

EĞİTİM yayınevi

Editör: **Prof. Dr. Arzu Karaca**

International Research in the Field of

Management and Organization -II

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Editor: Prof. Dr. Arzu Karaca

Chairman of the Publishing House Group: Yusuf Ziya Aydoğan (yza@egitimyayinevi.com)
Executive Editor: Yusuf Yavuz (yusufyavuz@egitimyayinevi.com)
Interior Designer: Kübra Konca Nam
Cover Designer: Eğitim Yayınevi Graphics Unit

Republic of Türkiye Ministry of Tourizm and Culture
Publisher Certificate No: 76780

ISBN: 978-625-385-245-0
1. Edition, May 2025

Printing and Binding
Sayfa Basım Sanayi
Tevfik İleri Mah. Emek Cad. Polat Sok. No: 2 Pursaklar / Ankara
Printing House Certificate No: 77079

Library Information Card

International Research İn The Field Of Management And Organization –II
Editor: Prof. Dr. Arzu Karaca
IV+217, 160x240 mm
Includes references, no index.
ISBN: 978-625-385-245-0

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Publisher Turkey Office: İstanbul: Eğitim Yayınevi Tic. Ltd. Şti., Atakent mah. Yasemen sok. No: 4/B, Ümraniye, İstanbul, Türkiye

Konya: Eğitim Yayınevi Tic. Ltd. Şti., Fevzi Çakmak Mah. 10721 Sok. B Blok, No: 16/B, Safakent, Karatay, Konya, Türkiye
+90 332 351 92 85, +90 533 151 50 42
bilgi@egitimyayinevi.com

Publisher USA Office: New York: Egitim Publishing Group, Inc.
P.O. Box 768/Armonk, New York, 10504-0768, United States of America
americaoffice@egitimyayinevi.com

Logistics and Shipping Center: Kitapmatik Lojistik ve Sevkiyat Merkezi, Fevzi Çakmak Mah. 10721 Sok. B Blok, No: 16/B, Safakent, Karatay, Konya, Türkiye
sevkiyat@egitimyayinevi.com

Bookstore Branch: Eğitim Kitabevi, Şükran mah. Rampalı 121, Meram, Konya, Türkiye
+90 332 499 90 00
bilgi@egitimkitabevi.com

Internet Sales: www.kitapmatik.com.tr
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OVERVIEW OF ARTIFICIAL INTELLIGENCE APPLICATIONS IN HEALTH

Hafize Boyacı*

ABSTRACT

In recent years, with the acceleration of technological developments, artificial intelligence has revolutionized the healthcare industry. With systems similar to human cognitive functions, artificial intelligence undertakes the task of performing analysis by processing big data and supporting decision support processes. These technological developments have increased the quality of health services, contributed to the provision of accurate, fast and reliable health services and expanded their effectiveness. Artificial intelligence technology, which is active in many areas such as the diagnosis of diseases, early diagnosis and treatment process, is assumed to be used in a much wider area in the future.

INTRODUCTION

Artificial Intelligence

Artificial intelligence describes formations that reproduce people's cognitive abilities using computer systems. Artificial intelligence is software systems that can do business, solve problems, improve by processing learned data and as a result reach the level of decision making. (Kaplan & Haenlein, 2019, Lai et al., 2021).

Artificial intelligence is also defined as a set of systems capable of performing activities such as movement, voice recognition, reasoning, etc. by exhibiting human-like behaviors (Çilhoroz & Işik, 2021, Rust & Huang, 2014) Artificial intelligence represents a technology that can interpret complex processes by obtaining system data, derive information from data and act on purpose (Samoili et al., 2020). The concept of what is AI was first used by John McCarthy and his team in 1956 (Gülşen, 2019). Presented as a proposal by the Australian Council of Learned Academies Dartmouth

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University, AI has been described as "a collection of technologies interrelated to each other to do tasks and solve problems that require people to think" (Walsh et al., 2019). Another definition of AI is "the theory and development of computer systems capable of performing tasks requiring human intelligence, such as decision making, visual perception, speech recognition and translation between languages, etc." (Agba et al., 2023). Huang and Rust (2018) expressed AI as a demonstration of human intelligence by machines. The definition of artificial intelligence made by the OECD is as follows; "For a given set of human-defined goals, it is a machine-based system that can make predictions, recommendations, or decisions that affect real or virtual environments." In the age of technology, AI is described as a compatible directory of programs that will perform many functions together with computers (Filiz et al., 2022). In the world, the way to ensure that the application of artificial intelligence is used more in the fields of education, market, health, etc., is made possible by ensuring the sustainability of the technological infrastructure and AI systems of countries (Hobeika, 2024).

Advances in AI technology have become influential in every field, not just science fiction. With computing technology, a wide range of uses has been created in all businesses and organizations (Lai et al., 2021). AI systems, which have found use in more and more sectors such as academia, industry, health, education, especially in recent years, are designed to operate with various levels of independence (Zhang & lu, 2021).

The special feature of artificial intelligence is that it gives machines the ability to think in a human-like way and is used to solve processes with the help of computers. For this reason, it is adapted and used in many areas (Yorgancıoğlu, 2024). Artificial intelligence technology has the capacity to be used in the field of medicine and other fields with machine learning and deep learning. Artificial intelligence technology, which has a complex structure, is rapidly integrated not only in industrial and information technology, but especially in the health sector.

Artificial İntelligence in Health

The use of AI in the health sector is becoming greasy all over the world. Studies showing that it has become widespread in the health sector, and especially in medical informatics, highlight the importance of AI in health care (Khanna et al., 2013).

Healthcare is one of the sectors where technology is heavily used. The healthcare sector requires costly investments, has advanced technology and meets the needs of a diverse patient population (Spyropoulos, 2000, Çetin, 2023). For this reason, the role of technology in health care is increasing. Technology offers new solutions for access to healthcare, improved quality (van der Niet AG & Bleakley, 2021). The health sector, due to its multidisciplinary and complex organizational structures, works in cooperation with various professional groups. With technological developments, increasing population, epidemics and chronic diseases have created a need for new searches in health services. Health institutions have expanded the field of application of artificial intelligence in this process (Güzel et al., 2022). In order to solve the problems caused by the increasing population and developing technology in health service, it is now a necessity to integrate applications such as ai, machine learning and internet of things into health. Intelligent health system implementation, regulation of data management systems, storage. AI applications in the creation of standards have become the need for rapid solutions and effective results (Nadimpall, 2017). AI is effectively used in management and clinical processes in central and local health institutions (Akalın & Veranyurt, 2020). AI is a system that can be applied in all medical disciplines such as radiology, surgery, cardiology, dermatology, ophthalmology (Chaieb et al., 2023). Research has shown that my use of AI in health care delivery yields good results. Today, robotic systems used in diagnosis and treatment, medical imaging and surgeries, patient follow-up and rational hospital systems, rational laboratory management, temperature monitoring system, etc. are used in many areas (Güzel et al., 2022, Gourisaria et al., 2022).

The Role of Artificial İntelligence in Medical Diagnosis and Treatment

In the process of diagnosing the disease, making use of AI technology makes it easier to achieve the goal by shortening the diagnosis and treatment process. In doing so, it supports the treatment by analyzing the information obtained from medical diagnostic tools (laboratory findings, radiological images, pathological findings, etc.) in a timely and accurate manner.

AI technology, when combined with biochemical tests and clinical tests, improves diagnostic performance (Keleş, 2022). In addition, the use of AI in endoscopic examinations is effective in the detection and diagnosis of diseases of the intestinal tract such as esophagus and stomach (Gulati et al.,

2020). In Microbiology, another field in health, AI systems are also used. The identification of microorganisms that lead to various diseases with the data obtained from the microbiology laboratory helps other branches of science in diagnosis and treatment. The risk of misdiagnosis is minimized with AI systems that allow data to be collected and interpreted. (Çağlar, 2013, Sinval, 2021, Ergüven & Ökten, 2022). The use of the information obtained in this field enables the protection of public health. Thanks to microbiology and other laboratories and rational laboratory systems, it works as an effective support program for the diagnosis of treatment by providing follow-up and information exchange of business processes (Şahin et. al., 2019).

In the field of medicine and radiology, significant changes have been experienced in recent years with the introduction of AI, informatics, machine learning, biobanks and personalized medicine. AI is used in various ways in medical imaging analysis, which is used in the diagnosis of diseases. AI is capable of medical image analysis using Ultrasound, computed tomography (CT), MR imaging, pathology image data (Park et al., 2020).

Another area of use for AI is early cancer diagnosis and eye diseases with AI-assisted medical imaging devices. In the process of COVID-19, early diagnosis with CT, and played an important role in diagnosis. It is also known that physicians support the right and fast decision-making process (Mintz & Brodie, 2019). The expansion of the use of AI applications in health has led to increased collaboration between healthcare and technology companies, such as medical image analysis, monitoring of the disease process with health data, and the development and commercialization of diagnostic medical devices (Park et al., 2020). In parallel with the developments in the field of medicine as a result of the use of AI, the medical device industry continues its attempts to integrate more advanced systems.

The effect of AI technology in the process of simultaneous progressive treatment with diagnostic applications in medicine is quite visible. With intelligent health systems, AI applications are used in many processes such as diagnosis, diagnosis, treatment, care, robotic surgery. Especially in the field of surgery, the applications that we encounter are groundbreaking in health. The first use of AI in the surgical branch was carried out by Gunn in 1976. The use of AI in the field of surgery in the process that has survived to the present day has found itself a much wider field (Ramesh et al., 2004, 334; Çilhoroz & Işık, 2021, Çetin, 2023). The use of AI technologies in pre-

and post-operative periods has yielded successful results. In the surgical branch, remote surgery, clear image, correct and comfortable surgery advanced AI systems have been developed, and it has been determined that complications are reduced and high surgical success is achieved (Keleş, 2022). Especially in the field of robotic surgery, artificial intelligence has shown great promise to revolutionize. There are studies in surgical care that state it has the potential to improve patient outcomes, reduce complications, and provide access to specialized surgical expertise, by improving efficiency, precision, and accessibility (Iftikhar et al., 2024).

In addition to all these developments, Al technology and the collection of data in the field of machine learning and pharmacology and "quantitative structure-activity relationship (QSAR) studies, novo drug design with absorption, distribution, metabolism, excretion and toxicity (ADME/T) properties in silico evaluation" are used in many drug design fields (Tarı & Arpacı, 2024). In the process of drug formulation studies, resulting from the processing and analysis of big data, it is thought that a comprehensive knowledge about the effect of drugs will be obtained by using AI technology. AI technology is applied in the fields of new drug design, personalized drug therapy, new treatment method, drug effect enhancement, targeted smart drug, effectiveness studies, etc. It has been determined that in some diseases that require treatment for a long time (such as tuberculosis and chronic diseases), the treatment process with AI technology is successful (Güner, 2020).

Artificial Intelligence in The Process of Patient Follow-Up and Management

In the concept of health services, it is necessary not only to follow the treatment process of the disease, but also the follow-up process of the patient. Intelligent IoT (Internet of Things), technology and wearable devices are used as AI tools used in the processing of the patient tracking mechanism. With these devices and services, daily health information can be accessed and monitored, helping to improve health (Park et al., 2020). AI technology plays an active role in the management of this process. Virtual patient monitoring and management through wearable technology has become one of the standards of patient care. Wearable technologies can be defined as "mechanical and technological devices that can be worn by humans" (Liu & Han, 2020). This is because in addition to tracking people's physical behavior in daily life, biochemical data is also monitored. It is

thought that these data obtained in the future may reach the size that will be effective in clinical decision making (Haghi & Deserno, 2020) . Clothing, smart bracelets and jewelry, smart glasses can be presented as examples of wearable technology (Erkılıç & Yalçın, 2020) . With the help of wearable technology and non-invasive sensors, the monitoring of chronic diseases such as sleep apnea, diabetes, hypertension and the process of obtaining data also support the organization of hospital management practices (Çiğdem & Şahin, 2022).

Many medical devices have been developed that have the ability to perform analysis using AI. For example, high diagnostic performance electrocardiogram (ECG) devices similar to those of cardiologists, glucose measuring devices (non-invasive) and devices that optimize hospital treatment processes (Park et al., 2020) and follow-up of patients "test results, etc. (Akalın & Veranyurt, 2020).

Artificial İntelligence in The Management Process

In addition to the benefits of artificial intelligence in medical processes, it also has benefits in the hospital management process.

The use of AI in terms of operational efficiency in healthcare institutions has caused radical changes. As technological applications in the field of health; It is also an important tool in administrative uses such as management of processes, processing of data, documentation, planning of activities, health management, resource allocation and patient information system management, cost and quality management, increasing hospital capacity, etc. (Güzel et al., 2022, Gourisaria et al., 2022). AI technology is used for administrative process management and various health care functions., it is used as a tool for the management of processes, the correct distribution of resources and the provision of a certain standardization in terms of the management of patient information systems, the processing of data and its more rapid and accurate inclusion in the process. (Spyropoulos, 2000, Gourisaria et al., 2022). Artificial intelligence alleviates the administrative burden by compiling data from patients "past medical records. Clinical records, revenue management, claims processing, and medical record management are among these applications. In the world, in the process of health management, AI applications continue at full speed, while countries incorporate innovations suitable for their health systems into their processes. For example, digital change in health and the use of

computer systems have been developed to provide or support healthcare provision in Turkey. As an example of these practices; E-Pulse (Personal Health System), Family Physician Information System (AHBS): Decision Support System (DSS), Central Physician Appointment System (MHRS): MEDULA applications etc. (E-Health, 2020, Akalın & Veranyurt, 2020).

Services developed using artificial intelligence technology that optimizes hospital treatment processes such as electronic medical records (EMRs) systems are groundbreaking applications (Park et al., 2020).The increasing use of digitalization in medicine will enable the collection of a huge amount of data that can be analyzed with AI. As a result of this process, it will reach the capacity to help patients and doctors more in the future (Al Kuwaiti et al., 2023) Through the use of large and complex data in the expansion of medical knowledge, AI technologies that help improve the quality of life of patients are thought to be able to completely transform medical and patient care (Chaieb et al., 2023).

RESULT

As a result, the use of AI applications in health systems is important in terms of producing fast, accurate and targeted results in the diagnosis and treatment process of diseases and enabling physicians to make decisions. It is seen that the use of AI technology, which is used at all stages of the health system, will continue in an efficient manner. The integration of AI technology in healthcare systems, the development and standardization of networks that increase data availability and information sharing will contribute to the development of healthcare services in the future.

REFERENCE

Kaplan, A. & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligenc. *Bus Horiz*, 62(1),15–25.

Lai, Y., Kankanhalli, A., Ong Desmond. (2021). Human-AI Collaboration in Healthcare: A Review and Research Agenda, Conference: Hawaii International Conference on System Sciences January. DOI: 10.24251/HICSS.2021.046

Çilhoroz, Y., Işık, O. (2021).Yapay Zekâ: Sağlık Hizmetlerinden Uygulamalar. *Ankara Hacı Bayram Veli Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, 23(2)573-588.

Huang, M.-H., & Rust, R. T. (2021). A Strategic Framework for Artificial Intelligence in Marketing. Journal of the Academy of Marketing Science, 49, 30-50. https://doi.org/10.1007/s11747-020-00749-9

Samoili, S., López-Cobo, M., Gómez, E., De Prato, G., Martínez-Plumed, F. and Delipetrev, B. (2020). AI watch. Defining artificial intelligence. Towards an operational definition and taxonomy of artificial intelligence. *Publications Office of the European Union.*

Gülşen, İ. (2019). İşletmelerde Yapay Zeka Uygulamaları ve Faydaları: Perakende Sektöründe Bir Derleme, *Tüketici ve Tüketim Araştırmaları Dergisi*, 11(2), 407-436.

Walsh, T., et al. (2019). The effective and ethical development of artificial intelligence: an opportunity to improve our wellbeing. (Australia): *Australian Council of Learned Academies*;

Agba, M.S., Agba, G. E.M., Obeten, A.W. (2023). Artificial Intelligence and Public Management and Governance in Developed and Developing Market Economies. *Journal of Public Administration, Policy and Governance Research*, 1(1)-14.7

Huang, M.-H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service Research, 21*(2), 155–172. https://doi.org/10.1177/1094670517752459

OECD. (2019). Legal Instruments, https://legalinstruments.oecd.org/en/instruments/oecd-legal-0449 (Erişim Tarihi: 18.04.2025)

Filiz, E., Güzel, Ş., Şengül, A.(2022). Sağlık Profesyonellerinin Yapay Zekâ Kaygı Durumlarının İncelenmesi. *Journal of Academic Value Studies*, 8(1),47-55

Hobeika, E., Hallit, R., Malaeb, D., Sakr, F., Dabbous, M., Merdad, N., … Fekih-Romdhane, F. (2024). Multinational validation of the Arabic version of the Artificial Intelligence Literacy Scale (AILS) in university students. *Cogent Psychology*, *11*(1). https://doi.org/10.1080/23311908.2024.2395637

Zhang, C., & Lu, Y. (2021). Study on Artificial Intelligence: The State of the Art and Future Prospects. *Journal of Industrial Information Integration, 23,* Article 100224. https://doi.org/10.1016/j.jii.2021.100224

Yorgancioglu, T. G., Yalçın, B. P, Sebik, N.B.(2024). Türkiye ve Dünyada Sağlık Hizmetlerinde Yapay Zekâ. *Mersin Üniversitesi Tıp Fakültesi Lokman Hekim Tıp Tarihi ve Folklorik Tıp Dergisi*,14(1),50-60. doi:10.31020/mutftd.1278529

Khanna, S., Sattar, A., Hansen, D. (2013).Artificial intelligence in health - the three big challenges. *Australas Med J.* 30;6(5):315-7. doi: 10.4066/AMJ.2013.1758.

Spyropoulos, C.D.(2000). AI planning and scheduling in the medical hospital environment, Artificial Intelligence in Medicine, 20(2), 101-111. https://doi.org/10.1016/S0933-3657(00)00059-2

Çetin B. Sağlık Hizmetleri Ve Yapay Zekâ, Internatıonal Journal Of Economics And Political Sciences Academic Researches. 2023;7(7):17:53-67. DOI: 10.58202/Joecopol.1364565

van der Niet, A.G., Bleakley. A. (2021). Where medical education meets artificial intelligence: 'Does technology care?', *Med Educ*. 55(1), 30-36.

doi: 10.1111/medu.14131.

Güzel, Ş., Akman Dömbekci, H., & Eren, F. (2022). Yapay Zekânın Sağlık Alanında Kullanımı: Nitel Bir Araştırma. *Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 9(4), 509-519. https://doi.org/10.34087/cbusbed.1140122

Nadimpall, M. (2017).Artificial Intelligence Risks and Benefits. *International Journal of Innovative Research in Science, Engineering and Technology*,6 (6).

Akalın, B., & Veranyurt, Ü. (2020). Sağlıkta Dijitalleşme Ve Yapay Zekâ. *SDÜ Sağlık Yönetimi Dergisi*, 2(2), 128-137

Chaieb, S., Garrouch, K., & Al-Ali, N. S. (2023). Perceptions of the use and benefits of artificial intelligence applications: survey study. *Journal of Medical Artificial Intelligence*, 6. https://doi.org/10.21037/jmai-23-59.

Gourisaria M. K., Agrawal, R. Singh, W. et al.. (2022). *AI and IoT Enabled Smart Hospital Management Systems In book: Data: Science in Societal Applications*(1.Chapter,) *Concepts and ImplicationsLab: pp 77–106*. DOI: 10.1007/978-981-19-5154-1_6

Keleş, H. (2022). Tıpta Yapay Zeka Uygulamaları. *The Journal of Kırıkkale University Faculty of Medicine,* 24(3), 604-613. https://doi.org/10.24938/kutfd.1214512

Gulati, S., Emmanuel, A., Patel, M., Williams, S., Haji, A., Hayee, B et al. (2020). Artificial intelligence in luminal endoscopy. *Ther Adv Gastrointest Endosc*, 13,2631774520935220.

Çağlar, Ç. (2013). Okulların Değişime Açıklık Düzeyi İle Öğretmenlerin Örgütsel Bağlılık Düzeyi Arasındaki İlişki. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*,15,119-150.

Sinval, J., Miller, V., Maroˆco, J. (2021). Openness Toward Organizational Change Scale (OTOCS): Validity evidence from Brazil and Portugal. *PLoS ONE*. 16(4). https://doi. org/10.1371/journal.pone.0249986

Ergüven, Ö., & Ökten, S. (2022). Yapay Zeka'nın Mikrobiyolojide Kullanımı. *JAIHS*, 2(2),1-12.

Şahin, A.R., Ateş, S., Günay, M.(2019). Klinik Mikrobiyoloji Laboratuvarlarında Yapay Zekanın Temel İşleyiş Modelleri. *J Biotechnol and Strategic Health Res*. 3(2),66-71. doi:10.34084/bshr.602790

Park, C.W., Seo, S.W., Kang, N., Ko, B., Choi, B.W., Park, C.M., Chang, D.K., Kim, H., Kim ,H., Lee, H., Jang, J., Ye, J.C., Jeon, J.H., Seo, J.B., Kim, K.J., Jung, K.H., Kim, N., Paek, S., Shin, S.Y., Yoo, S., Choi, Y.S., Kim, Y., Yoon, H.J. (2020). Artificial Intelligence in Health Care: Current Applications and Issues. *J Korean Med Sci*. 35(42). https://doi.org/10.3346/jkms.2020.35.e379

Mintz, Y., & Brodie, R . (2019). Introduction to artificial intelligence in medicine. *Minim Invasive Ther Allied Technol*. 28(2),73-81.
doi: 10.1080/13645706.2019.1575882.

Ramesh, S., Nagadhara, D., Reddy, V.D. and Rao, K.V. (2004) Production of Transgenic Indica Rice Resistant to Yellow Stem Borer and Sap-Sucking Insects, Using Super-Binary Vectors of Agrobacterium tumefaciens. *Plant Science*, 166, 1077-1085.https://doi.org/10.1016/j.plantsci.2003.12.028

Iftikhar, M., Saqib, M., Zareen, M., Mumtaz, H. (2024). Artificial intelligence: revolutionizing robotic surgery: review. *Ann Med Surg (Lond),* 1(86)9,5401-5409. doi: 10.1097/MS9.0000000000002426.

Tarı, Ö., & Arpacı, N. (2024). İlaç Tasarımında Yapay Zekâ Uygulamaları. *Journal of Faculty of Pharmacy of Ankara University*, 48(1), 327-365. https://doi.org/10.33483/jfpau.1327078

Güner MD. İlaç tedavisinde yapay zekâ kullanım alanları ve olası etik konular. Ekmekci PE, editör. Yapay Zekâ ve Tıp Etiği. 1. Baskı. Ankara: Türkiye Klinikleri; 2020. p.35- 9.

Liu, M.H., & Han, S.S. (2020). A Case Study of Unusually High Allocation of Decision Rights and Investment Efficiency Based on TaiJi Shares. *Journal of Zhengzhou Institute of Aeronautical Industry Management*, 38, 91-101.

Haghi, M., & Deserno, T. M. (2020). General conceptual framework of futurewearables in healthcare: Unified, unique, ubiquitous, and unobtrusive (U4) for customized quantified output. *Chemosensors*, 8(3), 1–9. https://doi.org/10.3390/CHEMOSENSORS8030085

Erkılıç, C.E., & Yalçın A. (2020). Of the wearable technology market within the scope of digital health Technologies. *Gazi Journal of Economics and Business*, 6(3), 310-323. DOI: 10.30855/gjeb.2020.6.3.006

Çiğdem, M., & Şahin, S (2022). Sağlık Hizmetlerinde Kullanılan Giyilebilir Teknolojiler Hakkında Bireylerin ve Sağlık Profesyonellerinin Algıları Üzerine Bir Araştırma. *Uluslararası Sağlık Bilimleri ve Yönetimi Dergisi*, 8(15):1-11.

https://e-saglik.gov.tr/(access: 25.04.2025).

Al Kuwaiti, A., Nazer, K., Al-Reedy, A., Al-Shehri, S., Al-Muhanna, A., Subbarayalu, A. V., Al Muhanna, D., & Al-Muhanna, F. A. (2023). A Review of the Role of Artificial Intelligence in Healthcare. *Journal of Personalized Medicine*, *13*(6), 951. https://doi.org/10.3390/jpm13060951