

WHITE MATTER RESEARCH IN SCHIZOPHRENIA, SCHIZOAFFECTIVE DISORDER, AND BIPOLAR DISORDER: A BIBLIOMETRIC ANALYSIS VIA WEB OF SCIENCE

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BACKGROUND AND AIM: White matter hyperintensities (WMH) are small, non-mass effect hyperintensities detected on MRI in T2 or FLAIR sequences. Their prevalence increases with age, vascular risk factors, cardiovascular disease, stroke, and dementia.

METHODS: This study was approved by the Ethics Committee of Elazığ Fethi Sekin City Hospital (2025/2-1). Articles indexed in Web of Science (WoS) on schizophrenia (SCZ), schizoaffective disorder (SAD), and bipolar disorder (BD) in relation to WMH were analyzed using bibliometric methods. The sample included studies from 1990 to 2025 indexed in SCI-E, SSCI, and ESCI. Reviews, case reports, letters, book chapters, and conference proceedings were excluded.

RESULTS: As of 09/02/2025, a search for “WMH” in WoS yielded 6,878 results, with 5,358 research articles. Research in this field has grown significantly since 2008 but declined in

2024. In 2022, 483 studies were published, 450 in 2023, and 472 in 2024. There were 66 studies on SCZ, 98 on BD, and only one on SAD. A total of 602 studies addressed psychiatric disorders. The most prolific author was Howard J. Aizenstein, the leading institution was the University of California System, and the U.S. had the highest number of publications.

CONCLUSIONS: Research on WMH in psychiatric disorders increased after 2008 but declined in 2024. SCZ and BD have received more attention, while SAD remains underexplored. BD studies may be more frequent due to its pronounced neurovascular changes. In SCZ, WMH is linked to cognitive decline and disease progression. Future studies should use larger samples and robust methodologies to clarify WMH’s role in these disorders.

Keywords: White matter hyperintensity, magnetic resonance imaging, schizophrenia, bipolar disorder, schizoaffective disorder