

ChatGPT for Psychotherapy

Telehealth exploded in the COVID pandemic. As did mental health problems. Psychiatrists were quick to adapt to the new paradigm. Online psychotherapy became common and there is even evidence to show its equivalence to in-person therapy. A large meta-analysis from University of Memphis found no difference in the efficacy of in-person clinical interventions versus that using video-conferencing by psychiatrists. This is a game changer considering that there are only 4 psychiatrists per 100,000 population worldwide.

But a recent report of the use of the artificial intelligence (AI) chatbot Chat GPT for psychotherapy has raised questions about ethics and long term consequences of technology that is not perfectly understood. The first chatbot called Eliza was invented in MIT in the 1960s by Joseph Weizenbaum. He trained the program to respond to human speech using various rules such as pattern matching and substitution methodology. It was an unexpected success with human beings attributing unwarranted feelings like empathy to this crude program based on Rogerian therapy techniques.

A recent tweet by Rob Morris, founder of the mobile mental health app- Koko has created a storm. Koko essentially provides support for people labouring under mental stress via replies which are crowd sourced. However, in October, 2022, the app started providing some suggestions on how to interact with the person under stress. These suggestions were written up by the chatbot GPT-3.

The concerns which people have regarding AI-based psychotherapy include safety, privacy and legal liability. There are reports of personal data being sold or leaked. Further, evidence of its efficacy has not been studied.

But it appears that AI-based health care interventions are here to stay. What we need to do is to strengthen the check and balances of this nascent technology. (*Nature 3 May, 2023*)

The Loneliness Epidemic

The Surgeon General of America has released an advisory bringing attention to the problem of widespread social disconnectedness in the US and possible strategies to mitigate it. More than 50% of adults in the US struggle with loneliness, and it appears to be equally common in childhood. It has been seen that the mean time spent with friends among 15-24-year-olds has decreased by 70% from 150 minutes/day in 2003 to 40 minutes per day in 2020. Single person households have increased from 13% in 1960 to 29% in 2022.

The consequences are significant. Data across 148 studies with an average of 7.5 years follow-up has revealed that social connection increases the odds of survival by 50%. Social isolation increases the risk of heart disease by 29%, stroke by 32% and dementia by 50%. Even childhood social isolation is associated with higher risks of obesity, hypertension and high blood glucose levels in adulthood.

How does social connection affect our health? They do so by changing biological processes like stress hormones, by changing behaviors like time spent on exercise and by changing by mood. The surgeon general has suggested a framework along which national policies can be decided to mitigate the widespread epidemic of loneliness. The first is to design environments which promote connection such as parks, libraries and community halls. The second is to enact policies which support connection such as good public transport and paid family leave. The third is to sensitize healthcare professionals to identify and advise risk factors for social disconnectedness. The fourth is to critically monitor our interaction with digital technology. The fifth is to encourage further research into the causes and consequences of socialization. And the last is to foster a culture of social interaction. (<https://www.hhs.gov/about/news/2023/05/03/new-surgeon-general-advisory-raises-alarm-about-devastating-impact-epidemic-loneliness-isolation-united-states.html>)

WHO Advisory on Valproate Use in Girls

The WHO has announced a safety statement regarding the use of valproate in women and girls with child bearing potential. Because of the enhanced risk of birth defect and developmental disorders associated with valproate exposure in utero, it is suggested that valproate is avoided in women and girls after puberty. The recommended drugs for both focal and generalized seizures are either lamotrigine or levetiracetam.

Those who are already on sodium valproate must be advised regarding contraception use if there is chance of pregnancy. One must make effort to switch to appropriate alternative treatment prior to conception. If switching is not possible, the woman should receive further counselling regarding the risks of valproic acid (sodium valproate) for the unborn child to support her informed decision-making. A specialist should periodically review whether valproic acid (sodium valproate) is the most suitable treatment for the person. (<https://www.who.int/news/item/02-05-2023-use-of-valproic-acid-in-women-and-girls-of-childbearing-potential>)

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