Letters

COMMENT & RESPONSE

Machine-Made Empathy? Why Medicine Still Needs Humans

To the Editor Can humans learn empathy from a machine? Dr Ayers and colleagues explored the comparison between physician and artificial intelligence (AI) chatbot responses to patient questions posted on a public social media forum.[1] Their findings indicate that chatbot responses were preferred and rated significantly higher in terms of quality and empathy. We commend the authors for their innovative and timely study and would like to broaden the discussion on empathy, AI, and medicine.

First, as acknowledged by the authors,[1] the online forum's context may have influenced the empathy level expressed by physicians. They were, in fact, responding on Reddit (Advance Publications), thus using a communication style typical of a social network. In contrast, the chatbot used a "standard chat level" of empathy. If the chatbot had been instructed to respond like a Reddit user, the results may have been more comparable.

Second, it is essential to recognize that empathy is a learned construct, not a fixed trait, for both humans and, to an extent, machines. Physicians can undoubtedly learn to respond empathetically by using techniques such as active listening, reflection, validation, and expression of concern.[2] Similarly, chatbots can learn to mimic empathetic responses by evaluating a vast data set of empathetic examples. Nonetheless, this does not imply that chatbots genuinely feel, share, or even comprehend the emotions of patients because empathy requires more than syntactic skills. In fact, so-called *artificial intelligence* could be more properly called *artificial agency without intelligence*, meaning that it can perform tasks without understanding their meaning or purpose.[3]

Indeed, today's AI remains an "imitation game," as Turing described, rather than a true intelligence.[4] Large language models, such as ChatGPT, are impressive but merely function as syntactic engines, lacking semantic and pragmatic abilities. Although they can generate coherent and fluent texts on various topics, they cannot effectively reason or understand their outputs.

Based on these premises, we concur with the authors' viewpoint[1] that chatbots may offer substantial utility in medicine, but they cannot be considered genuinely intelligent or empathetic. Chatbots can assist clinicians in crafting responses to patient questions, but they cannot replace human judgment and compassion. Nevertheless, chatbots may eventually help humans learn to be more empathetic by providing examples and feedback. Humans will not learn empathy directly from a machine, but they may learn it from other humans through a machine's mediation.

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Published Online: September 11, 2023. doi:10.1001/jamainternmed.2023.4389

Conflict of Interest Disclosures: None reported.

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