Factors influencing intent to vaccinate against Respiratory Syncytial Virus (RSV) among older adults in Australia, Hong Kong, Japan, New Zealand, South Korea, Singapore, and Taiwan

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Conclusions

- Across Asia-Pacific, RSV vaccination intent among older adults is shaped by a combination of awareness, access, affordability, and social context.
- While logistical factors such as convenience and cost are universally important, perceived disease risk and family involvement increasingly influence decision-making with age and comorbidity.

Background and Aims

- Respiratory Syncytial Virus (RSV) is a leading cause of severe respiratory illnesses among infants and older adults.
- This study aimed to understand the knowledge, attitudes, perceptions, and practices of RSV among older adults aged ≥50 years, as well as carers and HCPs managing respiratory illness in adults across seven countries in Asia
- With recent approvals of RSV vaccines for older adults, this poster highlights results related to the understanding of the factors influencing vaccination intention to optimize RSV vaccine uptake.

Study design

- This cross-sectional, survey-based study recruited 3,430 older adults aged ≥50 years from Australia, Hong Kong, Japan, New Zealand, South Korea, Singapore, and Taiwan.
- Respondents were grouped into general population (N=1,807) and high-risk (N=1,623, based on respiratory conditions, diabetes, cardiovascular conditions, chronic kidney disease or liver disease) and further sub-grouped by age (50-59, 60-74, and ≥75 years).
- Logistic regression models examined sociodemographic and health factors, and attitudes towards RSV (e.g., immunity preference, concerns over respiratory infections [RI], convenience, affordability) as predictors of vaccination intent.

Demographics

- Average gender distribution across all groups was balanced (44% Female and 56% Male).
- The majority of all 3 general populations scored as robust on the Modified Frailty Index-5 (mFI-5) (94% for adults age 50-59 years vs 82% for those 60-74 years and 36% for adults ≥75 years old).
- Higher rates of high-risk population respondents were observed scoring as slightly frail (43% for adults age 50-59 years and 51% for those age 60-74 years) or frail (37% for both age groups).
- Except population aged ≥75 years, all other age groups reported education levels above secondary level.
- The Charlson Comorbidity Index tends to increase with age.
- The commonest comorbidities reported among high-risk group were Hypertension requiring medication, Asthma and Type I/II diabetes mellitus.

Results

Figure 1: **Multivariable regression among the general population aged 50-59 years (N=740).**
Among adults aged 50-59 years, higher concern for RI, as well as ease of access and affordability, were significantly associated with stronger vaccination intent.

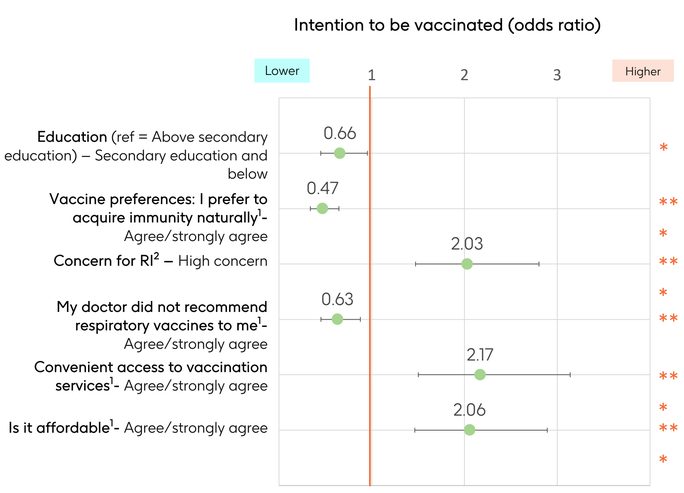


Figure 2: **Multivariable regression among the general population aged 60-74 years (N=707).**
In adults aged 60-74 years, higher comorbidity burden (CCI), concern for RI, and ease of access and affordability were linked to greater vaccine intent.

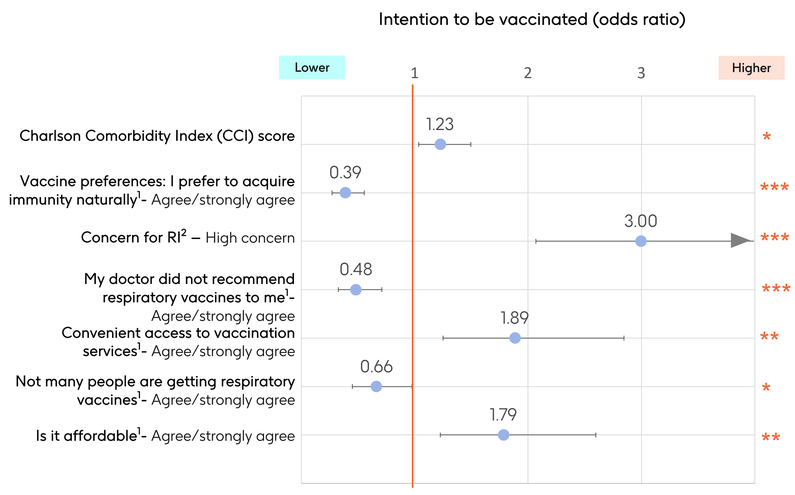


Figure 3: **Multivariable regression among the general population aged ≥75 years (N=383).**
For adults aged ≥75 years, awareness of RI and convenient access were the strongest predictors of intention to vaccinate.

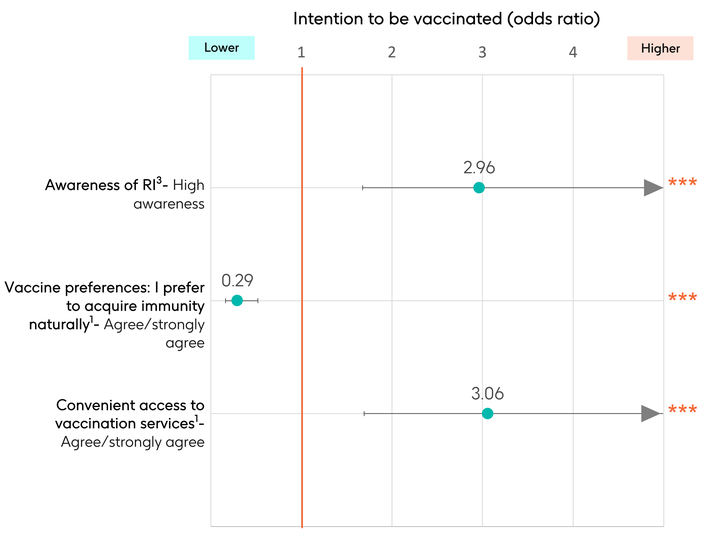


Figure 4: **Multivariable regression among the high-risk aged 50-59 years (N=999).**
Within the high-risk 50-59 year group, concern for RI, shared or child-led decision-making, dependency status, affordability, and higher comorbidity scores were all associated with stronger vaccination intent.

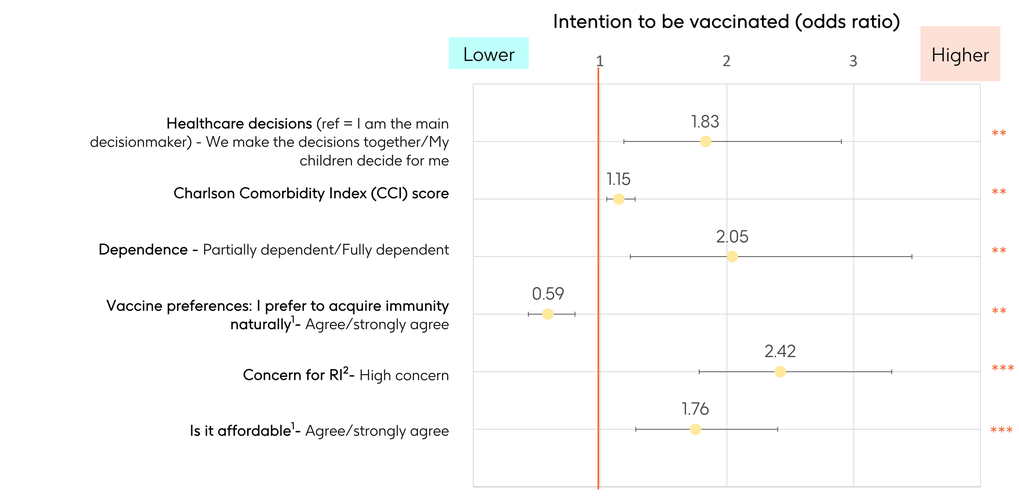
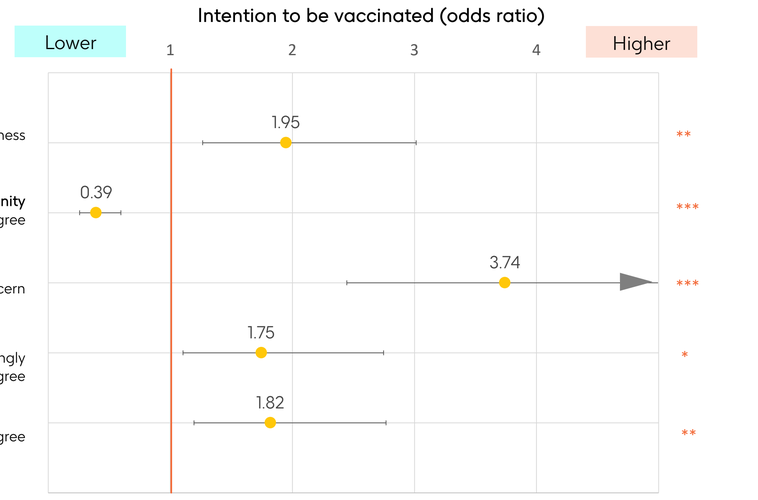


Figure 5: **Multivariable regression among the high-risk aged 60-74 years (N=643).**
For high-risk adults aged 60–74 years, concern and awareness of RI, along with affordability and access, were key facilitators of vaccine intent.



*1(ref = Strongly disagree/disagree/neutral); 2(ref = Low concern, less than median summary score); 3(ref = Low awareness; less than the median summary score); 4(ref = Low knowledge; less than median summary score); Only showing significant variables from the univariate analysis were included (p<0.05) *p-value<0.05, **p-value<0.010, ***p-value<0.001*

Abbreviations

CCI: Charlson Comorbidity Index
mFI-5: Modified Frailty Index-5
RSV: Respiratory Syncytial Virus
RI: Respiratory Infections

Fundings

This study was funded by GSK (Study ID: 219817)

References

1. Jain H, Schweitzer JW, Justice NA. Respiratory syncytial virus infection [Internet]. StatPearls [Internet]. StatPearls Publishing; 2022
2. Falsey AR, Hennessey PA, Formica MA, et al. Respiratory syncytial virus infection in elderly and high-risk adults. N Engl J Med. 2005;352(17):1749–59.

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Dr Lutz Beckert (Department of Medicine, University of Otago, Christchurch, New Zealand), Dr Chien-Hsien Huang (Kaohsiung Medical University, Kaohsiung, Taiwan), Dr Daisuke Kurai (Department of General Medicine, Infectious diseases, Kyorin University, Tokyo, Japan), Dr Hoe Nam Leong (Rophi Clinic, Mount Elizabeth Novena Hospital, Singapore), Dr Ji-Yun Noh (Department of Infectious Diseases, Guro Hospital, Seoul, South Korea), Dr John Siu Lun Tam (Department of Applied Biology & Chemical Technology, The Hong Kong Polytechnic University, Hong Kong), Dr Grant Waterer (Respiratory Medicine, Australia Royal Perth Hospital Unit and Internal Medicine, UWA Medical School, The University of Western Australia, Perth, Western Australia, Australia), Dr Sumitra Shantakumar (GSK, Real-World Evidence and Health Outcomes, Singapore), and Dr Nisa de Souza (formerly with GSK, Real-World Evidence and Health Outcomes, Singapore, at the time of study conduct).

Disclosures

Yufan Ho, Aruni Seneviratna: Employed by and hold financial equities in GSK.
Lawrence Vandervoort, Amana Woo, Neeyor Bose, Maria Choufany, Leila Alaoui Sosse: Nothing to disclose.

Digital poster
Supplemental data

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Appendix

Figure 1: Exploratory univariate regression showed high concern for RI, affordability, easy access, partial/full dependency and higher frailty was associated with higher intention to be vaccinated in those aged 50-59 years

Figure 2: An exploratory regression analysis showed education, CCI score, awareness, knowledge and concern for RI, people around who are getting the vaccine and affordability were significantly linked to vaccination intent for those aged 60-74 years

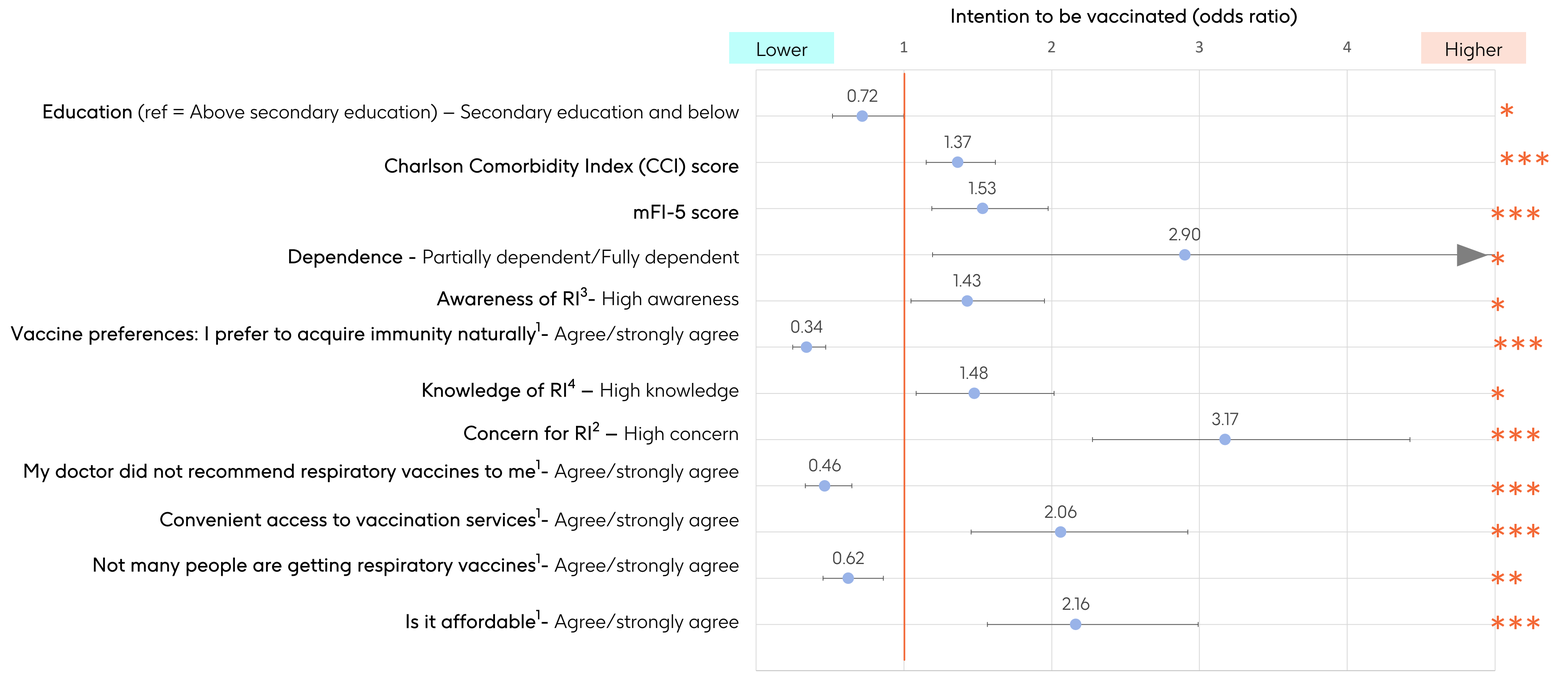
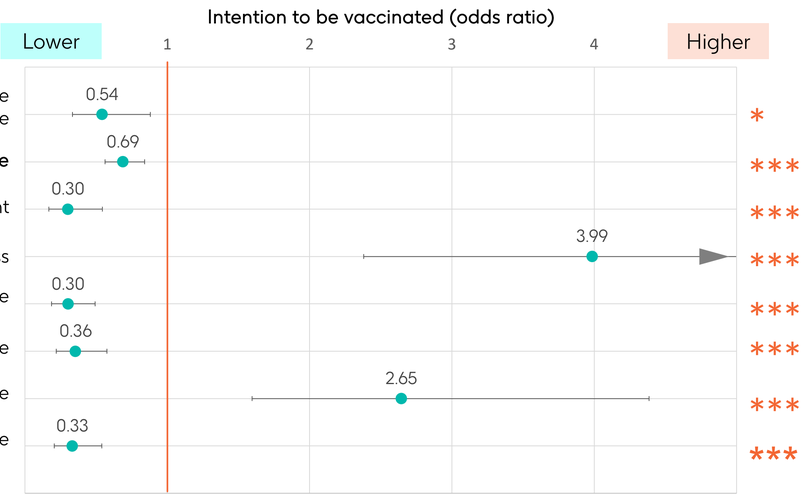


Figure 3: An exploratory regression analysis showed that the healthcare decisionmaker, awareness and people around who are getting the vaccine were significantly linked to intent to vaccinate in those aged ≥75 years



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Supplemental data

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