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“Chat GPT, write an abstract for the ACLP conference on the utility of ChatGPT in CL Psychiatry”

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Introduction

ChatGPT is an artificial-intelligence(AI) chatbot developed by OpenAI (an artificial intelligence research laboratory) which was launched as a prototype on Nov 30, 2022. It is a natural language processing tool that uses deep learning(DL) to produce human language. People can interact with iterations of bots such as ChatGPT, the most recent being GPT - 4, Google’s Bard, by generating various prompts. ChatGPT and other AI platforms can have utility in Medicine, Psychiatry and most specifically Consultation Liaison Psychiatry, in the clinical, educational, scholarly and administrative domains.

This poster envisions possible applications of ChatGPT in Consultation Liaison Psychiatry.

Chat GPT can be helpful in idea generation, which can in turn help consultation liaison psychiatrists with creative problem solving in clinical work, education, as well as in developing innovative solutions to administrative problems. AI can help with generation of case vignettes and in response to different prompts, AI can elucidate concepts to various target audiences and trainees of various developmental stages. Such idea generation can help in the creation of educational materials for patients and trainees and in curriculum building. The burden of administrative tasks can be reduced by the generation of templates for CL notes, as an example. ChatGPT has the potential to reduce clinician burnout in CL psychiatry by reducing the burden of repetitive tasks and clinician documentation. Doximity, a digital platform for medical professionals, has launched a beta version of a ChatGPT tool for doctors to streamline tasks such as preauthorization letters to insurers, and psychiatric progress notes. Chat GPT and its future iterations will be able to aid in clinical reasoning further by generating suggestions for assessments, differential diagnosis, and recommendations, in addition to further help with building predictive algorithms and tools of relevance in clinical psychiatry.



Methodology

We asked ChatGPT to describe its own utility in Consultation Liaison Psychiatry and used multiple prompts to get it to explain concepts, write Fellowship letters of application, write assessments based on clinical presentations, and perform numerous other tasks. Featured here on the poster are Chat GPT’s responses to the following prompts:

Can you enumerate the uses of Chat GPT in Consultation Liaison Psychiatry in the clinical, educational, scholarly / research and administrative domains?

Explain decisional capacity as you would to a five year old.

Explain decisional capacity with an example as you would to a Consultation Liaison Psychiatry fellow

Write a limerick about Consultation Liaison Psychiatry

Illustrative examples

Prompt : Can you enumerate the uses of Chat GPT in Consultation Liaison Psychiatry in the clinical, educational, scholarly / research and administrative domains?

Certainly! Consultation Liaison Psychiatry (CLP) focuses on the psychiatric assessment and treatment of patients with complex medical conditions in general medical settings. Given this, ChatGPT can be a useful tool across multiple domains. Here's a breakdown:

- 1. Clinical:** Triage and Preliminary Assessments: ChatGPT can provide preliminary assessments or screening for psychiatric symptoms in patients in medical settings, assisting medical professionals in identifying patients who might benefit from a more thorough psychiatric evaluation.
 - Therapeutic Interventions: While human intervention is irreplaceable in therapy, ChatGPT can be used for guided relaxation, mindfulness exercises, or providing psycho-education on specific topics.
 - Medication Information: ChatGPT can offer information about psychiatric medications, including side effects, dosages, and potential interactions, which can be useful for both clinicians and patients.
 - 2. Educational:**
 - Teaching and Training: ChatGPT can be used as an educational tool for medical students, residents, and other healthcare professionals to learn about psychiatric conditions, treatments, and the interplay between medical and psychiatric issues.
 - Case Simulations: Trainees can interact with ChatGPT to simulate patient scenarios, honing their diagnostic and therapeutic skills.
 - Psychoeducation for Patients: ChatGPT can provide patients and their families with information about their conditions, treatments, and coping strategies.
 - 3. Scholarly/Research:**
 - Data Collection: ChatGPT can be used as a tool for administering surveys or questionnaires for research purposes.
 - Literature Searches: Researchers can interact with ChatGPT to quickly gather information or summaries on specific topics from the existing literature up to the model's last training cut-off.
 - Statistical Analysis: While ChatGPT isn't specialized software for statistical analysis, it can assist researchers in understanding the basics and guiding them towards the right tools.
 - 4. Administrative:**
 - Appointment Scheduling: ChatGPT can assist in scheduling patient appointments or sending reminders.
 - Documentation Assistance: ChatGPT can help clinicians draft notes or reports by providing templates or suggesting appropriate clinical verbiage.
 - Resource Allocation: ChatGPT can aid in decision-making regarding resource allocation based on provided data, helping to determine needs in terms of staffing, beds, and other resources.
 - Feedback Collection: Administrators can use ChatGPT to collect feedback from staff, patients, and families about the services provided.
- While ChatGPT can be a useful tool in all these domains, it's important to remember that it should complement, and not replace, human expertise and judgment. Particularly in the sensitive domain of psychiatry, human touch, empathy, and experience are irreplaceable.

Results

Prompt : Explain Decisional capacity as you would to a five year old

Sure thing! Imagine you have a special job to do, like picking your favorite ice cream flavor at an ice cream shop. To have "decisional capacity" means you are able to make that choice all by yourself.

To do this, you need to understand what ice cream is, know what flavors are available, and think about what you like. It's like a little checklist in your head. If you can do all these things and make a choice, then you have decisional capacity.

But sometimes, if you're too young or not feeling well, you might need help from a grown-up to make the decision. They can help you pick the best ice cream flavor for you. That's what decisional capacity is all about – being able to make choices when you're ready and able, or getting help when you need it.

Prompt : Explain Decisional Capacity as you would to a Consultation Liaison Psychiatry Fellow with an example

Imagine a 75-year-old man, Mr. Smith, who's hospitalized with advanced pneumonia. His medical team believes that placing him on a ventilator could significantly increase his chances of recovery. However, Mr. Smith is reluctant to be intubated and ventilated. The medical team is unsure if Mr. Smith truly understands the implications of refusing the treatment, so they request a C-L psychiatry consultation to assess his decisional capacity.

Understanding:

During the consultation, the psychiatrist asks Mr. Smith to explain his understanding of his current medical condition. Mr. Smith correctly identifies that he has pneumonia and that it's severe.

Appreciation:

The psychiatrist then explores Mr. Smith's appreciation of the information. He's asked about the implications of his illness and how it relates to him personally. Mr. Smith acknowledges that without the ventilator, his chances of surviving might be lower.

Reasoning:

Next, the psychiatrist delves into Mr. Smith's reasoning. Why does he not want the ventilator? Mr. Smith explains that he's witnessed friends and family members being intubated, and he doesn't want to go through the potential complications and loss of autonomy, even if it means he might pass away. He's considered the pros and cons and has come to his conclusion after much thought.

Expressing a Choice:

Lastly, Mr. Smith clearly communicates his choice to refuse the ventilator, reiterating his reasons.

Outcome: **Based on the assessment, Mr. Smith demonstrates understanding, appreciation, reasoning, and can express a choice. Even though his decision might not align with the medical recommendation, he appears to have the decisional capacity to refuse the treatment. This scenario underscores the importance of distinguishing between agreement with medical advice and decisional capacity.**

A patient can have the capacity to make a decision that others may perceive as unwise. It's crucial for a C-L psychiatrist to approach such assessments without bias and with respect for the patient's autonomy

Furthermore, it emphasizes that decisional capacity is decision-specific. While Mr. Smith has the capacity to make decisions about the ventilator, he might not necessarily have the capacity to make other unrelated decisions, especially if they involve more complex information or different sets of values and beliefs.

Conclusion

Chat GPT and other AI platforms have the potential for tremendous innovation in Consultation Liaison Psychiatry in various domains, some of which Chat GPT itself listed in response to our first prompt. Chat GPT responds differently depending on how the role of the writer is identified and based on specific details provided. As Chat GPT's varying responses to our prompts about “Explain decisional capacity as though you would explain it to a ..” illustrate, more precise and strategically informed ways of engaging with these platforms result in more helpful and detailed responses. The potential for generating content to include ideas, original works of science and art such as scholarly papers, poems, in addition to creating tools and algorithms with clinical utility does raise ethical questions of originality, creative ownership, in addition to the ethical ramifications of reliance on AI for problem solving. If, for instance, AI writes a fellowship letter of application or a letter of reference for an applicant, or indeed generates an abstract, a poster or a paper that isn't used verbatim but edited and ultimately used to further the process of creation and expression of ideas in the academic domain, what then does that say about its originality, copyright, and how do we agree upon acceptable and ethical use of such a tool? The parameters may differ depending on the context. These were questions we sometimes wrestled with in the creation of this poster itself. AI based models can suffer from bias. Ensuring inclusiveness and equity is a guiding principle defined by the WHO in its first global report on AI “Ethics and Governance of Artificial Intelligence for Health”. Latimer, nicknamed “The Black GPT” is a newly developed AI platform that strives to be racially inclusive by adding books, oral histories, and archives from underrepresented communities.

All in all, we seek to highlight AI's tremendous potential as a transformative force in the clinical, educational, academic and administrative landscapes of Consultation Liaison Psychiatry and it is our recommendation that Consultation Liaison Psychiatrists familiarize themselves with Chat GPT and other AI platforms, and learn to engage with them in ways that we hope will help the field advance. We believe that these tools have the potential to help us take better care of patients, to make us better educators, and to reduce the burden of administrative tasks that plague us.

We conclude with a creative prompt posed to Chat GPT about Consultation Liaison Psychiatry, “Write a limerick about Consultation Liaison Psychiatry”.

In a hospital's bustling fray,

Consultation Liaison leads the way.

With mind and body aligned,

They treat both combined,

Bringing light to the patient's gray day.

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