

ETHICAL IMPLICATIONS OF AI IN MENTAL HEALTH FROM AN ISLAMIC PERSPECTIVE

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Abstract

Incorporating Artificial Intelligence (AI) in mental health management is emerging as a transformative approach. It offers new possibilities for diagnosing, treating, and supporting individuals with mental health conditions. AI technologies, such as machine learning algorithms and natural language processing, have shown potential in identifying patterns, predicting outcomes, and personalizing therapeutic interventions. However, adopting AI in this sensitive field introduces a range of ethical dilemmas. These challenges are chiefly obvious when assessed through an Islamic ethical framework. This research critically examines the role of AI in mental health management from an Islamic perspective. It uses the principles of *Maqasid al-Shariah (the higher objectives of Islamic law)* to establish an ethical basis for its use. These objectives include the preservation of life, intellect, dignity, and justice. AI technologies in mental health must maintain these values by safeguarding patient privacy. It should also promote human dignity. Furthermore, they must provide fair and unbiased access to mental health resources. Islamic teachings emphasize the concepts of *Adl (justice)*, *Ihsan (excellence)*, and *Amana (trust)*. Consequently, AI systems must be effective and operate within a framework that upholds these principles. *Adl* requires a fair distribution of mental health services without discrimination. *Ihsan* calls for AI systems to achieve the highest level of care and patient benefit. *Amana* underscores the duty of developers to protect patient data and maintain confidentiality. Failing to uphold these values could cause a breach of trust. Islamic ethics also prioritize human welfare and dignity. They emphasize that technological tools should serve as an assistant to humans, not as replacements. This perspective calls for human oversight to prevent the risks of algorithmic bias. AI should function as a support system that complements human capabilities. This study advocates for developing AI systems that are ethically sound and rooted in Islamic values. Such systems should address the psychological needs of patients while aligning with the broader spiritual and moral objectives of Islamic teachings. Through a holistic approach, AI can contribute positively to mental health management. The research concludes by offering recommendations for designing AI applications that prioritize transparency, equity, and the value of human dignity. This would promote a comprehensive framework for ethical AI utilization in mental health care.

Keywords: Artificial Intelligence (AI), Mental Health, Islamic Ethical Framework, Privacy, Dignity, Human Oversight

INTRODUCTION: The advent of Artificial Intelligence (AI) is reshaping healthcare, particularly in mental health management. AI technologies, including machine learning algorithms, natural language processing (NLP), and predictive analytics, are transforming how mental health disorders are diagnosed and treated.

For instance, AI-driven tools can analyze speech, text, and behavioral data to detect early signs of anxiety and depression. This enables timely interventions and makes mental health care more personalized, efficient, and accessible (1).

AI tools analyze behavior to detect early mental health issues. They provide timely, personalized, and accessible care. However, their integration into mental health services raises significant ethical concerns. These include privacy violations, algorithmic bias, and depersonalized care. (2) These challenges are especially significant in Islamic societies, where ethical considerations are rooted in religious principles. The Quran emphasizes the preservation of life and intellect as central objectives of Islamic law.

(مَنْ قَتَلَ نَفْسًا بِغَيْرِ نَفْسٍ أَوْ فَسَادٍ فِي الْأَرْضِ فَكَأَنَّمَا قَتَلَ النَّاسَ جَمِيعًا وَمَنْ أَحْيَاهَا فَكَأَنَّمَا أَحْيَا النَّاسَ جَمِيعًا) 3

“Whoever kills a person [unjustly] ... it is as if he had killed all mankind. And whoever saves one – it is as if he had saved all mankind.”

This verse emphasizes the sanctity of life and the collective responsibility to protect it. It highlights that taking a life unjustly is a grave sin. This principle calls for the safeguarding of both physical and mental well-being. It aligns closely with the goals of mental health care, which aims to preserve and improve human life. In addition to preserving life, the Quran stresses the inherent dignity of every human being. It teaches that all individuals are honored by Allah. This focus on dignity underscores the need to treat people with respect and compassion. It ensures that mental health care maintains their honor and self-worth. These Islamic values provide a strong ethical foundation for mental health practices, emphasizing the protection of life and dignity.

The Quran also highlights the inherent dignity of every human being:

Indeed, We have dignified the children of Adam, carried them on land and sea, granted them good and lawful provisions, and privileged them far above many of Our creatures.⁴

In the context of mental health, this verse emphasizes that all individuals, regardless of their mental or emotional state, deserve respect and care. Mental health services should be rooted in recognizing and preserving this dignity. This means that mental health care should aim to protect and uplift each person's well-being. AI systems in mental health must respect this dignity by ensuring privacy, offering fair treatment, and providing compassionate care. Technology should enhance human dignity and never diminish it, aligning with the Quranic principle that every individual is honored by Allah.

The concept of human dignity (*Karamah*) serves as a moral guideline. AI systems must be designed to respect and enhance human worth, not undermine it.

The Prophet Muhammad (ﷺ) also emphasized the importance of relieving human suffering. He said:

(مَنْ نَفَسَ عَنْ مُؤْمِنٍ كُرْبَةً مِنْ كُرْبِ الدُّنْيَا نَفَسَ اللَّهُ عَنْهُ كُرْبَةً مِنْ كُرْبِ يَوْمِ الْقِيَامَةِ) 5

“Whoever relieves a believer's distress of the distressful aspects of this world, Allah will rescue him from a difficulty of the difficulties of the Hereafter.”

This hadith highlights the moral obligation to alleviate suffering. It applies equally to mental health care, whether delivered through human expertise or AI systems.

Islamic teachings also advocate for fairness (*Adl*), excellence (*Ihsan*), and trustworthiness (*Amana*). Fairness ensures that mental health services are distributed equitably, without discrimination. Excellence requires striving to provide the highest standards of care. Trustworthiness demands handling patient data with confidentiality and integrity. These values are essential when designing and deploying AI in mental health care.

Mental well-being in Islam is a holistic concept. It encompasses emotional, social, and spiritual dimensions. AI technologies, while advanced, must align with this holistic approach. They should support not only clinical needs but also moral and spiritual well-being. The Quran further emphasizes justice as a guiding principle:

(إِنَّ اللَّهَ يَأْمُرُكُمْ أَنْ تُؤَدُّوا الْأَمَانَاتِ إِلَىٰ أَهْلِهَا وَإِذَا حَكَمْتُمْ بَيْنَ النَّاسِ أَنْ تَحْكُمُوا بِالْعَدْلِ) 6

Indeed, Allah commands you to return trusts to their rightful owners;¹ and when you judge between people, judge with fairness.

This verse underscores the need for fairness and ethical responsibility in mental health care. AI systems must prioritize justice and equity to meet Islamic ethical standards.

This article critically examines the role of AI in mental health management through an Islamic lens. It uses the principles of *Maqasid al-Shariah* as a framework to explore the ethical implications. By doing so, it aims to ensure that AI technologies uphold spiritual and moral values. Through a balanced approach, AI can become a transformative tool in mental health care. It can contribute to human welfare while adhering to Islamic ethics.

II. THE ROLE OF AI IN MENTAL HEALTH MANAGEMENT

Artificial intelligence (AI) is transforming mental health care by offering innovative tools to diagnose, manage, and monitor mental health conditions.

Applications of AI in Mental Health

1. Diagnosing Mental Health Conditions

AI tools, like machine learning algorithms and natural language processing (NLP), are used to analyze large datasets. These include patient history, speech patterns, and physiological data. Such analyses help diagnose conditions like depression, anxiety, and schizophrenia. For example, chatbots like Woebot and Wysa detect signs of distress in conversations. Wearable devices also collect biometric data, such as heart rate and sleep patterns, to provide insights into mental health. (7) AI tools play a crucial role in diagnosing mental health conditions. They analyze diverse data, including patient history, speech patterns, and biometrics. Technologies like chatbots and wearable devices help detect issues like depression and anxiety early. This ensures timely and data-driven insights into mental health.

2. **Predicting Outcomes and Early Intervention**

AI-powered predictive analytics identify individuals at risk of mental health issues early. By analyzing social media behavior, health records, or genetic information, AI can foresee crises like suicidal ideation or substance abuse relapses. This helps in providing timely intervention and preventing escalation. (8) AI predictive analytics detect mental health risks early, enabling timely interventions to prevent crises.

3. **Personalizing Therapeutic Interventions**

AI customizes treatment plans for each individual. Algorithms analyze past responses to recommend specific therapies, such as cognitive-behavioral therapy (CBT) or medications. Additionally, virtual reality (VR)-based AI therapies provide tailored therapeutic exercises. Adaptive apps also keep patients engaged and improve treatment effectiveness. (9) AI enhances mental health care by tailoring treatments to individual needs. It uses advanced tools and innovative technologies to personalize therapy. This approach leads to improved patient outcomes.

Advantages of AI in Improving Mental Health Services

1. **Efficiency and Accuracy**

AI processes and analyzes complex data quickly and with precision. It often surpasses traditional methods in diagnosing and monitoring mental health issues. This speed and accuracy reduce diagnostic errors and lead to better treatment outcomes. (10) AI improves diagnostic accuracy and treatment outcomes by quickly processing complex data, surpassing traditional methods.

2. **Enhanced Access to Care**

AI-powered tools, like mental health chatbots and telepsychiatry platforms, make services more accessible. These tools are especially helpful in underserved areas. They provide support 24/7, bridging gaps in professional care and reducing the stigma of seeking help. (11) AI tools expand mental health care access by offering continuous support, especially in regions with limited resources.

3. **Potential for Continuous Monitoring**

AI-integrated devices, such as smartwatches and mobile apps, enable real-time monitoring of mental health. These devices track parameters like mood, activity, and physiological responses. Changes in a patient's condition can be detected promptly, allowing healthcare providers to adjust treatment plans. Additionally, AI systems send alerts during emergencies, ensuring safety. (12) AI-integrated devices, like smartwatches and apps, enable real-time monitoring of mental health, detecting changes and ensuring timely intervention and safety.

III. ETHICAL CHALLENGES IN AI-DRIVEN MENTAL HEALTH MANAGEMENT

The integration of AI in mental health care brings various ethical challenges that require careful attention. These challenges primarily involve issues of privacy, fairness, and the balance between technological and human involvement in care.

A. Privacy and Data Protection

AI-driven mental health applications often require access to highly sensitive data, such as patients' emotional states, behavioral patterns, and personal conversations. This data collection raises significant concerns about consent and the ethical handling of private information. Transparency in data collection and adherence to regulations like the General Data Protection Regulation (GDPR) are crucial to maintaining patient trust. (13) The storage of sensitive mental health data in digital systems increases the risk of data breaches. Inadequate cybersecurity or malicious actors could lead to unauthorized access, causing harm to patients and exposing them to stigma. Addressing these risks involves implementing robust encryption, regular security audits, and stringent data protection measures (14). Ethical handling of sensitive mental health data is crucial for AI-driven applications. Strict adherence to data protection regulations is essential. Robust cybersecurity measures and transparency in data practices help build patient trust. These steps also minimize risks of breaches and misuse.

B. Algorithmic Bias and Fairness

AI algorithms can inherit biases present in the datasets used to train them, leading to discrimination in mental health services. For example, marginalized groups may be underrepresented in datasets, causing less effective or harmful outcomes for these populations. This perpetuates disparities in access and quality of care. (15) Ensuring fairness requires the use of diverse, unbiased datasets during AI training. Regular audits, thorough testing, and the inclusion of diverse stakeholders in the development process are essential to mitigate algorithmic bias. (16) Addressing algorithmic bias in AI requires diverse datasets, regular audits, and inclusive development processes. These measures ensure fairness and help reduce disparities in mental health care.

C. Over-reliance on Technology

AI tools offer significant support, such as identifying symptoms and providing cognitive behavioral therapy. However, over-reliance on AI risks diminishing the human connection, which is vital in mental health care. Empathy, active listening, and emotional understanding cannot be replaced by algorithms. (17) Although AI assists in diagnostics and treatment planning, human oversight is essential to contextualize AI recommendations and ensure ethical decision-

making. A hybrid model, where AI complements human care rather than replacing it, can balance efficiency and empathy. (18)A balanced hybrid model is essential for mental health care. AI should complement human care rather than replace it. This approach ensures efficiency while preserving empathy and ethical decision-making. By addressing these challenges, AI-driven mental health management can evolve into a more ethical, inclusive, and human-centered approach that ensures the well-being of patients without compromising their rights

IV. The Islamic Ethical Framework for AI in Mental Health

The use of Artificial Intelligence (AI) in mental health care must follow Islamic ethical principles. This ensures its application remains responsible and beneficial. Grounded in the higher objectives of Islamic law (*Maqasid al-Shariah*), the framework emphasizes the preservation of human values, justice, and well-being.

A. Principles of Maqasid al-Shariah (Higher Objectives of Islamic Law)

Maqasid al-Shariah defines the key purposes of Islamic law. It focuses on protecting life, intellect, dignity, and justice. These principles offer a strong ethical foundation for AI technologies to serve humanity in line with Islamic teachings.

1. Preservation of Life

AI applications in mental health should aim to protect and enhance human life, ensuring that interventions prioritize patient safety and well-being.

19 (مَنْ قَتَلَ نَفْسًا بِغَيْرِ نَفْسٍ أَوْ فَسَادٍ فِي الْأَرْضِ فَكَأَنَّمَا)

"And whoever saves one [life] – it is as if he had saved mankind entirely."

This verse emphasizes the immense value of human life and the collective responsibility to preserve it. This principle encourages the use of AI to detect, prevent, and address mental health challenges, such as depression or suicidal tendencies, thereby safeguarding individuals. By aligning with the Islamic ethos of valuing every life, mental health AI can serve as a tool for fostering care, healing, and support, embodying the sacred duty to protect life.

2. Preservation of Intellect

Mental health AI systems should support cognitive well-being, protect intellectual capacities, and foster informed decision-making. The Qur'an states:

20 (أَوَلَمْ يَتَفَكَّرُوا فِي أَنفُسِهِمْ)

"Do they not reflect upon themselves?"

This verse encourages introspection and self-awareness as essential elements of intellectual and emotional growth. AI systems in mental health can align with this principle by fostering reflection and self-understanding. They can reduce cognitive burdens and offer personalized support. This ensures that interventions empower individuals while protecting their intellectual autonomy, upholding the Islamic value of nurturing the intellect

3. Preservation of Dignity

All individuals should be treated with respect and honor, avoiding stigma or bias in AI mental health applications. The Prophet Muhammad (ﷺ) said:

"Indeed, your blood, your wealth, and your honor are sacred to one another" 21

This hadith emphasizes the sanctity of an individual's life, property, and dignity in Islam. It serves as a reminder to uphold fairness and respect in all interactions. AI mental health systems must embody this principle by treating all individuals without bias, ensuring equity, and avoiding stigmatization, thereby preserving the sacredness of human dignity as taught by Islam.

4. Promotion of Justice

AI systems must ensure equity in mental health care delivery, addressing disparities and providing unbiased solutions for all. The Qur'an states:

5. يَا أَيُّهَا الَّذِينَ ءَامَنُوا كُونُوا قَوَّامِينَ بِالْقِسْطِ شُهَدَاءَ لِلّٰهِ-22

O believers! Stand firm for justice as witnesses for Allah

This verse calls on believers to uphold justice consistently and impartially. In the context of mental health, AI systems must promote fairness by providing equal access to care and addressing biases in diagnosis or treatment. By ensuring that all individuals receive equitable mental health support, AI can help fulfill the Islamic principle of justice, promoting fairness and equality for everyone regardless of background.

B. Core Islamic Values Guiding AI Applications

1. **Adl (Justice):** AI should uphold fairness by providing equal access and avoiding discrimination based on race, gender, or socioeconomic status.

The Qur'an states:

23 (وَأَقِيمُوا الْوَزْنَ بِالْقِسْطِ وَلَا تُخْسِرُوا الْمِيزَانَ)

"And establish weight in justice and do not make deficient the balance."

This verse emphasizes the importance of honesty and integrity in all relationships. In the context of AI in mental health, it encourages the creation of systems that deliver care impartially, ensuring that no individual is unfairly disadvantaged due to their race, gender, or socioeconomic background. Just as one must maintain a balanced scale, AI systems should maintain fairness in diagnosis, treatment, and access to mental health resources

2. **Ihsan (Excellence):**

Developers and practitioners must aim for perfection in designing and implementing AI systems in mental health care.

The Prophet Muhammad (ﷺ) said:

﴿إِنَّ اللَّهَ يُحِبُّ إِذَا عَمِلَ أَحَدُكُمْ عَمَلًا أَنْ يُتْقِنَهُ﴾ 24

"Allah loves that when any one of you does a job, he does it with excellence."

This hadith encourages striving for excellence in all endeavors, including work that impacts others. In the context of AI in mental health, it calls for the highest standards of care, accuracy, and ethical responsibility. Developers should ensure that AI systems are designed to meet the needs of individuals with precision, fairness, and effectiveness, reflecting the Islamic value of Ihsan (excellence) in every aspect of their work.

3. **Amana (Trust):**

Trustworthiness must be a cornerstone in the development and use of AI, particularly in handling sensitive mental health data. The Qur'an states:

﴿إِنَّ اللَّهَ يَأْمُرُكُمْ أَنْ تُؤَدُّوا الْأَمَانَاتِ إِلَىٰ أَهْلِهَا﴾ 25

"Indeed, Allah commands you to render trusts to whom they are due"

This verse highlights the importance of fulfilling trust and responsibilities. In the context of AI in mental health, it emphasizes the duty to protect sensitive information and ensure confidentiality. Developers and practitioners must act with integrity, ensuring that AI systems are designed to handle personal data securely and ethically, maintaining the trust of individuals seeking care. This aligns with the Islamic value of Amana (trust), urging professionals to be responsible stewards of the information entrusted to them.

V. RECOMMENDATIONS FOR ETHICAL AI DEVELOPMENT IN MENTAL HEALTH

Ensuring Transparency in AI Algorithms

Transparency is key to building trust in AI systems. Both clinicians and patients should be able to understand how AI makes decisions. Data sources, assumptions, and methods used in training the system must be clearly disclosed. Regular third-party audits help ensure the AI is functioning properly and safely. This accountability helps prevent errors and increases confidence in AI's use.

Mitigating Biases in Data and Decision-Making

Bias in AI can harm vulnerable populations. Ensuring diverse and representative data is crucial to avoid discrimination. Regular checks for bias during development and deployment are necessary. Bias detection tools help identify issues early. Continuous monitoring ensures the AI adapts fairly to evolving data.

Maintaining Human Oversight in AI-Assisted Care

AI should support, not replace, human decision-making. Healthcare professionals must have the final say in diagnoses and treatment plans. AI can provide valuable insights but cannot fully replace human judgment. Clinicians should be able to offer feedback on AI recommendations to improve the system. This collaborative approach ensures safer, more effective care.

Promoting Equitable Access to AI-Driven Mental Health Services

AI in mental health must be accessible to everyone. Efforts should be made to make these tools affordable for underserved communities. Providing digital literacy programs can help people use AI tools effectively. It's also important to ensure that AI systems work in multiple languages. These steps help ensure no one is left behind in accessing care.

Integrating Spiritual and Moral Considerations into AI Applications

AI in mental health should respect patients' spiritual and moral beliefs. Users should be able to incorporate their values into their treatment plans. Collaborating with spiritual leaders can help align AI with these beliefs. AI tools should be customizable to accommodate diverse cultural and religious contexts. This ensures a more holistic and respectful approach to care.

VI. CONCLUSION

The use of Artificial Intelligence (AI) in mental health care is analyzed through an Islamic ethical framework. AI has the potential to transform mental health management by enabling early diagnosis, personalized treatment, and greater accessibility. Central to this discussion are the principles of Maqasid al-Shariah, which emphasize preserving life, intellect, dignity, and justice. AI technologies must align with Islamic values such as Adl (justice), Ihsan (excellence), and Amana (trust). Ethical challenges like algorithmic bias, data privacy, and depersonalized care are significant concerns. Human oversight is essential to ensure AI complements, rather than replaces, empathy and ethical decision-making. Transparent, fair, and equitable AI systems should safeguard human dignity and address both clinical and

spiritual needs. Recommendations include ensuring fair access, robust data protection, and designing AI tools that uphold Islamic values to ethically advance mental health care.

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