Internal Medicine Section

A Conversation with ChatGPT about the Treatment of Obstructive Sleep Apnoea

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Dear Editor,

The widespread popularity of Chat Generative Pretrained Transformer (ChatGPT) [1], an Artificial Intelligence (AI) programme capable of generating text based on written instructions, is evident through its availability on the web, facilitated by OpenAI, located in San Francisco, California, United States of America (USA) [2].

The programme possesses the capacity to comprehend the context of a conversation and proficiently produce suitable responses in various styles, including formal, informal, and humorous tones [3]. The utilisation of ChatGPT in medical research has sparked a debate, raising notable concerns primarily revolving around privacy and security. Furthermore, another significant concern that necessitates attention is the potential for misuse and excessive reliance [3]. While Al systems such as ChatGPT exhibit impressive capabilities, they are not devoid of limitations, as they can generate responses but do not provide references that can be verified. Medical professionals may fall into the trap of over-relying on Al systems, unquestioningly trusting their decisions, and neglecting to sufficiently consider the inherent limitations and potential errors of this technology [3].

Obstructive Sleep Apnoea (OSA) is characterised by recurrent occurrences of obstructive apnoea and hypopnoea throughout the sleep cycle. Clinical inspection of the patient, usage of a sleep questionnaire, cardiorespiratory polygraphy, or, if essential, overnight polysomnography is required for the diagnosis of OSA [4].

During an interaction with ChatGPT, the Al displayed dependable and comprehensive information regarding treatment options for OSA. It commenced with the gold standard treatment, which is Continuous Positive Airway Pressure (CPAP), and then progressed to surgical interventions and the use of inspire implants. However, the Al did not mention any new pharmacological options. Additionally, ChatGPT offered detailed insights into lifestyle modifications for managing OSA.

To date, the most effective pharmacotherapy for OSA has been the combination of atomoxetine (a norepinephrine reuptake inhibitor) and oxybutynin (a muscarinic receptor antagonist) [5]. Although ChatGPT provided extensive information, it strongly advised seeking medical advice whenever there is a suspicion of OSA. The conversation with ChatGPT is illustrated in [Table/Fig-1].

The unfavourable perception of early ChatGPT publications in all academic fields may be explained by restrictions in present research or ethical issues with the application of Generative Pretrained Transformer (GPT) technology. Because ChatGPT is still relatively new, many unanswered concerns regarding its potential and limitations need to be investigated by academics from other sectors [6]. Although ChatGPT generated realistic-sounding responses for user-generated questions about OSA, the major limitation is that it does not generate references or sources of this information. This can pose a challenge in healthcare because it is crucial that the public receive accurate

	Questions	Answers
1.	What is OSA?	Obstructive Sleep Apnoea (OSA) is a sleep disorder characterised by recurrent episodes of partial or complete obstruction of the upper airway during sleep. This obstruction leads to pauses in breathing, known as apnoeas, or reduced airflow, called hypopnoeas.
2.	What are the causes of OSA?	Excess weight or obesity. Anatomical factors: Include a large neck circumference, recessed chin, enlarged tonsils or adenoids, a deviated nasal septum, or a narrow airway. Age: OSA is more common in middle-aged and older adults. Gender: men show a higher predilection compared to premenopausal women. Family history. Alcohol, sedative, and tranquiliser usage. Smoking. Medical conditions: Congestive Heart Failure (CHF), type 2 diabetes, high blood pressure, and hormonal disorders. Neuromuscular disorders.
3.	What are the treatment options of OSA?	Continuous Positive Airway Pressure (CPAP). Bi-level Positive Airway Pressure (BiPAP). Adaptive Servo-Ventilation (ASV). Oral appliances. Lifestyle changes. Positional therapy. Surgery.
4.	Are there any other treatment options for OSA?	Inspire therapy. Nasal Expiratory Positive Airway Pressure (EPAP). Mandibular Advancement Devices (MADS). Acupuncture. Positional therapy devices. Myofunctional therapy. Weight management programmes.
5.	Are there any pharmacologic treatments for OSA?	Medications for OSA-associated conditions. Oral pressure agents. Pharmacotherapy for Central Sleep Apnoea (CSA).

[Table/Fig-1]: A conversation with ChatGPT about Obstructive Sleep Apnoea (OSA)

and verified information about healthcare. Doctors and healthcare organisations can play a great role in training future versions of such software that can generate verifiable and correct information.

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