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| OBJECTIVE | METHOD | EXPERIMENT/RESULT | APPLICATION | REFERENCE LINK |
| This study aims to investigate the potential of machine learning in predicting mental health conditions | **\*The Datasets Used for the Prediction of Mental Health Diagnoses,**  **\*Uncover Methodologies and Key Findings and Identify Commonly Used Algorithms in Mental Health Diagnosis Prediction** | The study highlights Convolutional Neural Networks (CNN), Random Forest (RF), Support Vector Machine (SVM), Deep Neural Networks, and Extreme Learning Machine (ELM) as prominent models for predicting mental health conditions. | **Bipolar Disorders,**  **Post-traumatic Stress Disorder, Depression and Anxiety,**  **Schizophrenia** | LINK: [https://clinical-practice-and-epidemiology-in-mental-health.com/VOLUME/20/ELOCATOR/e17450179315688](file:///C:\Users\SHUBHADIP\Downloads\LITERATURE%20SURVEY.docx)/FULLTEXT/ |
| Artificial Intelligence (AI) has emerged as a transformative force in various fields, and its application in mental healthcare is no exception. | \* Including review papers providing an overview, analysis, or synthesis of existing literature.  \* Title screening, abstract screening, and full-text eligibility assessment. | A total of 211 papers were found in four database searches, out of which 87 publications were excluded due to non-English language and duplicates. | Early detection of mental health disorders,  The landscape of mental health treatment through personalized interventions and the rise of virtual therapists and chatbots. | Link: [https://www.sciencedirect.com/science/article/pii](https://www.sciencedirect.com/science/article/pii/S2949916X24000525)/S2949916X24000525 |
| Mental illnesses are common health conditions that involve changes in emotion, thinking | first-of-its-kind study utilizing naturalistic, passively collected movement data | AI in mental healthcare is the lack of large, high-quality data sets that represent a diverse set of mental phenotypes. | Medical and psychiatric curricula, convening expert panels to discuss applications of technology in mental health practice. | Link: [https://academic.oup.com/bjr/article/96/1150](https://academic.oup.com/bjr/article/96/1150/20230213/7498934)/20230213/7498934 |
| However, the use of AI in mental healthcare and neurobiological research has been modest. | Recent survey of psychiatrists highlighted documenting/updating medical records and synthesizing. | The ability to differentiate between diagnoses with similar initial clinical presentations but divergent treatment approaches | Assistance with Clinical Diagnosis, Prognosis, and Treatment | Link: [https://pmc.ncbi.nlm.nih.gov/articles/PMC8349367](https://pmc.ncbi.nlm.nih.gov/articles/PMC8349367/)/ |
| At least 10% of the population is affected, with almost 15% of adolescents experiencing a mental health condition | investigate how artificial intelligence is transforming the mental health segment, let’s take a look at the factors that contribute to the global | This category is largely represented by keyword-triggered, NLP, and generative AI chatbots. | Analyzing patient data to assess the risk of developing mental health conditions and classify disorders | Link: [https://itrexgroup.com/blog/ai-mental-health](https://itrexgroup.com/blog/ai-mental-health-examples-trends/)-examples-trends/ |