



Maintaining good sexual health in men with cardiovascular risk factors: ChatGPT may be a good lifestyle-modification advising friend

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Dear editor,

Cardiovascular risk factors (obesity, diabetes, hypertension, alcohol consumption, dyslipidemia, smoking, stress, and high-fat diet) are associated with accelerating the development of sexual dysfunctions in men. Erectile dysfunction (ED) is one of these sexual dysfunctions [1,2]. ED is a term that defines a man's inability to maintain a sufficient erection for sexual intercourse. This sexual insult not only impacts men's quality of life but also negatively impacts their partners [3-8].

Phosphodiesterase type 5 inhibitors are first-line medications to improve this sexual insult in men. According to many studies, lifestyle modification (smoking cessation, participating in exercise classes, limiting high-fat diet, cessation of alcohol consumption, managing stress, weight loss, and controlling high blood pressure, glucose, and lipids) are also called first-line therapeutic options in the treatment of ED induced by cardiovascular risk factors [1].

While standard lifestyle modification programs and guidance can help some men with cardiovascular risk factors [9] and ED, they may not be effective for all of them. For some ED sufferers, new artificial intelligence (AI) technologies provide a source of easy accessibility and hope. Men may benefit, in particular, from employing ChatGPT, a prevalent language-model internet technology

in the processing of natural languages, in the field of treating ED induced by cardiovascular risk factors.

Deep learning is used in an approach to language modeling known as ChatGPT to generate responses to text-based inquiries that resemble human responses. It has been used in a variety of technology-based applications, including chatbots, virtual assistants, and language translation. Because ChatGPT can understand and respond to natural/native language, it is the ideal tool for applications in personalized/individualized healthcare [10-12].

Men with ED and cardiovascular risk factors can make use of different potentials of ChatGPT in sexual health. The main potential use of Chat GPT in the management of ED induced by cardiovascular risk factors is to provide men with individualized lifestyle change advice. By examining men's medical history, physical/demographic characteristics, and lifestyle history, technology enables the provision of individualized guidance on ED-related health issues such as low-calorie restriction programs, exercise counseling, tips for smoking stopping and alcohol consumption cessation, weight loss protocols, tips for controlling blood lipids and glucose, blood pressure-lowering lifestyle regimes, and psychological support. Furthermore, Chat GPT can track men's progress over time and adjust recommendations as required. This unique approach may lead to more effective



improvement in the associated cardiovascular risk factors, hence ED may improve.

Predictive modeling for sexual complications or dysfunctions in men with cardiovascular risk factors is a further prospective purpose of ChatGPT. To identify patterns and trends that could be used to anticipate the start of sexual dysfunction as well as ways to prevent them, ChatGPT can analyze large amounts of men's data (alcohol consumption and smoking history, marital status, alcohol consumption history, quality of life indicators, stress exposure, level of physical activity, dietary lifestyle, records of blood pressure, lipids, and glucose, etc.).

However, there are several hurdles/obstacles in using ChatGPT in suggesting a lifestyle treatment for ED in men with cardiovascular risk factors. One ChatGPT-proposed issue is the ethical implications of employing AI technology to recommend treatments or give counsel to men with ED and cardiovascular risk factors. There are concerns/worries about the likelihood

of bias in the men's training data, which may make ED men unwilling to engage in an AI-powered healthcare system with their health-related requirements/inquiries. Additionally, there are concerns about the confidentiality of ED men's data and the possibilities for hacks.

Some of the suggested considerations that may restrict the implementation of ChatGPT in tailoring a lifestyle-modification program for men with ED and cardiovascular risk factors include constant requirements for broadband internet access or elegant technology for computing, giving patients bad medical or lifestyle advice, and privacy and security concerns. Future research is required to determine the strengths and weaknesses of ChatGPT in advising men with ED to modify their lifestyles.

Disclosure statement

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