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## CONFERENCE ABSTRACT

# Factors Influencing Influenza Vaccination Uptake Among Community-Dwelling Older Adults: A Mixed-Methods Study

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**Background:** Despite making the influenza vaccine accessible and affordable, vaccination rates remained low among community-dwelling older adults. Therefore, this study aimed to explore the factors influencing vaccine uptake and impact of COVID-19 on vaccine uptake among community-dwelling older adults in Singapore.

**Methods:** A mixed methods study involving a survey and face-to-face semi-structured interviews were conducted between September 2020 and July 2021. Community-dwelling older adults aged  $\geq 65$  years were recruited from 27 Community Nurse Posts. Data on participants' demographics, health condition(s), vaccination status, attitudes towards influenza infections and vaccinations, willingness to pay, intention for future vaccination and source of information were collected via the survey. Semi-structured interviews were conducted to understand vaccination experiences, key enablers and barriers, and the impact of COVID-19 on vaccine uptake. All interviews were analyzed using Braun and Clarke's thematic analysis. Quantitative data were analyzed using descriptive statistics, chi-square tests and multinomial logistic regressions.

**Results:** A total of 235 participants completed the survey. Living arrangement was a statistically significant contributing factor for influenza vaccine uptake ( $\chi^2 = -0.139$ ;  $p = 0.03$ ). Participants who lived alone were 2.5 times more likely to be vaccinated than those living with others (OR=2.504, 95% CI: 1.294-4.842,  $p = 0.006$ ). Avoidance of getting infected (82.5%), avoidance of transmission to others (84.7%), and advice from healthcare professionals to receive vaccination (83.4%) were key enablers while concerns about possible side effects (41.2%), effectiveness of vaccine (42.6%), and not having enough information (48.1%) were barriers. Twenty participants were interviewed. The findings were congruent with the survey results. Five themes were identified as follows: 1) Perceived importance of influenza vaccination, 2) Sphere of influence, 3) Healthcare schemes and medical subsidies, 4) Psychological impediments, and 5) Inconsistent emphases at various touch points.

**Conclusion:** Greater public health efforts are needed to reach out to the larger population of older adults of different living arrangements, and those concerned about the possible side effects and effectiveness of the influenza vaccine. Healthcare professionals need to provide more information to address these concerns, especially during COVID-19, to encourage vaccine uptake.

**Keywords:** older adult, influenza, vaccine, vaccination, barrier, enabler, mixed methods