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ORGANIZATIONAL STATEMENT

Artificial Intelligence in Healthcare and Psychiatry

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The advent of artificial intelligence (AI) in healthcare, especially in the realm of psychiatry, signifies a pivotal shift in both medical practice and research. The European Union of Medical Specialists (*Union Européenne des Médecins Spécialistes*, UEMS) Section of Psychiatry [1] is very much aware of these developments and potential changes to the Specialty that need to be considered. This review by the Section brings together insights from some of the latest studies to explore the multifaceted impacts, potential applications, and ethical considerations of AI technologies including generative AI and Large Language Models (LLM) like ChatGPT. We consider how AI will potentially influence healthcare education, clinical practice, patient-doctor dynamics, and the ethical nuances essential for its integration in Psychiatry.

AI's Transformative Impact in Healthcare and Psychiatry

AI technologies, many now offered open access to the general public, are carving a new path in healthcare education and practice. Studies by Sallam [2] and Dave et al. [3] highlight the enhancement in personalized learning, data management, and research capabilities brought about by AI. These advancements present opportunities to streamline various aspects of healthcare delivery, making information processing and learning more efficient. They also caution however about the challenges, particularly ethical dilemmas, issues of copyright infringement, and the necessity of maintaining transparency in the deployment of these technologies. As regards the specialized field of psychiatry, the potential of AI is both promising and complex. Sun et al. [4] and D'Souza et al. [5] discuss AI's application in early detection, diagnosis, and treatment of psychiatric disorders. The ability of AI to process and analyze large datasets could revolutionize the understanding and management of psychiatric conditions. This ability comes however with its own set of challenges, such as ensuring the accuracy and ethical handling of sensitive mental health information, particularly because of the continuing challenges of stigma with regard to mental illness. The discussion extends to forensic psychiatry, as examined in the study by Starke et al. [6]. This research highlights the ethical risks associated with AI predictions in judicial contexts, e.g., risk of offending, underscoring the necessity for a holistic model that incorporates both clinical insights and broader social and environmental variables. This approach ensures that the deployment of AI in forensic psychiatry addresses not only the clinical aspects but also critically evaluates the socio-ethical implications.

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Current and Future Applications of AI in Psychiatry

Cheng et al. [7] examine the present and future roles of ChatGPT in psychiatry. While the technology is currently useful for routine tasks and enhancing communication, they discuss how it faces limitations in areas requiring deeper emotional understanding and empathy. It is hoped that the future of AI in psychiatry will encompass these human aspects, leading to more holistic patient care. In a global survey by Blease et al. [8], psychiatrists expressed hope that AI would increase efficiencies, e.g., assist with administrative tasks but were skeptical about replacing human empathy.

Ethical Implications of AI in Clinical Decision-Making

McCradden et al. [9] emphasize the importance of balancing AI-derived insights with traditional clinical judgment. They warn against over-reliance on AI, advocating for a mindful approach that respects both the power and limitations of these technologies in potentially complex clinical settings. Wilhelmy et al. [10] focus on the digital transformation in psychiatry, addressing the ethical dimensions. They argue that the rapid integration of AI in psychiatry necessitates a parallel evolution in ethical understanding and frameworks. This aspect is particularly vital in maintaining the sanctity of the doctor-patient relationship in an increasingly digital healthcare environment.

The Importance of Involving Psychiatry Experts

Like any technological advancement, the trust of its users will depend on how involved they were in all steps of the development [11]. The users of AI applied to Psychiatry will be healthcare professionals and patients; therefore, it is important to involve them from the early stages of development to the implementation and evaluation stage. Psychiatrists as experts in psychiatric medical diagnosis and treatment and patients and their families as "lay experts" should be partners and not passive users. Of capital importance is the risk of misinformation and consequent risk to the general public if experts are not used [12]. Not involving experts poses risks for patients but also for clinicians who use the tools. Therefore, we need to improve digital education of clinicians too both through under- and postgraduate training and continuous medical education.

Conclusion

In summary, the integration of AI in healthcare, particularly psychiatry, represents a frontier of immense potential coupled with significant challenges. The future of AI in this field is dependent on a careful balancing act—harnessing technological advancements while diligently addressing ethical, practical, and humanistic aspects of healthcare and psychiatric care. As AI continues to evolve, it is imperative that its development and application in healthcare be guided by experts and a conscientious approach that prioritizes patient welfare, ethical integrity, and the indispensable human element in medicine. The UEMS Section of Psychiatry believes that a statement reflecting the shared position of its members is required at this point. We consider this an important step to underpin harmonization of approach towards the developing technologies in order to ensure excellence in psychiatric care and treatments.

UEMS Section of Psychiatry Statement on AI

Our mission is to foster engagement, facilitate discussions on the intersection of psychiatric education and AI, and advocate for an inclusive, ethical, and human-centric approach. We recognize AI as a tool, not a substitute for diagnosis or treatment. We aim to collaboratively navigate the changing landscape by incorporating medical professionals, including those in training, as well as service users and their family members and by embracing diverse perspectives from our community of European doctors in a harmonized overall approach that will benefit all.

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Declarations

Disclosures On behalf of all authors, the corresponding author states that there is no conflict of interest.

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