*Iyortsuun, N. K., Kim, S.-H., Jhon, M., Yang, H.-J., & Pant, S. (2023). A Review of Machine Learning and Deep Learning Approaches on Mental Health Diagnosis. Healthcare, 11(3), 285. https://doi.org/10.3390/healthcare11030285*

[*https://www.mdpi.com/2227-9032/11/3/285*](https://www.mdpi.com/2227-9032/11/3/285)

This article (2023) demonstrates the potential of ML and DL methods to aid in diagnosing mental illnesses. The authors cite “the wide possibilities of using DL methods for mental health diagnosis with good results”, as one team developed “end-to-end CNN architecture show[ing] excellent precision (99.76%), Recall (99.74%), F1-Score (99.75%), accuracy (99.72%) and AUC (99.75%) in a three-way classification task.” The article cites challenges, including that “[o]nly four search databases (Google Scholar, PubMed, Scopus, and Web of Science) were used to collect data” and that “the focus was limited to seven mental health diseases” in their analysis.

*Bradford A, Meyer AND, Khan S, et al*

*Diagnostic error in mental health: a review*

*BMJ Quality & Safety 2024;****33:****663-672.*

*https://qualitysafety.bmj.com/content/33/10/663.citation-tools*

This article (2024) explores diagnostic error in mental health settings, asserting that it “is well understood to be a problem.” While “various avenues for future research and development” have been suggested regarding “missed, wrong, delayed and disparate diagnosis of common mental disorders,” “a lack of clear consensus on how to conceptualise, define and measure errors in diagnosis will pose a barrier to advancement.” They then point to numerous statistics concerning the accuracy of diagnosis and findings on intersectional dynamics concerning age, gender, race, and other factors that may affect accuracy in diagnosing anxiety disorders, ADHD, ASD, mood disorders, and schizophrenia.

*Martin-Key N, Schei T, Barker E, Spadaro B, Funnell E, Benacek J, Tomasik J, Bahn S*

*The Current State and Diagnostic Accuracy of Digital Mental Health Assessment Tools for Psychiatric Disorders: Protocol for a Systematic Review and Meta-analysis*

*JMIR Res Protoc 2021;10(1):e25382*

*URL: https://www.researchprotocols.org/2021/1/e25382*

*DOI: 10.2196/25382*

This article explores digital assessment tools for mental health screening and diagnosis, noting that, in spite of their rapid growth in number, “little is known about their diagnostic accuracy.”