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EDITORIAL

Chat GPT: Boon or Curse for health science research?

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There have been advancements in artificial intelligence (AI) and deep learning in the past decade. ChatGPT is a language model developed by Open Artificial Intelligence (AI) that has become popular in recent times for multi tasks including creative writing, brainstorming ideas, generating text formats and many more. Use of ChatGPT has increased rapidly since it interacts in a conversational way and its dialogue format makes is user friendly and faster. It has the potential to play a vital role in health science research in future. With its ability to generate human-like text based on large amounts of data, ChatGPT has the potential to support individuals and communities in making informed decisions about their health and health related matters.[1,2] Regarding health, Chat GPT can provide personalized recommendations on topics like nutrition plans, exercise programs and psychological support. However, some ethical and security concerns should also be considered regarding its use.[3]

What is Chat GPT?

ChatGPT (Chat Generative Pre-Trained Transformer) is a new generative AI based chatbot developed by American company Open AI and launced in 2022 AD. Free tiers ChatGPT are available free of cost but ChatGPT Plus which provides enhanced capabilities and features has a paid subscription. Current version of ChatGPT may be useful for medical personnel as well as researchers to check all updated information and recent advancements in medical field within short time.[4]

Impact on research and publications

The research community, including journal editors, researchers and publishers are uncertain about the place of ChatGPT in medical science research and publishing. It is now known that ChatGPT can mimic an author and write fake scientific abstract and papers. In a study, the researchers asked ChatGPT to write 50 medical research abstracts based on a selection of articles published in some of the top journals like Journal of American Medical Association (JAMA), New England Journal of Medicine (NEJM), British Medical Journal (BMJ), Lancet and Nature Medicine. Then they checked the similarity by a plagiarism detector and an AI-output detector. Interestingly, the ChatGPT-generated abstracts passed the plagiarism checker test. The AI-output detector however, was able to spot 66% of the fabricated abstracts. Further, human researchers incorrectly labelled 32% of the generated abstracts as real and 14% the genuine abstracts as being ChatGPT-generated.[5]

ChatGPT can be utilized as boon

1. Research:

- Literature search: With the help of AI a large number of relevant publications can be easily

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searched in a fraction of time making ChatGPT the most useful tool for effective literature search.

- Generating titles: ChatGPT can generate titles by using appropriate keywords.
- Make text more readable: It can help rewrite difficult sections of the article in simplified form.
- The currently used search engines for researchers like PubMed, Scopus and Google provide useful references for a research query and may also provide a short summary but ChatGPT has the ability to narrate the required information in a text form in a reasonably detailed manner.

2. Clinical services:

- Summarizing the patient's data: By using ChatGPT, one can gather clinical information of a patient much faster like diagnosis, allergies, details of previous visits, etc. It also helps in translating the clinical notes into more patient friendly version.

ChatGPT can be curse

1. Lack of specialized medical knowledge: Medicine is a continuously changing branch of science. Patients are different in psychological and physical profiles and respond differently to treatment. The diagnosis and outcomes are not dichotomous but a continuum. The current version of ChatGPT may lack several crucial elements necessary for providing precise responses to medical questions or situations.
2. Potential for bias: ChatGPT may be influenced by any biases present in the data. It may occasionally produce harmful instructions or biased content.
3. Limitations in understanding complex medical concepts: While ChatGPT is capable of generating fluent and coherent text, it may struggle to understand or explain complex medical concepts. This could limit its usefulness medical research, where precise language and accurate terminology are essential.
4. Inadequate conceptual learning: Since ChatGPT provides the required information on a subject so easily, and without any active involvement, that it may compromise on the conceptual learning of an individual on that subject.

CONCLUSION

In research, some journals specifically banned ChatGPT in scientific papers. However, the researcher can use ChatGPT to facilitate article selection, research methodologies, feedback, idea summaries and deliver researchers' messages in a better way saving a tremendous amount of time. However, there are some shortcomings such as the inability to obtain complete and reliable data, which leads to unreliable study results. When used correctly, it becomes a powerful tool to rewrite but one should not rely on ChatGPT alone. As such, ChatGPT can be boon or curse depending on how the researchers use it.

REFERENCES

1. Panch T, Pearson-Stuttard J, Greaves F, Atun R. Artificial intelligence: opportunities and risks for public health. The Lancet Digital Health. 2019 May 1;1(1):e13-4.
2. Baclic O, Tunis M, Young K, Doan C, Swerdfeger H, Schonfeld J. Challenges and opportunities for public health made possible by advances in natural language processing. Canada Communicable Disease Report. 2020 Jun 4;46(6):161.
3. Arslan S. Exploring the potential of Chat GPT in personalized obesity treatment. Annals of biomedical engineering. 2023 Sep;51(9):1887-8.
4. Vaishya R, Misra A, Vaish A. ChatGPT: Is this version good for healthcare and research?. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. 2023 Apr 1;17(4):102744.
5. Else H (2023) Abstracts written by ChatGPT fool scientists. Nature 613(7944):423.

ORIGINAL ARTICLE

Autonomy and Respect among Postnatal Mothers during Maternity Care in Tertiary Level Hospital

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ABSTRACT

Introduction: Lack of respectful maternity care act as more powerful deterrents to skilled birth care utilization than other more commonly recognized deterrents such as geographic and financial obstacles. Ensuring high level of respectful maternity care encourage the women to utilize facility-based care, which is essential for improving maternal and neonatal health. Thus, the objective of the study is to find out autonomy and respect during maternity care among the postnatal mothers in a tertiary level hospital.

Methods: A descriptive cross-sectional study was conducted among 214 postnatal mothers receiving child birth services from the facility were selected by using non-probability purposive sampling technique. Analysis of data was done by using descriptive statistics (number, percentage, mean, standard deviation) and chi-square test was used for association between autonomy and respect and selected socio-demographic variables.

Results: The study result indicated that (74.8%) of the respondents had high level of autonomy. Similarly, (71%) of the respondents reported that they experience high level of respect. A significant association was present between autonomy of postnatal mothers with caste (p=.027) and parity (p=.005) and a significant association was present between respect of postnatal mothers with type of delivery is with p value (.001).

Conclusion: Level of autonomy and respect tends to be high among postnatal mothers during maternity care and is associated with caste, parity and type of delivery. Continuous professional development programme for all cadres of health personnel should be conducted in respectful maternity care of maternity ward.

Keywords: Autonomy, Respect, Postnatal mothers

INTRODUCTION

Lack of respectful maternity careis considered as a violation of fundamental human rights.[1-3] Generally, concept of safe motherhood is restricted to the physical safety, it should be expanded beyond the prevention of morbidity and mortality.[4] According to WHO respect and autonomy during maternity care are essential for positive maternity experiences.[5-6] In 2010, a landscape report by Browser and Hill describe seven categories of disrespect and abuse during childbirth.[7] The White Ribbon Alliance led a multi-sectoral collaboration which produce a consensus document the Respectful Maternity Care Charter: The Universal Rights of Childbearing Women.[8]

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