

Artificial Intelligence – A Reality or Myth

Dear Readers,

The term artificial intelligence (AI) was coined by John McCarthy in 1956.^[1] Since then, computational power has grown to the point of instant calculations and the ability to evaluate new data, according to previously assessed data, in real time.

Slowly, AI is becoming a part of our daily lives in the form of Siri, Google Assistant, and so on, as well as in other sectors such as aviation, travel, and computer games. Of course, one of the best examples is ChatGPT that is being used widely at present.

Ramesh *et al.*^[2] brought out the use of AI in medicine suggesting its use in diagnosis and treatment as well as predicting the treatment outcomes and reducing costs. Computers and machines are trained to mimic human neural networks and process data to develop algorithms and deep learning. They suggested integrating engineering tools such as fuzzy logic and computational systems in medicine such as robotics and drug delivery.^[3] AI finds its use in imaging, radiology, ophthalmology, cardiovascular medicines, etc. AI works on the basis of learning, thinking, and self-correction further subdivided into machine learning and deep learning.^[4]

In dentistry,^[5] neural networks in the form of apps and computer programs are being developed in restorative dentistry, endodontics, orthodontics, periodontology, and other specialties. Using neural network to detect dental caries, restoration margins, and vertical root fractures. Endodontic lesions such as apical periodontitis, cysts, granulomas with gene expression, position of the apical foramen, as well as determining cell viability are some of the areas where AI is being used at present. Dental clinic management such as record keeping, history taking, and patient appointments are some other added uses of AI.

As an antithesis, on the advantages, we need to critically evaluate machines replacing the human mind in various fields. Similarly, the role of ChatGPT in paper writing and undergraduate as well as postgraduate teaching needs to be carefully understood and implemented.^[6]

Although this field is making rapid progress, I feel AI has tremendous potential but we need to tread carefully weighing the ethical as well as financial viability with solid evidence-based research.

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Date of submission : 04.11.2023

Date of acceptance : 04.11.2023

Published : 22.11.2023

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Website:

<https://journals.lww.com/jcde>

DOI:

10.4103/JCDE.JCDE_261_23

How to cite this article: Singh S. Artificial intelligence – A reality or myth. *J Conserv Dent Endod* 2023;26:609.

The Print and Online ISSNs for Journal of Conservative Dentistry and Endodontics are P-ISSN: 2950-4716 and E-ISSN: 2950-4708. During this transition period of name change the SCOPUS, PUBMED and other indexing which are temporarily affected will be restored with a retrospective effect resultantly leading to no change in the status of the journal.