Supervised machine learning in psychiatry

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SUPERVISED MACHINE LEARNING IN PSYCHIATRY: TOWARDS APPLICATION IN CLINICAL PRACTICE

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Propositions

1. The Personalize Medicine paradigm can help to improve the effectiveness of psychiatric treatments and the prevention of Mental Disorders.
2. Psychiatry must begin to better exploit the possibilities opened by recent technological advancements.
3. The introduction of clinical decision support systems in Psychiatry would allow clinicians to improve the decisions they take in clinical practice.
4. The interest in Psychiatry for Machine Learning (i.e., Artificial Intelligence) needs to be ultimately directed to develop clinical tools.
5. Supervised Machine Learning algorithms should be developed to use input information that can be cost-effectively collected in clinical practice.
6. Introducing the principles of Supervised Machine Learning to mental health clinicians and addressing their potential resistance is necessary to achieve the application of Supervised Machine Learning in clinical practice.
7. A coordinated effort between the academia, industry, clinicians, and patients is necessary to develop useful clinical tools based on Supervised Machine Learning algorithms.
8. Supervised Machine Learning algorithms can significantly contribute to making Personalized Medicine a reality in psychiatric clinical practice.
9. We should not judge the decision-making performance of Artificial Intelligence systems more severely than how we judge the performance of human decision-making.
10. The labor market is drastically changing due to a massive introduction of automatization and Artificial Intelligence, with a serious risk of unemployment for several categories of workers.