6ER-003

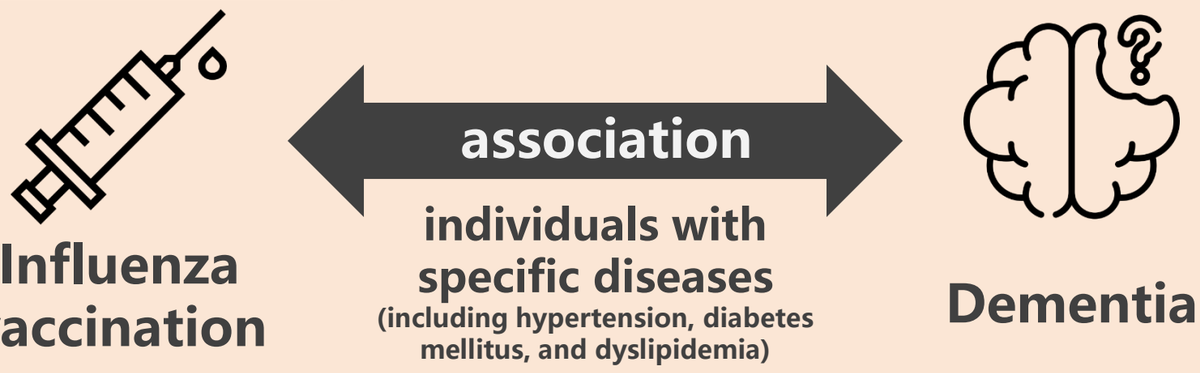
Influenza Vaccination and Its Association with Dementia Risk: A Systematic Review and Meta-Analysis

Chia-Chao Liu[1], Shih-Chieh Shao[1], Wen-Kang Yang[2], Ching-Chi Chi[3]
[1]Department of Pharmacy, Keelung Chang Gung Memorial Hospital, Keelung, Taiwan
[2]Department of Education, Keelung Chang Gung Memorial Hospital, Keelung, Taiwan
[3]Department of Dermatology, Linkou Chang Gung Memorial Hospital, Taoyuan, Taiwan

Background

- Influenza vaccination is not only effective in preventing influenza but may also provide protection against other diseases, including dementia.
- Previous findings on the association of influenza vaccination and dementia in populations with specific underlying conditions remains unclear.

Objectives



Methods

MEDLINE、Embase、CENTRAL

Up to July 17, 2024

7 Cohort studies
8,265,275 participants

Newcastle-Ottawa Scale
Random-effects model

Results

All-cause dementia risk ⬇

HR: 0.75 95% CI 0.66–0.85

General population HR: 0.89 95% CI 0.81–0.98

Specific diseases HR: 0.66 95% CI 0.63–0.69

Vaccination doses

≥ 4 doses dementia risk ⬇ HR: 0.42 95% CI 0.35–0.50

Dementia subtypes

Vascular dementia HR: 0.59 95% CI 0.47–0.75

Alzheimer's disease HR: 0.87 95% CI 0.64–1.19

Conclusions

- This systematic review and meta-analysis suggest that influenza vaccination is associated with a reduced risk of dementia, particularly vascular dementia, and in populations with specific underlying conditions.
- These findings highlight the potential of vaccination as a valuable strategy for dementia prevention in high-risk groups.

Acknowledgements: Pharmacists of the department of pharmacy, Keelung Chang Gung Memorial Hospital (Taiwan)
Contact details: Chia-Chao Liu, BSPh
chiachao@cgmh.org.tw

Abstract Number: 6ER-003
Presented at the EAHP 2025 | March 12-14, 2025 | Copenhagen, Denmark

Abstract