwurih*”: Ruling on something presupposes conceiving its reality.
- “*Man, istakhraja al-shay’ min mawḍi‘ihi fa-huwa dāmin*”: Whoever extracts or uses something improperly is liable.

Specialized Principles for Medical Practice

- Authority of Expertise: “Ask those who know if you do not know” (Qur’ān 16:43)—decisions require qualified physicians, not machines or laypersons.
- Consent and Privacy: Bodily integrity and confidentiality are inviolable unless necessity dictates otherwise.
- Moral Agency: Only humans bear *Taklīf*; tools lack accountability.

Points of Compatibility: Where AI Aligns with Islamic Law

Advancing *Maqāṣid* and Public Welfare (*Maṣlaḥah*)

- Preservation of Life: AI enables earlier detection of fatal conditions, aligning with *Hifẓ al-Nafs*.
- Equity and Access: Helps overcome shortages of specialists in rural or conflict-affected Muslim regions, serving *Hifẓ al-‘Adl* (justice).
- Supporting Intellect: AI processes complex data to assist human reasoning, not replace it consistent with *Hifẓ al-‘Aql*.

Permissibility of Tools and Technology

Islamic law does not prohibit technology per se; it assesses use and impact. AI is analogous to stethoscopes, MRI scanners, or lab tests—auxiliary instruments that enhance human capacity, so long as they do not usurp authority or cause harm.

Alignment with Darūrah and Maṣlaḥah Mursalah

Where no specialist is available, AI-assisted triage satisfies Darūrah, justifying its use under Islamic legal exceptions provided safety standards are met.

Points of Tension: Potential Incompatibilities and Risks

Loss of Human Authority and Moral Agency

- Issue: Fully autonomous AI diagnosis bypasses clinician review, violating the requirement to rely on qualified experts and ignoring AI’s lack of *Taklīf* or spiritual-moral judgment.
- Scholarly View: Egypt’s *Dār al-Ifṭā’* explicitly rules independent AI diagnosis *Ḥarām* (forbidden); AI reports are valid only when reviewed, signed, and adopted by a licensed physician.

Accountability and Liability Gaps

- Issue: If AI misdiagnoses, responsibility may fall ambiguously on developers, hospitals, or clinicians contradicting Amanah and liability maxims.
- Conflict: Islamic law demands a clear, accountable moral agent; AI cannot be punished or held to ethical duty.

Privacy, Data Use, and Dignity

- Issue: Unregulated data collection, cross-border sharing, or gender-insensitive image processing risks violating *Hifẓ al-ʿIrd* and patient modesty norms.
- Conflict: Medical data requires consent and protection; opaque data pipelines breach trust (*Amanah*).

Algorithmic Bias and Justice

- Issue: Systems trained on narrow data may disadvantage women, ethnic minorities, or low-income groups undermining *Maqāṣid* of justice and equality.
- Spiritual and Holistic Neglect
- Issue: AI focuses on biological signs but may overlook psychological, social, or spiritual dimensions central to Islamic healing (*Tadāwī*) and patient well-being.

Synthesis: Conditions for Shariʿah Compliance

AI in medical diagnosis is compatible with Islamic legal principles if and only if it meets the following safeguards:

Functional Status: Assistive, Not Autonomous

- AI acts as a decision-support tool, never as the final authority. All outputs require independent review, verification, and sign-off by a licensed, competent physician.
- No “AI-only” diagnosis or treatment recommendation may be presented to patients without human validation.

Clear Accountability and Transparency

- Developers disclose methodology, limitations, and error rates (explainable AI).
- Hospitals establish audit trails linking every AI use to responsible staff.
- Liability rests with the clinician or institution adopting the output, with supplementary safeguards for system reliability.
- Data Protection and Ethical Sourcing
- Patient data collected only with informed, religiously appropriate consent, anonymized where possible, and secured per *Amanah* obligations.
- Datasets reflect diverse populations to avoid bias; processing respects modesty and privacy in sensitive examinations.

Alignment with Holistic Care

- AI systems integrate with clinical practices that honor spiritual needs, family involvement, and patient dignity—upholding *Hifẓ al-Dīn* and *Hifẓ al-ʿIrd*.

Summary and Conclusion

AI in medical diagnosis is not inherently incompatible with Islamic legal principles; it can serve *Maṣlaḥah* and the *Maqāṣid al-Shariʿah* when used responsibly. Incompatibilities arise only when AI is deployed as an autonomous decision-maker, without accountability, or in ways that violate privacy, equity, or human moral agency.

Recommendations

1. Regulatory bodies in Muslim-majority states issue unified standards mandating human oversight and explainability.
2. Tech developers co-design systems with Islamic jurists and clinicians to embed compliance from the start.
3. Medical institutions train staff on both technical use and Shariʿah-based governance of AI tools.
4. Scholarly bodies like the OIC Fiqh Academy continue periodic reviews to address evolving capabilities.

References

1. Dār al-Iftāʾ al-Miṣriyyah. (2026). Ruling on relying on medical reports issued by artificial intelligence systems (Fatwā No. 8897). Cairo: Egyptian Dar al-Ifta.
2. Dār al-Iftāʾ al-Miṣriyyah. (2025). Ruling on a patient relying on AI in medical matters without specialist supervision (Fatwā No. 8809). Cairo: Egyptian Dar al-Ifta.
3. Fallatah, H. F., & Syed, J. (2016). *Maqāṣid al-Shariʿah: A beginner’s guide*. London: International Institute of Islamic Thought.
4. MDPI. (2025). Ethical integration of AI in healthcare project management: Islamic and cultural perspectives. *Journal of Risk and Financial Management*, 6(12), 307.
5. PMC. (2026). Ethical and legal considerations in healthcare AI. *Journal of Medical Ethics and Law*, 12, 1–12.
6. WHO EMRO. (2026). Potential and pitfalls of artificial intelligence application in medical diagnostics. *Eastern Mediterranean Health Journal*, 32(4).
7. Wikipedia. (2026). Islamic bioethics. Retrieved from https://en.wikipedia.org/wiki/Islamic_bioethics
8. IAIN Ponorogo. (2025). Transformative fiqh and health technology: An Islamic ethical study of AI in medical practice. *Kodifikasi: Jurnal Fiqh dan Hukum Islam*, 9(2), 112–134.