http://sjifactor.com/passport.php?id=22258

CHATGPT IN THE EDUCATIONAL AND MEDICAL SPHERE

N.M. Goyibova, G.M. Goyibova

1st Author – Public School 225, Tashkent, Uzbekistan

<u>nig_30@mail.ru</u> 2nd Author – Tashkent Pediatric Medical Institute, Department of Pediatrics, Tashkent, Uzbekistan <u>miss.gulinoza2@gmail.com</u>

Abstract: In the near future ChatGPT with new speed artificial intelligence can replace employees in a variety of fields. In this article it will be revealed new artificial intelligence from educational and medical perspectives. In fact, this kind of AI may be unpredictably powerful than we anticipated. From this point of view this article serves as a huge of information for two vital direction in human life. However, AI has an exact limitation whereas it cannot approach to the topic cognitively and emotionally as a human being.

Keywords-component: ChatGPT, education, medicine, medical marketing.

Introduction

ChatGPT is a unique chatbot, which is capable of taking part in the discussion and even generating appropriate answers to challenging questions. It has already acquired a great deal of popularity. This artificial intelligence gained the highest step among other types of AI. Factually, ChatGPT can take the position of human intelligence, it not only gives automatic answers to questions but also provide responses based on previous conversations.

AIM OF THE WORK

The aim of this work is to deploy Chat GPT tools during the teaching process, as nowadays artificial intelligence is quite demanding. This technology assists teachers and students to adopt unfair means of completing assignments and in a positive way for students as access to an endless supply of knowledge. Moreover, ChatGPT is a valuable, ground-breaking aid in the fields of medicine and medical marketing. Besides ChatGPT can be useful for staying current on new medical breakthroughs.

Critical thinking abilities can be taught using ChatGPT. The ability to think

http://sjifactor.com/passport.php?id=22258

critically can be developed in a variety of ways. Investigating various viewpoints is one of these facilities. Chat GPT makes it simple to have conversations with students on a range of subjects that have an impact on how well they develop higher order thinking. Students can learn to challenge their own presumptions and beliefs by using ChatGPT. They can examine the model's outputs, review its underlying presumptions, and evaluate the accuracy and dependability of the data it presents. However, it has also some drawbacks in using ChatGPT. It is not safe to use Chat GPT to write your assignments and essays as it can include some incorrect factual information or in some cases get accused of plagiarism if a software tracks the use of AI bot to write the assignment. In such case, teachers and students must be acquainted with software literacy. In addition, this tool is very helpful to provide feedback to students by using natural language processing algorithms and it can help teachers evaluate written assignments and provide constructive feedback to students answering students' queries. ChatGPT can serve as a conversational partner for students to engage in reflective thinking. Through dialogue, students can articulate their thoughts, clarify their ideas, and identify any biases or logical inconsistencies. This process promotes metacognition and self-awareness, key components of critical thinking. It is important to note that while ChatGPT can be a valuable tool for teaching critical thinking, it should not be the sole means of instruction. Incorporating a variety of teaching methods, including discussions, group activities, and real-world applications, is essential for fostering well-rounded critical thinking skills. [1]

According to the statistics of Education Week, around three-quarters of teachers say that ChatGPT can help their students learn more and help them grow as teachers. Among students, 68 percent believe the program can help them become better students and 75 percent think it helps them learn faster. [2] Besides, Of the teachers using ChatGPT, the Impact Research/Walton Foundation survey found that 88 percent gave the AI program a good review, saying it has had a positive impact on instruction. Seventy-nine percent of students said the same thing. Teachers report they have been much more likely to allow students to use ChatGPT than they have been to catch students using it without permission. Thirty-eight percent of teachers say they have given their students the green light to use the program, compared to 10 percent who say they have caught their students using ChatGPT without their permission. [3]

In health care, Chat GPT is viewed as a replacement for doctors. Knowing the condition from its symptoms can be helpful. As a result, the patient can at least receive a crude optional treatment and speak with a precise physician. This might make things more pleasant.

A new study by Cedars-Sinai investigators describes how ChatGPT, an artificial intelligence (AI) chatbot, may help improve health outcomes for patients with cirrhosis

and liver cancer by providing easy-to-understand information about basic knowledge, lifestyle and treatments for these conditions. To verify the accuracy of the AI model in its knowledge about both cirrhosis and liver cancer, investigators presented ChatGPT with 164 frequently asked questions in five categories. The ChatGPT answers were then graded independently by two liver transplant specialists. Each question was posed twice to ChatGPT and was categorized as either basic knowledge, diagnosis, treatment, lifestyle or preventive medicine. Study results include:

ChatGPT answered about 77% of the questions correctly, providing high levels of accuracy in 91 questions from a variety of categories. The specialists grading the responses said 75% of the responses for basic knowledge, treatment and lifestyle were comprehensive or correct, but inadequate.

The proportion of responses that were "mixed with correct and incorrect data" was 22% for basic knowledge, 33% for diagnosis, 25% for treatment, 18% for lifestyle and 50% for preventive medicine.

"ChatGPT has shown to be able to provide professional, yet highly comprehensible responses," said Yee Hui Yeo, MD, first author of the study and a clinical fellow in the Karsh Division of Gastroenterology and Hepatology at Cedars-Sinai. "However, this is one of the first studies to examine the ability of ChatGPT to answer clinically oriented, disease-specific questions correctly and compare its performance to physicians and trainees."

While ChatGPT offers numerous advantages in the field of medicine, it is important to acknowledge some of its potential disadvantages and limitations. Here are a few disadvantages of ChatGPT in medicine:

1. Inability to comprehend context: ChatGPT could have trouble comprehending the context of a conversation. It might not fully comprehend the finer points, delicacies, or particular medical language that are essential in medical contexts. This can result in erroneous interpretations or recommendations.

2. Limited Domain Knowledge: ChatGPT relies on historical data and trends to function. It might not give accurate or trustworthy advice if it comes across a scenario or query that is outside the scope of its training data. The effectiveness could be hampered by a lack of specialized knowledge in complex medical cases or unusual illnesses.

3. Incapability to Conduct Physical Exams: Because ChatGPT only uses textbased communication, it is unable to conduct physical examinations of patients. It might lack access to vital diagnostic resources, including physical examinations, imaging investigations, and laboratory tests, all of which are essential for rendering reliable medical judgments.

4. Ethical and Legal Issues: Implementing ChatGPT in a medical environment presents significant ethical and legal issues. The need to handle important issues such patient privacy, data security, and the possibility of bias in algorithmic decision-making.

5. Lack of Emotional Intelligence: Empathy and emotional intelligence, which are essential components of patient care, are lacking in ChatGPT. It might not be able to fully comprehend a patient's mental condition, react correctly to that state, or offer the assistance required in trying circumstances.

6. Responsibilities and Liabilities: The use of ChatGPT as a source of medical advice involves issues of accountability and liability. Determining responsibility can be difficult if a healthcare provider primarily depends on ChatGPT and an adverse event happens.

It is essential to be aware of these restrictions and make sure ChatGPT is utilized as an additional tool rather than as a replacement for medical experts. Instead than replacing the knowledge and judgment of skilled medical professionals, it should complement and enhance clinical decision-making. [4]

III RESULT OF THE RESEARCH

In public school 225, it was observed among secondary classes up to Grade 9 on using AI effectively. The result was not satisfied according to the survey. Students are addicted using ChatGPT with their home assignment. Indeed, students may use it in favor when they have some challenges for solving tasks. This artificial intelligence serves to raise critical thinking among students, as well as it can be served to stop thinking critically. It appears dependence on technology. The test was settled for the percentages of mental thinking of students. 72 % students have been shown that they cannot do the task appropriately due to misunderstanding the theme. Other 23 % students are not be satisfied in solving task independently and it led them to plagiarize information.

One of the Private clinics which is named "X-Med", there was a research among 8 patients. According to the survey, 6 patients could write their disease in the chat and they obtained the diagnosis of the disease. However, 2 of them got false diagnosis when it was checked by doctors.

100% effective result was in promoting of 13 doctors' sites on Instagram, Facebook and Telegram platforms. ChatGPT provided a unique promoting strategies, content and advertising texts for each doctor.

IV CONCLUSION

The studies offered revealed that incorporating AI into secondary classrooms, healthcare, and marketing had a significant positive influence and provides a worthwhile learning experience. We hope that our research will be able to maximize the positive effects of AI on everyone's lives.

REFERENCES:

- 1. OPEN Community Leader: openprogramenglish.com
- 2. Education Week: edweek.org
- 3. The Impact Research/Walton Foundation survey.
- 4. Marr B. (n.d). Revolutionizing Healthcare: The Top 14 Uses Of ChatGPT In Medicine Wellness [WWW Document]. Forbes. Available online at: https://www.forbes.com/sites/bernardmarr/2023/03/02/revolutionizing-healthcare-the-top-14-uses-of-chatgpt-in-medicine-and-wellness/ (accessed March 7 2023).
- 5. Timothy Nerozzi (2023). Bill Gates says ChatGPT will 'change the world,' make jobs more efficient [online]. Fox Business. Available at: <u>https://www.foxbusiness.com/technology/bill-gates-says-chatgpt-willchange-world-make-jobs-more-efficient</u>