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## A STUDY ON CHATGPT IN PUBLIC HEALTH AND ISSUES

Dr.TAPAS KUMAR MAHATO<sup>1</sup>, Mr.JITUMONI RAJKONWAR<sup>2</sup>, Dr.SHUBHANGINI PANDEY<sup>3</sup>

1-Senior Project Officer-Health Systems Strengthening,  
United Nations Development Programme, O/O Directorate of Health Services,  
DHS (MCH&FW) Laitumkhrach, Shillong – 793003, Meghalaya.

2-PhD Scholar, School of Public Health, SRM University, Gangtok, Sikkim

3-BPT, MPH, MBA-HM-Student at Madurai Kamaraj University, Tamilnadu,

### ABSTRACT

ChatGPT is a series of popular generative Artificial Intelligence Chabot and language model developed by OpenAI, The large language models (LLMS) that support earlier Chabot models were unmoral and could only process and generate text, and potential to play in public health. With its ability to generate human like text bases on large amounts of data, ChatGPT has the potential to support individuals and communities in making informed decisions about their health. However, as with any technology, there are limitations and challenges to consider when using ChatGPT in public health. ChatGPT works by attempting to understand prompt and spitting out strings of words that it predicts will best answer our question, based on the data it was trained on, and generally considered to be safe to use. In this study potential uses and issues of ChatGPT in public health, as well as the merits and demerits of future, scope, uses ChatGPT, Cyber security in Medical Information and its capabilities is examined.

Keywords: Introduction of ChatGPT, Public health, Uses, Issues, Cyber security, AI

### INTRODUCTION TO CHATGPT

ChatGPT is a series of popular generative Artificial Intelligence Chabot and language model developed by OpenAI. The large language models (LLMS) that support earlier Chabot models were unmoral and could only process and generate text, and potential to play in public health. With its ability to generate human like text bases on large amounts of data, ChatGPT has the potential to support individuals and communities in making informed decisions about their health

ChatGPT is neutral language processing tool driven by Artificial Intelligence technology that allows having conversations and much more Chatbot. The language model can answer questions and assist you with tasks like composing essays, code and emails etc. Its use to generate creative writing such as stories and poetry etc. The future of ChatGPT mostly lies in improving language generation and making it more accessible and user-friendly for various applications. As Artificial Intelligence advances, ChatGPT may be integrated into products like virtual assistants and customers service Chabot's. ChatGPT can understand students learning styles, providing a personalized learning experience also. It can analysis students' academic performance and structure the course to meet their requirements etc.

## II. CHATGPT IN PUBLIC HEALTH AND ISSUES

Public health is the science of improving and protecting their communities. Its work is achieved by developing, promoting healthy lifestyles, researching diseases, detecting, preventing, and responding to infectious diseases and injury prevention.

ChatGPT is promoting health issues. Here are some examples of how ChatGPT can be used in community health.

- Answering the questions about disease prevention strategies and health promotion.
- Providing detailed information about public health issues, infectious diseases, chronic diseases, and environmental health hazards etc.
- Providing information about community health programs and services.
- The impact of social and environmental factors on community health
- Explaining the role of community health workers and health educators.

## III. PREVENTION STRATEGIES AND HEALTH PROMOTIONS

ChatGPT provide answer and questions about disease prevention strategies and health promotions etc.

**Vaccination ChatGPT:** can provide information about the importance of vaccination in preventing the spread of infectious diseases, and answer questions about the types of vaccines available and their recommended schedules.

**Health lifestyle choices:** ChatGPT provide details about strategies for promoting healthy lifestyle's choices, such as regular physical activity, healthy diet and avoiding harmful substances, tobacco and excessive alcohol consumption.

**Risk factor reduction:** ChatGPT provide details about strategies for reducing risk factor for chronic disease, managing stress, cholesterol levels, avoiding tobacco, controlling blood pressure and excessive alcohol consumptions etc.

**IV. PROVIDE INFORMATION ON PUBLIC HEALTH ISSUES:** ChatGPT provide details about public health issues, infectious diseases and environmental health hazards along with examples.

**V. IMPACT OF SOCIAL AND ENVIRONMENTAL FACTORS ON COMMUNITY HEALTH:** Social and environmental factors like poverty, lack of access to health care issues, poor housing conditions and exposure to hazardous chemicals and pollutants can have a significant impact on the health of individuals and communities. It provide details about how these factors contribute to health disparities and the challenges faced by the communities in addressing them.

**VI. INFORMATION ABOUT COMMUNITY HEALTH PROGRAMS AND SERVICES:** ChatGPT provide details about the types of community health programs and services availability, and the population they serve, specific health outcomes they aim to achieve. ChatGPT can provide information about the eligibility criteria for accessing these programs and services, as well as the costs involved and the insurance coverage availability.

**VII. CYBERSECURITY IN THE MEDICAL INFORMATION:** Protecting the medical information is the critical aspects of healthcare, as it is highly sensitive and personal. Medical Information includes patients' personal information, medical history and Medical health record, and it is unauthorized disclosure or theft can cause serious harm to patients.

Protecting medical information is the critical aspects of cyber security in the healthcare industry. Medical Information is highly sensitive and personal, and its unauthorized disclosure or theft can be cause serious harm to patients.

**Some of the ways to protect medical information include;**

- ❖ Regular Security Audit: Regularly audit the security infrastructure of the organization to detect my vulnerabilities and risks.
- ❖ Encryption: Encryption medical data can prevent unauthorized access to information, even if it is intercepted or stolen.
- ❖ Employee Education: Regularly educate and train employees on security best practices and the importance of protecting medical information
- ❖ Compliance: Adhering to industry regulations, such as HIPAA, can help ensure that medical information is being handled and protected in accordance with legal and ethical standards.
- ❖ Access Controls: Implementing strict access controls, such as multi-factor authentication, can provide unauthorized individuals from gaining access to medical information.

- ❖ Network Security: Implementing firewalls, intrusion detection and prevention system, and other system security measures can help protecting against cyber-attacks.

### VIII. ROLE OF COMMUNITY HEALTHY WORKERS AND HEALTH EDUCATORS:

ChatGPT used to explain the role of community health workers (CHWs) and health educators in Developing, promoting, and protecting the health of populations, in urban and rural communities. ChatGPT provide details about the qualifications, responsibilities and training required for these positions, and the impact they have on community health outcomes etc.

### IX. CONS OF USING CHATGPT IN PUBLIC HEALTH

**There are some Demerits of using ChatGPT in public health**

- ✓ Physical inactivity and food,
- ✓ Obesity, tobacco, substance abuse,
- ✓ AIDS,
- ✓ Mental health, falling and injury,
- ✓ Environmental quality,
- ✓ Immunization and healthcare access. These all-personal health issues require attention to improve the quality of life and keep you free from diseases
- ✓ Limited accuracy.
- ✓ Bias and limitations of data.
- ✓ Lack of context.
- ✓ Limited engagement.
- ✓ No direct interaction with health professionals.

### X. CONCLUSION

ChatGPT is a valuable tool for providing detailed information and answering the questions in various fields, including public health etc. However, it is important to acknowledgement its limitations and supplement its use with other resources to ensure accurate and effective public health outcomes. Patients will lose empathy, kindness, and appropriate behavior when dealing with robotic physicians and nurses because these robots do not possess human attributes such as compassion. Physical inactivity and food, obesity, tobacco, substance abuse, AIDS, Mental health, falling and injury, Environmental quality, Immunization, and healthcare access. These all-Personal health issues require attention to improve the quality of life and keep you free from diseases.

This is one of the most significant negative aspects of artificial intelligence in medical science. The benefits and uses of ChatGPT in public health should be carefully considered and implemented with caution.

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