Assessment of Autonomous Medication Management as a Viable Supported Decision Making System

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A Multidisciplinary Exploration into the Ethical, Clinical, and Technological Dimensions of Personalized Psychiatric Care

Introduction and methods

The current state of psychiatric treatments often involves a complex regimen of medication management that can be both confusing and burdensome for patients. This research project aims to assess the viability of autonomous medication management as a supported decision-making system within the existing framework of psychiatric care. Utilizing a qualitative approach, we will conduct in-depth interviews with healthcare practitioners experienced in psychiatric medication management as well as users who are navigating these treatment plans. The objective is to understand the challenges and opportunities inherent in implementing autonomous medication management systems, with a focus on patient autonomy, compliance, and overall mental health outcomes, achieving treatment plans more patient-centered and effective..

Results up to date

The preliminary findings of this research project reveal a complex landscape of challenges and opportunities in the realm of autonomous medication management within psychiatric care. Interviews with healthcare practitioners elucidate that while there is a general consensus on the need for more streamlined and patient-centered approaches, there is also considerable apprehension about relinquishing full control to an autonomous system. Concerns were raised about medication interactions, patient non-compliance, and the lack of human oversight in adjusting medication regimens based on nuanced clinical presentations that may not be easily quantifiable.

Conversely, interviews with users of psychiatric medications indicated a strong desire for greater autonomy and simplified medication management.

Many users expressed frustration with the current system, citing issues such as the complexity of medication schedules, the difficulty in obtaining timely medical consultations for medication adjustments, and the emotional toll of managing a chronic psychiatric condition. A significant number of users expressed a willingness to engage with an autonomous system if it could safely and effectively manage their medications, thereby reducing the cognitive and emotional burden of their treatment regimen.

Interestingly, both practitioners and users acknowledged that a well-designed autonomous medication management system could potentially increase medication compliance, improve mental health outcomes, and reduce the need for coercive measures in treatment plans. However, both groups emphasized the need for clinical validation, ethical scrutiny on patient autonomy and data privacy, and a multidisciplinary approach for successful system implementation.

Next steps of the study

In the next phase of this research, we will conduct additional interviews with healthcare practitioners, technology experts, and patients to further explore the complexities and opportunities in autonomous medication management. We aim to delve into existing guidelines for deprescription and assess how expert systems can be leveraged to improve medication protocols.

A pilot study group is being created. A significant component of this extended study will be the integration of continuous monitoring technologies to allow for more personalized and adaptive treatment plans. We invite interested stakeholders to join us in this multidisciplinary endeavor, as we believe that a collaborative approach is essential for the responsible and effective implementation of supported decision-making systems in psychiatric care.

Please follow the QR code to submit your feedback and or take part in this research

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