EXPLORING THE POTENTIAL OF CHATBOTS IN ONCOLOGICAL CARE: A COMPREHENSIVE NARRATIVE REVIEW

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ABSTRACT

Oncological care is a complex and challenging field that requires ongoing monitoring and support. The use of chatbots has emerged as a promising tool for delivering oncological care in a more efficient and effective manner. This narrative review aims to provide an overview of the current literature on the use of chatbots in oncological care. The review highlights the potential benefits of chatbots in improving patient outcomes, enhancing patient engagement, and reducing healthcare costs. The review also discusses some of the challenges and limitations associated with chatbots and provides recommendations for future research.

KEYWORDS: chatbots, oncological care, patient engagement, healthcare costs, patient outcomes.

INTRODUCTION:

Oncological care is a complex and demanding field that requires ongoing monitoring and support. With the growing burden of cancer and the increasing need for more efficient and effective care, there has been a growing interest in the use of technology to support oncological care. One technology that has emerged as a promising tool for delivering oncological care is chatbots. Chatbots are computer programs that can simulate conversation with human users and are increasingly being used in healthcare settings to provide support and information to patients.

Chatbots have several potential benefits for oncological care, including improving patient outcomes, enhancing patient engagement, and reducing healthcare costs. Chatbots can provide patients with personalized support and information on their condition, medications, and treatment options. They can also help patients to manage symptoms, track their progress, and provide reminders for medication and appointments. In addition, chatbots can

be available 24/7, providing patients with round-the-clock support and reducing the need for in-person consultations.

This narrative review aims to provide an overview of the current literature on the use of chatbots in oncological care. The review will highlight the potential benefits of chatbots, discuss some of the challenges and limitations associated with chatbots, and provide recommendations for future research.

BENEFITS OF CHATBOTS IN ONCOLOGICAL CARE:

Chatbots have several potential benefits for oncological care, including improving patient outcomes, enhancing patient engagement, and reducing healthcare costs.

Improving patient outcomes: Chatbots can improve patient outcomes by providing personalized support and information on their condition, medications, and treatment options. Chatbots can help patients to manage their symptoms and side effects, track their progress, and provide reminders for medication and appointments. This can lead to better adherence to treatment, improved quality of life, and better patient outcomes.

Enhancing patient engagement: Chatbots can enhance patient engagement by providing patients with access to support and information when they need it most. Chatbots can be available 24/7, providing patients with round-the-clock support and reducing the need for in-person consultations. This can increase patient satisfaction, reduce anxiety, and improve patient engagement with their care.

Reducing healthcare costs: Chatbots can reduce healthcare costs by providing patients with support and information at a lower cost than traditional care. Chatbots can help to reduce the need for in-person consultations, which can be costly and time-consuming for patients and healthcare providers. This can lead to cost savings for healthcare providers and reduced healthcare costs for patients.

CHALLENGES AND LIMITATIONS:

Despite the potential benefits of chatbots, there are several challenges and limitations associated with their use in oncological care. One of the major challenges is the need for accurate and reliable information. Chatbots rely on accurate information to provide personalized support and information to patients, and the quality of the information can have a significant impact on patient outcomes.

Another challenge is the need for effective communication and interaction with patients. Chatbots must be able to understand patient needs and provide appropriate responses to questions and concerns. This requires effective natural language processing and machine learning algorithms, which can be challenging to develop and implement

Additionally, patient privacy and confidentiality are major concerns in healthcare. Chatbots must adhere to strict data protection regulations and ensure that patient information is kept secure. This requires the use of robust security measures such as encryption, firewalls, and access controls.

Despite these challenges, the use of chatbots in oncological care has shown promise in improving patient outcomes and experiences. Studies have shown that patients who interacted with chatbots reported higher levels of satisfaction with their care and increased engagement in self-management of their condition. Chatbots have also been shown to improve adherence to treatment plans and medication schedules, which can ultimately lead to better health outcomes.

CONCLUSION:

Chatbots have the potential to improve oncological care by providing patients with personalized support and information. However, there are significant challenges that must be addressed to ensure their effectiveness and safety. Future research should focus on developing and refining chatbot technology to meet the unique needs of oncological patients and healthcare providers. Furthermore, efforts should be made to ensure that chatbots are integrated into existing healthcare systems and workflows in a seamless and efficient manner.

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