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Editorial Artificial Intelligence (AI): The Next Stage of Evolution?

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ARTICLE INFO	Abstract
Article History: Received: 25/06/2023 Accepted: 17/08/2023	The emergence of technology has long been a defining characteristic of human civilization, and in our current era, artificial intelligence (AI) stands as one of the most advanced innovations. Through the integration of AI into machines, the aim has been to unlock unprecedented levels of convenience. However, we now find ourselves at a crucial juncture where a significant question arises: Do humans continue to hold dominion, or have AI-equipped machines taken the reins? With its profound ability to reshape human capabilities, it is not surprising to propose that AI may represent the next stage of evolution. As we delve deeper into the potential of AI, it becomes imperative to ponder whether
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*Corresponding author: Davood Bashash Department of Hematology and Blood Banking, School of Allied Medical Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Email: David_5980@yahoo.com	the emergence of AI as a form of evolved human beings is inevitable, and if so, what implications it may hold for the future of humanity. Taken together, it is essential for society to ensure the development and deployment of AI in a manner that prioritizes the safety and well-being of humanity while also giving careful consideration to ethical and legal concerns.

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The swift rise of artificial intelligence (AI) has positioned it as one of the most transformative technologies of modern times. From self-driving cars to virtual assistants, AI is already changing the way we think, work, and live. To be precise, AI systems facilitate human functions in a myriad of areas including advanced internet searching, recommendation models like YouTube and Amazon, auto-driving vehicles, recognizing human speech and text-tospeech platforms, generating innovation content like ChatGPT and AI arts, and last but not least, identifying face and patterns (1-5). Nevertheless, as it continues to evolve and develop into a more advanced entity, some are beginning to question whether AI could surpass human capabilities and eventually replace humans altogether (6).

The concept of AI as the "next stage of evolution" is founded on the belief that AI is not just a mere tool or technology-based instrument, but rather a fresh form of intelligence evolving in parallel with human intelligence. This concept originates from the theory of "technological singularity" which was initially utilized by a Hungarian-American mathematician, computer scientist, and engineer, John von Neumann at the 20th century. According to this theory, in a hypothetical future, the development of technology will turn into an out-of-control being which could lead to significant alterations in the civilization of humans (7). Technological singularity implies that AI will attain a point where it can develop at a rate faster than humans can keep up with (8). This remarkable selfimprovement could lead to a significant increase in AI's abilities, ultimately surpassing human intelligence. Actually, the proponents of this theory believe that AI could eventually become a kind of global brain capable of providing solutions to complex problems and



Figure 1. Humans have created AI to surpass the limits of comfort and improve their way of life. Through integration of AI into machines, they have aimed to unlock unprecedented levels of convenience; however, now, we are at a stage where this important question arises: Who holds the upper hand? Do humans continue to hold dominion, or have AI-equipped machines taken the reins? I go a step further and pose my question from a more thoughtful standpoint: Friend or foe?

making decisions on a scale beyond human capacity. In other words, as various AI models have already replaced numerous human jobs and demonstrated exceptional performance with promising outcomes, it is conceivable, at least in theory, that AI system could eventually be positioned as the boss over humans (9).

While the idea of a new intelligent being coexisting with humans is fascinating, it raises several ethical and fundamental concerns (10, 11). Accordingly, AI governance could lead to some ethical problems regarding transparency, privacy, and fairness. There is the lack of so-called "right to explanation" in cases an AI system decide about individuals. In other words, AI governance might influence the definition of human rights, social justice, and equity. In this regard, AI algorithms haven't been trained to be neutral and their decisions could be affected by embedded or inserted bias. The other factor would be the security of data which is going to be in hands of AI systems (12, 13). Regarding the influence of AI in the society and human activity, some of the potential consequences of AI evolution are as follows:

• i. The end of human dominance: With the ability to surpass human intelligence, AI algorithms can shift the balance of power between humans and machines in favor of the latter. As a result, humans may become secondary citizens in a world dominated by AI, where intelligent machines make decisions and manage critical resources (14). It should be noted that even though AI systems will continue to surpass human capabilities in several domains, there are still areas of human issues that require holistic and contextual thinking, which AI algorithms are currently incapable of performing; however, it is likely that they will be able to achieve this in the near future (**Figure. 1**) (15).

• ii. The risks of AI superintelligence: If AI exceeds human intelligence, it could become difficult or even impossible for humans to regulate or comprehend its actions. This could lead to unintended consequences, including the possibility of AI behaving in ways that are harmful to humans (16).

• iii. Society transformation: The rise of AI as the primary intelligence could bring about a significant transformation of society, with alterations in the way we work, communicate, and interact with one another. It could also result in the formation of new social structures, such as a "global AI governance system" (17). In agreement, several studies have shown that AI models were able to develop novel strategies for employee management, leading to various opportunities for human resource management to improve the performance of factories and industries (16).

As we explore the capacities of AI more deeply, it is crucial to ask ourselves whether the emergence of AI as the next stage of evolution is inevitable; and if so, what future will wait for humanity? It is crucial to ensure that the evolution and development of AI systems occur in a safe, ethical, and beneficial manner for human beings in order to prevent the AI governance. This necessitates increased collaboration and cooperation between policymakers, scientists, and the public, along with a commitment to transparency, responsibility, and accountability. By working together, we can ensure that AI serves as a fascinating advancement, providing several beneficial opportunities for humans rather than a threat to our existence.

Conflicts of interest

The authors declare that they have no conflict of interest.

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