

Leveraging Artificial Intelligence (AI) and Digitalization of Community Health Screening in Unani Medicine: Bridging Tradition with Technology – A Perspective Review

Syed Abdul Zahoor^{1,*}, Mohammed Maqbool Hussain², Fouziya Anjum³, Khaleda Begum³

Abstract

AI and digitalization bring a great opportunity for reforming and even improvement of traditional healthcare systems in Unani physiology. This review, therefore, observes the important role played by AI and digital health solutions in modernizing health screening and diagnostic procedures in Unani medicine, thereby bridging traditional healing practices with contemporary technological advancement. AI refers to the advantages that may accrue via wearable health devices and telemedicine in real-time monitoring, early detection, and personalized treatment plans, thereby correlating diagnostic efficacy and patient outcomes for Unani medicine. AI aids in data gathering and processing in Unani practice giving feedback to the practitioner on humoral imbalances (Mizaj) and temperament-based treatment of the patient. Despite bright predictions, there remain mounting ethical issues, concerns for data sharing and data privacy, and behavioral challenges for the regulatory framework, all vying for clear guidance for sustainable integration within Unani practice. It would further be crucial to virtually augment access to Unani medicine by improving the digital health infrastructure, particularly in unprivileged rural areas. This review proceeds to present a discussion addressing both the opportunities and challenges of integrating traditional health systems and digital health from an Unani perspective with a view to charting the future course for Unani medicine worldwide.

Keywords: Artificial Intelligence, Unani medicine, digital health, health screening, personalized treatment

*Author for Correspondence

Syed Abdul Zahoor
E-mail: abdulzahoor313@gmail.com

¹Scholar, Department of Community Medicine, Government Nizamia Tibbi College, Charminar, Hyderabad, Telangana, India

²Professor & HOD, Department of Community Medicine, Government Nizamia Tibbi College, Charminar, Hyderabad, Telangana, India

³Assistant Professor, Department of Community Medicine, Government Nizamia Tibbi College, Charminar, Hyderabad, Telangana, India

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INTRODUCTION

The Unani system of medicine is a comprehensive medical system, which meticulously deals with the states of health and disease. Its fundamentals are based on deep philosophical insights and scientific principles. This system fully appreciates and understands the creation of man, his nature, his constitution and his relationship to the environment. The strength of the system is its holistic approach, temperament-based prescription and principles of six essential factors of life (Asbabe Sitta Zaruriya); which are pivotal for maintenance of health. Its holistic approach focuses on how the physical, mental, emotional and spiritual elements of the body are interconnected to maintain wellness. Toning up organs and immune system is another unique feature of this system [1]. Unani

medicine, an ancient system of medicine that originated thousands of years ago, has been practiced in India for centuries. The system was developed on lines of Hippocratic and Galenic traditions and is centered on the equilibrium of the bodily humors – blood (Dam), phlegm (Balgham), yellow bile (Safra), and black bile (Sauda) [2]. The Unani diagnosis relies on clinical observation, pulse reading (Nabz), and symptom and sign observation to identify the hidden imbalance of the humors [3]. Due to advances in medical technology, the need now felt is to modernize these diagnostic processes but keeping their fundamental principles unchanged. Artificial Intelligence (AI) and digitalization possess the revolutionary potential to make health screening in Unani medicine more effective and accurate to close the gap between tradition and modern healthcare innovations [4].

Screening for health is a hallmark of early disease detection and prevention. Preventive health in Unani medicine is obtained by changing lifestyle (Ilaj bil Tadbeer) and by medication with herbs (Ilaj bil Dawa) [5]. Effective as it is, the traditional approach to assessment of health in Unani medicine is usually devoid of standardized diagnostic instruments and objective measurement parameters [6]. AI and digital health technologies' integration can help augment conventional diagnosis by facilitating automated data collection, real-time observation, and prediction analysis. AI-driven decision support systems and digital screening tools can assist Unani practitioners in enhanced decision-making and patient outcomes [7].

Artificial Intelligence is transforming medicine through the support of machine learning, deep learning, and natural language processing technologies. Predictive analytics, image recognition, and AI-based diagnosis algorithms have transformed healthcare delivery into contemporary medicine [8]. The technologies are amendable to helping Unani medicine detect patterns of disease, predict humoral imbalance, and monitor patients [9]. The extent to which AI can improve the accuracy of diagnoses without lagging on the holistic aspects of Unani medicine is an area with immense scope for integration [10].

Digitalization of health screening entails the application of electronic health records, telemedicine portals, and remote monitoring equipment to enhance patient care [11]. Unani health screening can be digitally transformed to enable systematic recording of patient history, monitoring of treatment progress, and distant consultations. In India, telemedicine adoption has picked up pace, particularly post-COVID-19, allowing greater access to healthcare services, including consultations with traditional medicine [12]. Through digital platforms, Unani practitioners can reach rural and disadvantaged areas, ensuring that traditional knowledge is properly complemented with technological innovations [13].

One of the most excellent aspects of using digitalization and AI in Unani health screening is cost reduction in healthcare and accessibility improvement. Virtual assistants and chatbots with AI features can provide preliminary diagnoses and recommend relevant Unani treatments based on the patients' symptoms [14]. In addition, AI can be used for the analysis of herbal drugs in effectiveness terms by identifying active components and their anticipated pharmacological effects based on computer simulations [15]. This convergence of traditional medicine and AI-based research can result in evidence-based justification of Unani treatments, thus enhancing their acceptability in the global healthcare community [16].

IMPORTANCE OF HEALTH SCREENING IN UNANI MEDICINE

Health screening is a part of Unani medicine, as it helps in the early detection, prevention, and cure of diseases. The Unani system of medicine, as per the principles of Hippocrates and Galen, emphasizes the necessity of maintaining the four humors – blood (Dam), phlegm (Balgham), yellow bile (Safra), and black bile (Sauda) [3] – in equilibrium. Any disruption in this balance results in the onset of diseases, hence screening should be carried out early for timely treatment. The traditional Unani screening tests are founded on clinical examinations, such as pulse diagnosis (Nabz), urine test (Baul), stool examination (Baraz), and assessment of physical and psychological symptoms [6].

Perhaps the most valuable aspect of Unani health screening is its preventative effect. Unani physicians focus on identifying risk factors and following lifestyle modifications (Ilaj bil Tadbeer) to ensure balance before disease arises [5]. This is particularly important in India, which sees a high rate of diseases, like diabetes, hypertension, and metabolic syndrome, that are increasingly prevalent in the region. Through conducting regular health screenings, Unani practitioners can provide personalized guidance on diet (Ilaj bil Ghiza), herbal therapy (Ilaj bil Dawa), and physical therapies [16].

Although effective, conventional screening in Unani medicine is ridden with limitations because it is not standardized using diagnostic tools and objective measurement criteria. While modern diagnostic tools are technical and independent of the technician's skill and experience, Unani assessment is qualitative, relying on the skill and observation capabilities of the practitioner [2]. Inclusion of new technologies, like artificial intelligence (AI) and digital health platforms, can improve the process to be more precise and standard in Unani diagnosis. Employment of AI-based tools for analysis of pulse variation, facial recognition of disease patterns, and electronic capture of patient history can improve the validity of Unani health screening [9].

ROLE OF ARTIFICIAL INTELLIGENCE AND DIGITALIZATION IN HEALTHCARE

Artificial Intelligence (AI) and digitalization are revolutionizing healthcare by improving diagnostic accuracy, enhancing patient management, and enabling personalized treatment. AI-powered technologies, like machine learning (ML), deep learning (DL), and natural language processing (NLP), are increasingly being employed for disease prediction, medical image analysis, and drug discovery [8]. They can even be used in conventional frameworks, such as Unani medicine, where AI is used in studying intricate patterns of diseases, improving treatment protocols, and facilitating data-driven decision-making [10].

One of the most important applications of AI in Unani medicine is diagnostic support. AI-based software can analyze previous patient history, identify patterns of recurring symptoms, and suggest potential Unani treatment from previous cases [17]. AI-based chatbots and virtual assistants can also provide preliminary consultations, relieving pressure on healthcare professionals and making Unani medicine more popular among the masses [6].

Healthcare digitalization involves the application of electronic health records (EHRs), telemedicine platforms, and wearable technology for ongoing health monitoring. In Unani medicine, digitalization can facilitate remote consultations, organized documentation of patient improvement, and incorporation of AI-based diagnostic systems [13]. The efforts of the government of India, for example, the Ayushman Bharat Digital Mission, to develop a single digital health ecosystem that can enable inclusion of Unani medicine in mainstream healthcare [18].

One of the largest benefits of AI and digitalization in healthcare is that they can process a vast amount of data in an efficient manner. The AI programs may analyze biochemical properties of Unani products, predict drug interactions, and recommend personalized herbal treatment based on the constitution of an individual (Mizaj) [15]. Moreover, electronic platforms can integrate evidence-based research and Unani medicine by carrying traditional knowledge with present scientific proof-based practices (Table 1) [16].

Whereas digitalization and AI provide unlimited opportunities to develop Unani health screening, surmounting certain issues, such as data privacy, lack of systematic datasets, and regulatory challenges is essential. There is a need for Unani practitioners, policymakers in health, and AI scientists to collaborate and make moral implementation and worldwide acceptability possible [4]. By employing the aid of digital technology and AI, Unani medicine can be transformed into an even more evidence-based and accessible mode of healthcare bridging the gap between tradition and modernity in the medical field.

Table 1. Shows comparison of traditional and AI-enhanced health screening in Unani medicine.

Aspect	Traditional Unani Health Screening	AI-Enhanced Health Screening
Diagnostic Method	Pulse reading (Nabz), urine/stool analysis, observation-based diagnosis	AI-based pattern recognition, digital pulse analysis.
Accuracy & Consistency	Relies on physician's experience, subjective interpretation	Data-driven analysis, higher consistency.
Data Storage	Paper-based records, limited historical tracking	Electronic health records, cloud storage.
Consultation Mode	In-person only, limited outreach	Telemedicine, remote health monitoring.
Personalization	Based on physician's assessment of Mizaj	AI-driven personalized treatment recommendations.
Speed of Diagnosis	Time-consuming, requires physical examination	Faster analysis through AI algorithms.
Integration with Modern Healthcare	Limited, traditional approaches only	Can be integrated with modern diagnostics and research.

Objectives of the Review

1. To examine the traditional health screening methods in Unani medicine.
2. To explore the role of AI and digitalization in enhancing Unani health screening.
3. To identify the challenges and ethical considerations in integrating AI with Unani medicine.
4. To provide recommendations for the effective implementation of AI and digitalization in Unani healthcare.

ARTIFICIAL INTELLIGENCE IN HEALTHCARE

Artificial Intelligence (AI) is the disruptor within the healthcare space, enabling faster diagnoses, patient-specific treatments, and better outcomes for patients. AI encompasses all these technologies including machine learning (ML), deep learning (DL), natural language processing (NLP), and robotic process automation (RPA), which all transformed medical practice into numerous manners [8]. The integration of AI in healthcare systems is expected to optimize decision-making, eliminate human error, and provide doctors with advanced technologies for accurate diagnosis, prognosis, and treatment [4]. The potential applications of AI-powered health screening are of significant concern because of the capabilities of such systems to enhance diagnostics through quick, accurate, and data-facilitated solutions [10].

Fundamentals of Artificial Intelligence

Artificial Intelligence (AI) refers to the simulation of human thinking by machines, particularly computer programs. They comprise learning, reasoning, problem-solving, perception, and language understanding [19]. AI is driven by algorithms that allow computers to interpret vast amounts of data, draw conclusions, and improve with practice over time. The two wide categories of AI are machine learning (ML) and deep learning (DL). ML algorithms learn patterns from data and use the patterns to forecast or decide without direct programming. DL, a subcategory of ML, uses neural networks to manage data by propagating data between layers of interlinked nodes so that the system can recognize advanced patterns and deliver accurate forecasts [20]. In medicine, AI is increasingly used for enhancing diagnostic accuracy, personalizing treatment, and optimizing patient care.

AI Technologies Used in Health Screening

Artificial intelligence technologies are revolutionizing health screening through improved diagnostic accuracy, process optimization, and decision-making. The most prominent AI technologies used in health screening include machine learning algorithms, computer vision, and natural language processing (NLP). Machine learning algorithms can be used to scan enormous datasets, like medical images, electronic health records (EHRs), and genomic data, to detect patterns and predict the onset of disease [21]. Computer vision, a field of AI, allows machines to interpret and comprehend medical images, like X-rays, MRIs, and CT scans, to identify anomalies, such as tumors or fractures [22]. NLP is used to process and analyze text data from patient records, allowing for automatic extraction of

clinical information pertinent to it [23]. These technologies allow for early diagnosis, faster diagnosis, and improved screening of diseases like cancer, diabetes, and cardiovascular diseases.

Potential Applications of AI in Unani Medicine

AI can be utilized in Unani medicine by augmenting its diagnostic and therapeutic functions. Interpretation of the patient’s symptoms and health condition in terms of the humoral imbalance (Dam, Balgham, Safra, and Sauda) is one of the most important areas where AI can be applied for Unani medicine [9]. Artificial intelligence is capable of processing vast amounts of data regarding patients, including clinical background, lifestyle information, and results from the lab, to scan for patterns and predict the disruption of the body’s humor. AI-driven systems can further be used for customized treatment planning through an examination of the effectiveness of different Unani drugs and treatments in respect to some specific factors of a patient like Mizaj (temperament) [10].

AI Tools for Diagnosis and Prognosis in Unani Practices

Unani practices may use AI technologies to obtain diagnosis and prognosis based on conventional methods facilitated by available computational mechanisms. For diagnosis, AI technology can implement processing clinical data with the diagnosing imbalance of humor among the Dam, Balgham, Safra, and Sauda [3]. For instance, machine learning tools can be modeled from historical patient data to recognize patterns around specific conditions and forecast the chances of the disease occurrence with accuracy. In prognosis, AI tools can predict the course of a disease based on the present condition and history of treatment, formulating personalized treatment regimens with Unani medicine, diet regimen, and therapeutics [9]. Comparison of traditional and AI-enhanced diagnostic tools in Unani medicine is depicted in Figure 1.

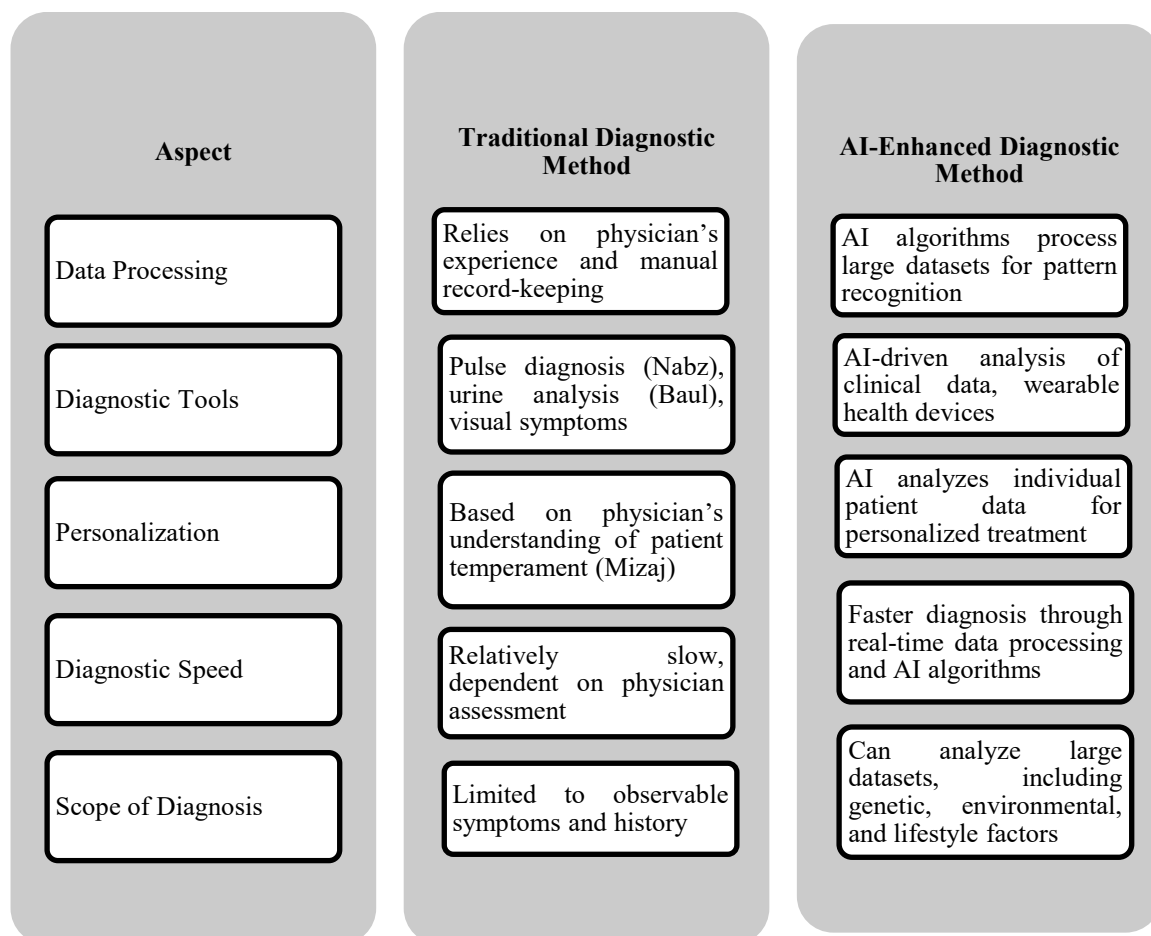


Figure 1. Illustrates comparison of traditional and AI-enhanced diagnostic tools in Unani medicine.

In addition, AI-based prognosis in Unani also helps monitor the progress of disease by regularly going through patient data, predicting future complications, and recommending proper treatment at the correct time. Machine learning models can also be used to gauge the effectiveness of different Unani treatments so that professionals can adjust the treatment in accordance with the response of patients. AI technology will allow Unani practitioners to deliver more precise, tailored treatment, leading to enhanced patient outcomes and satisfaction (Figure 2) [6].

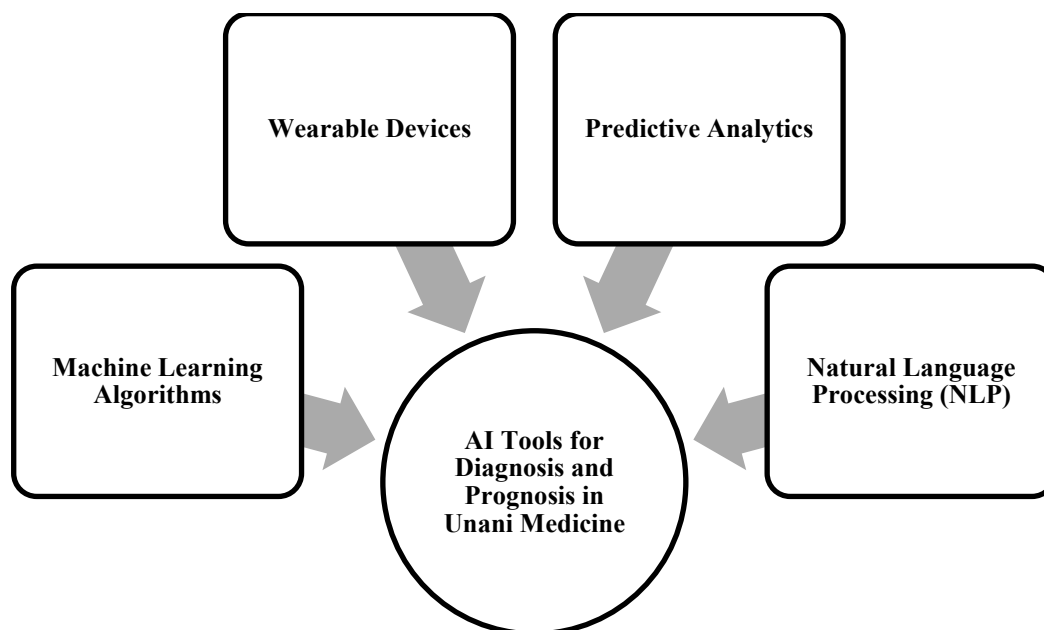


Figure 2. Shows some AI tools for diagnosis and prognosis in Unani medicine.

With the integration of AI-based tools during the diagnostic and prognostic phases, Unani medicine has the advantage of quicker, more precise evaluations while upholding its holistic nature. The integration provides Unani practitioners with the opportunity to provide tailored treatments based on real-time inputs and AI-supported analysis.

DIGITALIZATION OF HEALTH SCREENING

Concept of Digital Health Screening

Digital health screening refers to the use of digital technology in distant evaluation, monitoring, and diagnosis of health. It employs a set of technologies, such as wearable technologies, telemedicine systems, mobile health applications, and web-based diagnostic tools to collect health information and provide immediate feedback [24]. This new health screening procedure enables patients' health markers to be continuously monitored with reduced face-to-face consultations and earlier detection of most medical conditions [25]. Digital health screening is particularly convenient to implement in rural areas where hospitals or clinics are miles apart, making healthcare more accessible and efficient. Furthermore, it provides real-time data that is useful in individualized treatment regimens and preventive medicine, aligning with the world-wide movement from reactive to preventive care [26].

Key Technologies in Digital Health (e.g., Wearables, Telemedicine)

Wearables and telemedicine are two of the most critical of a range of foundational technologies that underpin successful digital health screening. Wearable technology, for instance, such as smartwatches and fitness trackers, monitors simple vital signs, like heart rate, blood pressure, and blood oxygen, reporting in real-time to both patients and health professionals [27]. These wearables are increasingly linked to mobile applications, allowing patients to track their health in real time and send this data to their doctors. Wearables also help manage chronic diseases by reminding clinicians and patients of upcoming health complications before they arise [28].

Telemedicine, the second most prevalent technology, refers to the delivery of healthcare services remotely via video consultation, phone call, or web chat. Telemedicine allows doctors to make consultations, diagnosis, and prescribe treatments without necessarily seeing patients in person [29]. Telemedicine platforms are particularly vital for individuals living in remote and underserved locations who do not have easy access to health centers. In addition, telemedicine can be combined with AI algorithms that help diagnose diseases based on patient histories and symptoms [19].

Digital Health Screening Platforms and Software

Different digital health screening software and programs have been created to make the process of health screening easier. The platforms facilitate easy integration of patient information, provide diagnostic software, and facilitate communication between patients and health providers. For example, platforms, such as Doctor on Demand, Teladoc, and LiveHealth Online facilitate virtual consultations and real-time monitoring of health [24]. These platforms have been integrated with video consultations, prescription management, and sharing of lab results, which enhance the effectiveness and availability of health care. There also are new specialist digital health screening platforms for individual medical conditions, like diabetes and cardiovascular disease, which utilize wearables' data to track patient health and offer real-time evaluations [30].

Besides, some digital health software platforms have AI-based tools for analysis of patient data and diagnostic suggestions. For example, Babylon Health uses AI to sift through patient symptoms and provide preliminary diagnoses, whereas Fitbit links with healthcare applications to track chronic diseases and suggest preventive measures based on data collected [31]. These platforms have the potential to relieve the workload of health professionals, optimize the utilization of resources, and help deliver timely, actionable health information to patients.

Benefits of Digitalization in Health Screening

Digitalization of health screening has numerous advantages that enhance the quality of healthcare provision. Firstly, it enables real-time monitoring of patients' health, thus enhancing early detection of potential problems and timely intervention [24]. This shift from episodic to continuous care enables enhanced health outcomes, especially for patients with chronic conditions. Digital health screening also offers improved access to healthcare services, particularly in rural or remote settings where there might be limited healthcare facilities (Figure 3) [27].

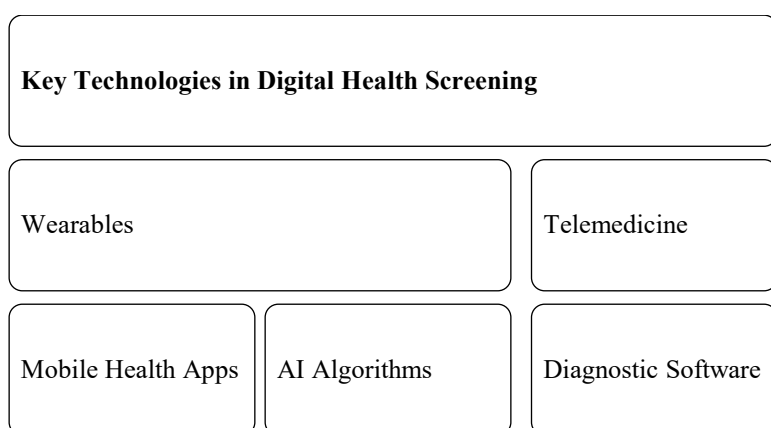


Figure 3. Shows the key technologies in digital health screening.

BRIDGING TRADITION WITH TECHNOLOGY IN UNANI MEDICINE

Integrating AI and Digitalization with Traditional Unani Practices

Synergy between digitalization and AI with conventional Unani practice will improve screening to be more accessible and accurate. Conventional practices of pulse diagnosis (Nabz), urine examination (Baul), and temperament analysis (Mizaj) can be supported by digital interventions for accuracy and

efficiency improvement [6]. For instance, AI-based systems can examine pulse changes and correlate them with states of health for better diagnostic information. Equally, computer programs can be employed to examine urine and stool samples across distant locations, thus raising the yield of diagnosis in regions where there is poor access to laboratory facilities.

With the incorporation of AI technologies, Unani practitioners get diagnostic support carrying old wisdom with new technology. AI-based systems can suggest personalized herbal remedies based on the patient's health data and humoral imbalance, creating an evidence-based road to Unani therapy [10]. Remote consultation is also enabled by digitalization, where Unani medicine reaches a wider population without any loss of its holistic philosophy of care.

Challenges and Opportunities in Bridging Tradition with Technology in India

While the intersection of AI and digitalization in Unani medicine has enormous potential, there are numerous challenges that need to be met. One of the most important challenges is that there are no standard datasets and regulations for the digitalization of traditional medicine, which may slow down the process of developing AI-based diagnostic tools [4]. Another challenge is that technology adoption resistance comes from the conventional practitioners who are afraid that AI will replace their experience [2].

Despite this, there exist tremendous potentialities of carrying technology and tradition in India. India's vast-scale digital network, increasing internet penetration rate, and government patronage for digital health schemes provide a favorable environment for synergizing AI with Unani practice [18]. With the education of Unani practitioners and developing user-friendly AI tools, India's potentialities for increasing the accessibility, efficiency, and personalization of healthcare can be fulfilled. Challenges and Opportunities in integrating AI and Digitalization with Unani medicine are depicted in Figure 4.

Challenges	Opportunities
<ul style="list-style-type: none"> •Lack of standardized datasets for Unani practices •Resistance to technology adoption among practitioners •Regulatory concerns and data privacy issues •Limited funding for research in traditional medicine 	<ul style="list-style-type: none"> •Government initiatives like Ayushman Bharat Digital Mission •Growing digital infrastructure and internet penetration in India •Training programs for Unani practitioners in AI integration •AI tools to personalize treatment and enhance diagnostic accuracy

Figure 4. Illustrates challenges and opportunities in integrating AI and digitalization with Unani medicine.

DISCUSSION

Impact of AI and Digitalization on Unani Medicine in India

Enhancing Accessibility and Reach of Unani Medicine

Digital convergence and enabling of AI in Unani medicine highly improve its availability and accessibility. As the penetration of the internet and mobile phones is increasing in India, digital platforms enable Unani practitioners to serve more patients residing in rural or underserved areas by extending their consultation and treatment services to them. Telemedicine and AI together can fill the gap in healthcare by means of virtual consultations and take Unani medicine to the masses [18]. Health technologies in digital form can also diagnose potential health complications earlier and thereby reduce in-clinic visits. Apart from that, they can integrate Unani medicine into conventional care so that it may be practiced more often in combination with current therapies, particularly in rural and underserved areas [25].

Improving Diagnostic Accuracy and Treatment Personalization

Digitalization and AI enhance the diagnostic capability and personalized treatment of Unani medicine. The AI-based software can process patient information like symptoms, vital signs, and history to allow Unani practitioners to detect improved imbalances in humors (Dam, Balgham, Safra, and Sauda) [10]. With the analysis of big data, AI facilitates easier identification of weak correlations and patterns hard to detect in conventional diagnosis, which assists in gaining more knowledge regarding patient well-being. AI also allows treatment planning tailored to individual characteristics, such as temperament (Mizaj), lifestyle, and reactions to past therapies. Personalization to this extent will most probably result in improved therapeutic outcomes, optimizing the efficacy of administration of Unani herbal therapy [9].

Role of AI in Data Collection, Monitoring, and Patient Education

AI plays a central role in the collection of data, monitoring of patients, and education of people in Unani medicine. Mobile technology and health applications with integrated AI algorithms facilitate ongoing monitoring of physiological parameters and instant feedback to patients and practitioners [28]. Data aids early diagnosis of medical conditions and hence timely intervention and better control of chronic diseases. In addition, AI-based platforms can educate patients about their disease, its treatment, and mode of prevention so that they can manage their conditions themselves. Platforms online also facilitate remote consultation, wherein doctors can monitor patients' health status and modify treatment protocols based on the same [24].

Ethical and Regulatory Considerations in Integrating AI in Unani Medicine

The application of AI in Unani medicine is generating ethical and regulatory problems that must be addressed in depth. The confidentiality of the patient and the protection of their information are required as medical data are private and are to be extended strict protection [14]. For ensuring the ethical application of AI based systems we have to frame the Rules and Regulations for using the AI in the practice of medicine [4]. It should be noted that AI technology is only for the enhancement of the knowledge of the medicine expert or Unani practitioners so that they find it easy in the diagnosis of the disease. Ethical challenges with AI decision-making in treating patients must be addressed through bringing transparency and accountability to outsourced algorithms [29]. The regulatory bodies must also give straightforward instructions on how AI-based technologies are used alongside traditional systems of medicine so that the practices are within medical guidelines and cultural standards.

Suggestions for Advancing the Integration of AI in Unani Medicine

1. To convincingly promote the integration of AI in Unani medicine, a few important strategies can be followed. One, research and development in collaboration among AI experts, Unani practitioners, and healthcare technologists must be encouraged. With collaboration, AI tools are developed that are specific to the distinct Unani medicine principles and practices, e.g., determining humoral imbalance and temperament (Mizaj) more precisely. The AI algorithms should be developed on a strong data set of patient data and conventional diagnostic protocols, encouraging accuracy in treatment protocols.
2. *Education and training programs:* For Unani professionals, utilizing AI technologies should be established. This will facilitate them to gain the necessary skills in bringing AI tools into their practice without compromising the holistic approach of Unani medicine. Providing experiential training and workshop facilities on AI applications, wearable health devices, and mobile health apps will facilitate greater uptake and utilization of these technologies among the conventional healthcare practitioners.
3. *Regulatory Frameworks:* There must be regulatory frameworks for the application of AI ethically in traditional medicine. There should be rules developed by regulatory bodies that ensure the application of AI tools in patient-privacy-friendly manners, maintain the sanctity of Unani practices, and promote transparency in AI-informed decision-making. This would ensure patients and practitioners alike of their confidence in AI technologies.

4. *Investment in digital health infrastructure in rural India*: will go a long way in enhancing reach and accessibility of Unani medicine so that AI tools are made accessible to target populations requiring care.

CONCLUSIONS

From the above study we can conclude that there is a shift in the Unani mode of treatment from the traditional methods to the use of AI and other digital methods. The accuracy of the Unani treatments are being enhanced using AI and digital tools as now their accessibility, accuracy, and personalization of Unani treatment has been increased to various folds with the use of AI and other digital tools. The use of AI and other digital tools has bridged the gaps between ancient healing systems and modern technological advancements. The continuous monitoring of patients, detection of the disease and intervention for various health conditions is made possible only using AI and other digital tools especially in rural and underserved regions. This mixture of Unani medicines with AI and other digital tools and systems makes Unani medicine relevant in the modern world healthcare facilities.

The potential contribution of AI towards raising the accuracy of diagnosis and individualized treatment in Unani medicine cannot be discounted. By the large volumes of patients' data, AI technologies support practitioners to make better decisions about diagnosis and treatment. In addition to this, integrating wearable sensors with mobile health applications provides real-time health information such that patients manage their own healthcare actively and professionals can monitor the progress of treatment through remote means. This personalized response fits into the overall philosophy behind Unani medicine as it seeks to treat the patient rather than focusing on treatment of symptoms.

With advantages also come the challenges. The basic challenges which are being faced by the Unani medicine are ethical considerations, data privacy and the regulation of AI tools in traditional healthcare systems. To preserve the originality of Unani medicine we must make certain strict laws and clear guidelines. As India is developing at a very fast pace so the synergy between the Unani medicine and AI makes a significant promise for the future of healthcare as this synergy offers a balanced approach which integrates modern technology with traditional wisdom.

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