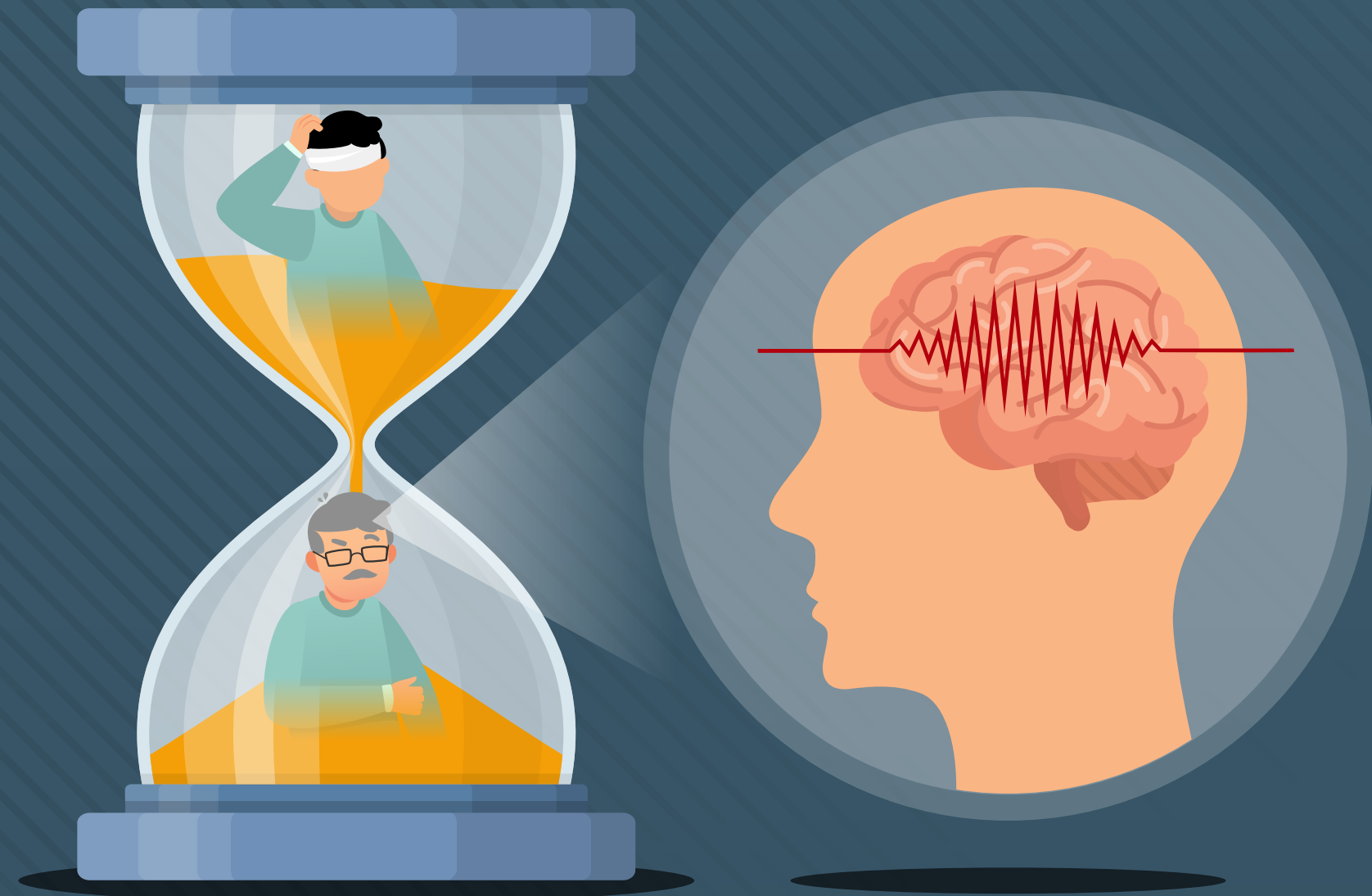


# Prior Head Injury and Late-Onset Epilepsy: Is There a Connection?

Head injury is a risk factor for epilepsy



However, the degree to which prior head injury may play a role in late-onset epilepsy (LOE) is not clear

## Study question

Is prior history of head injury associated with subsequent LOE?



Participants from the 'Atherosclerosis Risk in Communities Study' (N = 8,872)

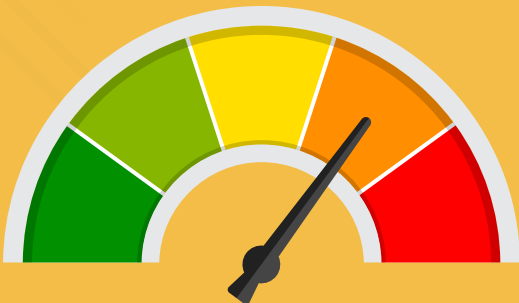


Identification of prior head injuries and LOE



Estimation of adjusted hazard ratio (HR)

### Increased risk of LOE after prior head injury



HR = 1.88  
(95% confidence interval (CI) = 1.44–2.43)

### Older age increased the risk of head injury with LOE

<67 years with prior head injury

(HR = 0.98; 95% CI = 0.68–1.41)



≥67 years with prior head injury

(HR = 4.01; 95% CI = 2.91–5.54)



### Compared to no head injury, number and severity of prior injuries increased risk of LOE

1 prior head injury



(HR = 1.37; 95% CI = 1.01–1.88)

>2 prior head injuries



(HR = 3.55; 95% CI = 2.51–5.02)

Mild head injury



(HR = 2.53; 95% CI = 1.83–3.49)

Moderate/severe head injury



(HR=4.90, 95% CI 3.15–7.64)

Prior history of head injury, especially repeated and more severe head injuries, was associated with LOE