

Editorial

Dissemination reports are concise informative reports of health-related research supported by the Health and Medical Research Fund (and its predecessor funds) administered by the Food and Health Bureau. In this edition, we present 11 dissemination reports of projects related to respiratory infection, viral hepatitis, *Helicobacter pylori*, and bacterial infection. In particular, three projects are highlighted due to their potentially significant findings, impact on healthcare delivery and practice, and/or contribution to health policy formulation in Hong Kong.

The burden caused by respiratory virus infections includes hospitalisation and death as well as economic losses due to sick leave and doctor consultations. Respiratory viruses can be transmitted by contact, large droplets, and aerosols. Cowling et al¹ aimed to detect respiratory virus RNA from the exhaled breath of persons infected with one of a range of common respiratory infections and to determine the potential benefits of face masks to prevent respiratory virus transmission. The investigators found that respiratory viruses could be detected in exhaled breath of patients with acute respiratory infections. Overall, respiratory viruses were less frequently detected in exhaled breath in the group wearing surgical masks when compared with the control group in the aerosol (7% vs 13%) and droplet (0% vs 6%) fractions. Surgical masks were effective in preventing virus dissemination in the coarse fraction of exhaled breath even when a participant coughed many times.

Human parechovirus (HPeV) is a virus common in Europe and some Asian countries. HPeV exists as 16 different strains that cause mainly respiratory and gastrointestinal symptoms. Chan et al² set out to determine its prevalence, seasonality, and clinical profile among young children aged 3 months and

under hospitalised for acute viral illness. They found that HPeV infection occurred in about 2.3% of young children hospitalised for acute viral illnesses with most infections occurring in autumn and winter. Symptoms ranged from mild gastroenteritis, upper respiratory tract infection, febrile rash to convulsion and severe sepsis. The authors suggested that a diagnostic service for HPeV might be useful for young infants presenting with sepsis.

Influenza infection is associated with a heavy burden of mortality and morbidity globally, and vaccination is an important strategy to reduce disease severity and virus transmission. However, the true effectiveness of influenza vaccines in older people is subject to debate. Yang et al³ compared the long-term trend of influenza burden in older people aged ≥65 years in Hong Kong and Brisbane and aimed to quantify the impact of influenza and pneumococcal vaccine coverage on the reduction of influenza disease burden. They found that the uptake of both vaccines had increased dramatically in Hong Kong since 2003. In the period 2003-2009 in Hong Kong, influenza-associated rates of mortality secondary to cardio-respiratory disease, stroke, and ischaemic heart disease decreased more in Hong Kong than in Brisbane. This provides some evidence to suggest that increased vaccination rates have reduced influenza disease burden in older people in Hong Kong.

We hope you will enjoy this selection of research dissemination reports. Electronic copies of these dissemination reports and the corresponding full reports can be downloaded individually from the Research Fund Secretariat website (<https://rfs2.fhb.gov.hk/>). Researchers interested in the funds administered by the Food and Health Bureau may visit the website for detailed information about application procedures.

Supplement editor



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References

1. BJ Cowling, DK Ip, HL Yen. Efficacy of face masks to prevent respiratory virus transmission: abridged secondary publication. *Hong Kong Med J* 2020;26(Suppl 4):S4-7.
2. PKS Chan, MCW Chan, EAS Nelson, TF Leung. Human parechovirus infection in Hong Kong neonates, infants, and young children: abridged secondary publication. *Hong Kong Med J* 2020;26(Suppl 4):S8-11.
3. L Yang, WB Hu, CM Wong, et al. Effect of increased influenza and pneumococcal vaccine coverage on the burden of influenza among elderly people in Hong Kong versus Brisbane: abridged secondary publication. *Hong Kong Med J* 2020;26(Suppl 4):S12-6.