Facilitators and Barriers to Use Rapid Antigen Test among Communitydwelling Older Adults in Hong Kong: A Population-Based Random Telephone Survey

Joseph Kawuki ¹, Yuan Fang ², Fuk-yuen Yu ¹, Danhua Ye ¹, Paul Shing-fong Chan ¹, Siyu Chen ¹, Zixin Wang ¹ ¹ Centre for Health Behaviours Research, Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong, Hong Kong, SAR- China. ² Department of Health and Physical Education, the Education University of Hong Kong, Hong Kong, China.

Background

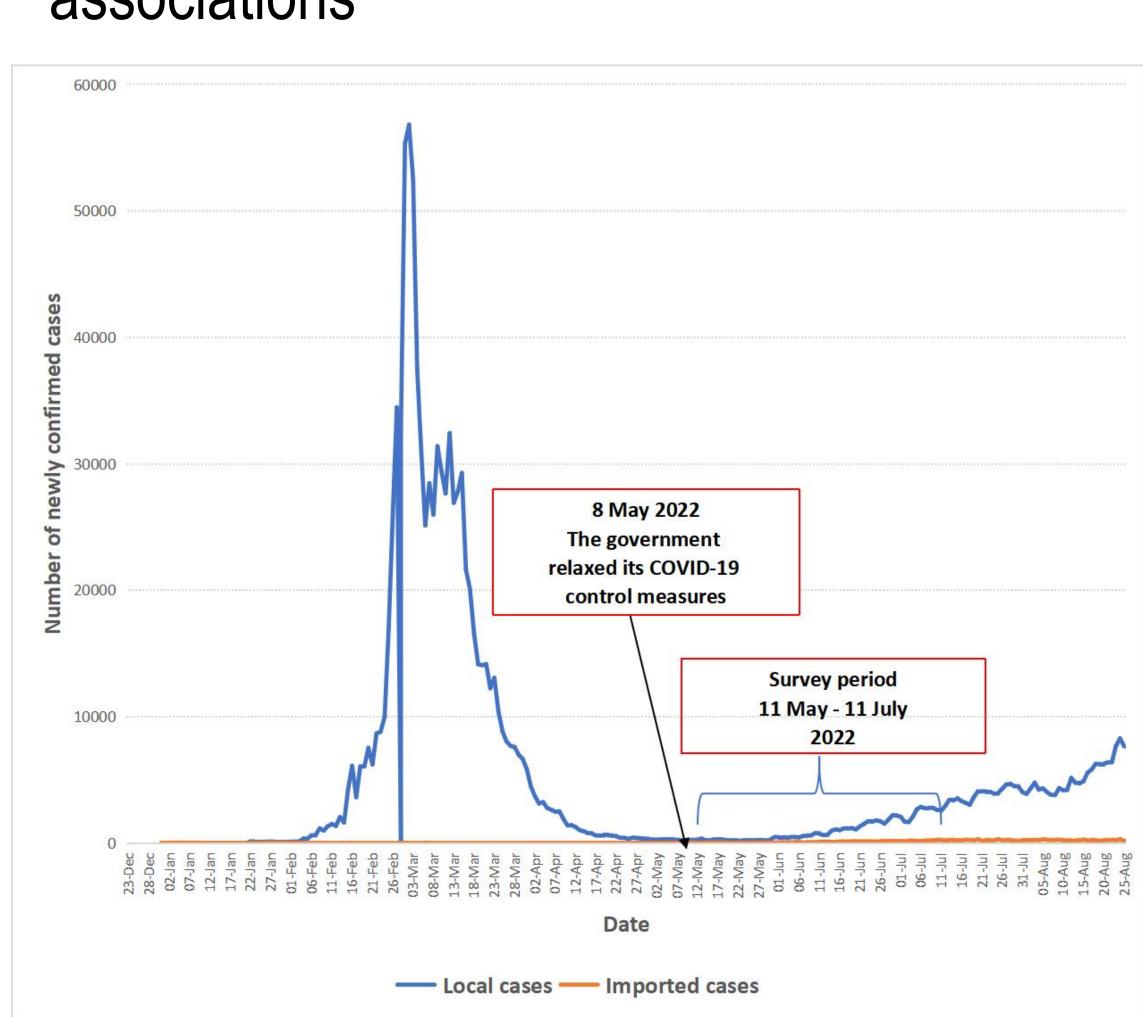
- Faster diagnosis of COVID-19 is crucial for surveillance, prompt implementation of infection control measures and adequate patient care among older adults
- Unlike nucleic acid amplification tests, rapid antigen tests (RAT) for SARS-CoV-2 have the shortest assay time of 15-20 minutes and are easy to perform as self-testing 1-3
- With the faster and cheaper diagnosis, RAT drastically reduced COVID-19 infections and averted potential deaths in several countries 4-6

Objectives

- The study investigated the behavioral intention to use RAT and associated factors among Hong Kong older adults aged ≥65 years in two scenarios;
 - i) Using RAT regularly for health status monitoring without any symptoms, and
 - ii) RAT use when having COVID-19-like symptoms

Methods

- Study design: A population-based random telephone survey
- Participants and data collection: 370 Chinese-speaking adults aged ≥65 years and data was collected through telephone interviews (11 May — 11 July 2022)
- Analyses: Multiple logistic regression- assessed the associations



Scan me for details



Results

- Of the 370 participatnts, 90.3% had used RAT, of which 21.6% obtained positive results
- The common challenges faced when using RAT included:
 - Difficulty choosing the right RAT kit,
 - Uncertainty about how to use RAT, and
 - Not knowing what to do after getting a positive result
- For behavioral intention;
 - **27.3% intended to use RAT** regularly for health status monitoring without any symptoms, while
 - 87.0% if they had COVID-19-like symptoms

Factors associated with behavioural intention

- ☐ In both scenarios the following were associated with higher behavioral intention to use RAT;
- **✓** Positive attitudes,
- **✓** Perceiving significant others would support them using RAT,
- **✓** Belief that RAT health promotion materials were helpful to understand how to use RAT and
- **✓** Thoughtful consideration of the veracity of COVID-19 specific information
- ☐ Having negative attitudes toward RAT was associated with the lower intention of RAT use only when having no symptoms.

Conclusions

Addressing difficulties faced when using RAT, strengthening positive attitudes, involving significant others and empowering with adequate information-veracity evaluating skills are potentially vital strategies to increase RAT use among older adults

References

1. UpToDate. 2022. https://www.uptodate.com/contents/image/print?imageKey=ID%2F128419

2. Dinnes J. CDSR 2022. https://doi.org/10.1002/14651858.CD013705.pub3

3. Ciotti M. J. Med. Virol. 2021. https://doi.org/10.1002/jmv.26830 4. Paltiel AD. Ann. Intern. Med. 2021. https://doi.org/10.7326/M21-051

5. Girdwood S. SSRN 2021. https://dx.doi.org/10.2139/ssrn.3813182 6. Maya S. medRxiv. 2022. https://doi.org/10.1101/2022.03.21.22272687



