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Anxiety after Traumatic Brain Injury

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Background: Traumatic brain injury (TBI), defined as a disruption of brain structure or function caused by an external force, leaves approximately half of those afflicted hospitalized or permanently disabled. While the physical consequences of TBI have been well documented, the psychological outcomes remain less explored. Specifically, the development of generalized anxiety disorder (GAD) post-TBI, which can be characterized by excessive and uncontrollable worry, merits further investigation. Prior research has often failed to exclusively investigate GAD as a psychiatric outcome, producing inconsistent findings regarding its prevalence, progression, and associated risk factors.

Purpose: This review aims to evaluate the prevalence, trajectories, and risk factors of GAD and anxiety following TBI to inform clinical treatment strategies.

Method: Peer-reviewed studies published in the past 30 years were reviewed. Inclusion criteria required adult participants (≥ 18) with confirmed TBI, the use of validated diagnostic measures, and cross-sectional, longitudinal, or prospective designs. Selected studies were compared across their prevalence estimates, symptom trajectories, and identified risk factors.

Results: Substantial variability in prevalence estimates was identified. While estimated GAD post-TBI prevalence ranged from 3% to 28%, self-reported significant anxiety ranged from 4% to 83%. Several distinct symptom trajectories were found: most individuals reported consistently low levels of anxiety post-TBI, while a significant minority experienced either a gradual increase in their anxiety or initial moderate symptoms that later declined to mild. Risk factors for experiencing anxiety following TBI included female sex, lower socioeconomic status, prior mental health diagnoses or issues, and intensive care admission.

Conclusion: Overall, these findings indicated that although the majority of individuals experienced minimal anxiety post-TBI, a substantial minority followed adverse trajectories that were influenced by a multitude of risk factors, emphasizing the importance of early screening and intervention.