Review of "Dementia knowledge and associated factors among older Chinese adults: a cross-national comparison between Melbourne and Beijing" by Mei Zhao et al.

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Key highlights:

- Older Chinese adults in Melbourne and their counterparts in Beijing reported similar levels of overall dementia knowledge. Similarities are also observed in dementia knowledge subdomains.
- Associates of dementia knowledge vary between the two groups: younger age and dementia worry were associated with higher levels of dementia knowledge in the Melbourne group, while family history of dementia was associated with higher levels of dementia knowledge in the Beijing group.
- Dementia education programs should focus on caregiving information and risk factors for dementia. Dementia beliefs and cultural values, as well as access to dementia education resources need to be examined in future studies.

Dementia is global health concern for individuals, communities and governments. Currently the number of people living with dementia worldwide is more than 55 million, and the number is projected to grow with an incidence of nearly 10 million new cases each year. It is estimated that the number of people with dementia will triple by 2050. To date, no cure is available for most types of dementia. Thus, being knowledgeable about dementia is important for individuals, so that they can take proactive approaches to prevent dementia onset.

Although considerable research has explored dementia knowledge and associated factors, migration status, which is an important sociocultural factor, was rarely included. It is reported in dementia research that immigrants might be vulnerable to cognitive impairment (Zhao *et al.*, 2021); however, there is little research that discusses differences in dementia knowledge levels between older adult, Chinese immigrants and their counterparts in China.

Zhao et al. conducted comparative research between Melbourne, Australia, and Beijing, China, from March to May 2019. The study aimed to compare dementia knowledge levels between these two groups, and inform the development of culturally and socially appropriate dementia education programs. A total of 379 older Chinese adults aged 50 or above, including 153 from Melbourne and 226 from Beijing, completed the survey in Zhao et al.'s study.

This study reported three major findings: first, there was not a significant difference in dementia knowledge between Chinese older adults living in Melbourne as compared to older adults living in Beijing. The Alzheimer's Disease Knowledge Scale (ADKS) was used to assess Alzheimer's disease knowledge, and the results showed that the average ADKS score was 17.2 ± 2.9 in the Melbourne group, which was almost identical to Beijing group (17.5 ± 2.9). The similarity was observed in the overall level of dementia knowledge between these two groups. According to the migrant process theory, immigrants tend to be highly educated, and engage in healthier behaviors as compared to counterparts living in their home country. One possible reason provided by the authors was related to sample selection. Given that participants were recruited from economically developed urban areas in both cities respectively, people share an equal opportunity to obtain dementia knowledge, especially those connected with community centers, which comprise a primary information source for them.

The second finding is the similarity across subdomains of dementia knowledge, including risk factors, assessment and diagnosis, symptoms, disease course, impact, caregiving, and treatment and management. Both groups had the greatest knowledge in the life impact subdomain, followed by the treatment and management subdomain. Risk factors and caregiving were the two subdomains which both groups had the least knowledge.

The third finding relates to differential factors associated with dementia knowledge between the two groups. It was found that younger age and self-rated dementia worry were significantly correlated with the ADKS total score in older Melbourne Chinese. A family history of dementia was the only variable associated with a greater level of dementia knowledge in Beijing group. In the absence of contact limitations, older Chinese in Beijing tended to have more connections with people living with dementia (PLWD) in their family; this is especially the case when older adults are caregivers for family members with dementia, which leads to them developing a greater knowledge of dementia. However, for those participants living in Melbourne, their own worry was associated with a higher awareness of dementia, and the presence of a family member with dementia appears to have no significant influence on dementia knowledge.

The projected increase in dementia incidence globally calls for more efforts to increase dementia awareness and knowledge. Previous studies indicate that immigrants might face unique obstacles, such as limited knowledge of the disease, social isolation and unfamiliarity of health care system due to language barriers. Yet, research on dementia knowledge in relation to immigrant status is limited. Hence, Zhao et al.'s study examining differences between immigrant and non-immigrant populations has significantly contributed to this area of research.

Public education programs designed to increase dementia knowledge among Chinese older adults are much needed. Dr. Zhao's findings affirmed the importance of public education, and highlighted specific domains, such as risk factors and caregiving as areas of emphasis for dementia education programs. Additionally, to effectively reach out to immigrant groups, culturally and socially appropriate approaches aligned with the older adults' beliefs and traditions should be used. Future studies need to include rural older adults, and examine disparities in access to dementia education, as well as health and social services, which can also affect older adults' dementia knowledge.

References:

1. *Kovaleva, M., Jones, A., Maxwell, C. A., & Long, E. M. (2021). Immigrants and dementia: Literature update. Geriatric nursing (New York, N.Y.), 42(5), 1218–1221. https://doi.org/10. 1016/j.gerinurse.2021.04.019*

2. *Zhao, M., Lv, X., Lin, X., You, E., Zhang, H., Ellis, K. A., ... & Lautenschlager, N. T. (2021). Dementia knowledge and associated factors among older Chinese adults: a cross-national comparison between Melbourne and Beijing. International Psychogeriatrics, 33(10), 1057-1067. doi:10.1017/S1041610221000053*

3. *Zheng, Y. B., Shi, L., Gong, Y. M., Wang, X. X., Lu, Q. D., Que, J. Y., Khan, M. Z., Bao, Y. P., & Lu, L. (2020). Public awareness and knowledge of factors associated with dementia in China. BMC public health, 20(1), 1567. https://doi.org/10.1186/s12889-020-09665-7*

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