

# Editorial

Dissemination reports are concise informative reports of health-related research supported by the Health and Medical Research Fund administered by the Health Bureau. In this edition, we present 11 dissemination reports of projects related to neurology, public health, cardiovascular disease, cancer, reproduction, health services, and infection. In particular, research findings of three projects may provide insights to enhance clinical practices and help inform health policy formulation in Hong Kong.

Alzheimer disease (AD) is a progressive incurable neurodegenerative condition. Current diagnostic tests are limited by their invasive nature, high cost, and limited resolution. There is a need for improved assays for biomarkers for AD that are sensitive, specific, reliable, non-invasive, accessible, and inexpensive. Cheung et al<sup>1</sup> assessed whether retinal vascular and neuronal changes could fulfil these requirements among 163 Chinese individuals who were patients with AD or amnesic mild cognitive impairment or healthy controls. They found that specific retinal microvascular abnormalities and retinal neuronal/axonal loss (measured using non-invasive retinal imaging technologies) could reflect cerebrovascular dysfunction and classic features of neuronal injury in the AD brain, were associated with AD, and were independently predictive of cognitive decline. Thus, retinal imaging measurements are potentially useful biomarkers for AD.

Breastfeeding is widely promoted worldwide and yet the mechanism of how breastfeeding exerts its long-term beneficial effects is unclear. One possibility is that breastfeeding mediates its effects by influencing lipid profiles in children and adolescents. Schooling et al<sup>2</sup> attempted to clarify the long-term effects of breastfeeding on apolipoprotein B (ApoB),

which is emerging as the predominant lipid that causes ischaemic heart disease, by following up the 'Children of 1997' birth cohort. Overall, breastfeeding was associated with lower ApoB but not lower triglycerides or high-density lipoprotein cholesterol in older adolescents at ~17.6 years. From a public health perspective, this study gives further support to the promotion of breastfeeding given its known short-term benefits and potential lifelong benefits.

The Hong Kong SAR Government, in collaboration with the healthcare sector, facilitates and encourages women to have regular cervical screening to prevent cervical cancer. The Hong Kong SAR Government has also implemented human papillomavirus (HPV) vaccination for female adolescents. Starting from the 2019/2020 school year, schoolgirls in primary five and six (equivalent to age 11-12 years) can receive two doses of the nonavalent HPV vaccine without charge. Leung et al<sup>3</sup> aimed to evaluate the comparative cost-effectiveness of different applications of HPV testing in the local setting via modelling HPV vaccination and cervical cancer screening. They found that among cohorts without HPV vaccination programme, using HPV test results as stand-alone primary test or as a triage for cytology for atypical squamous cells of undetermined significance was likely a cost-effective cervical screening strategy to reduce deaths from cervical cancer when the willingness to pay threshold was one GDP per capita (US\$46 615). Among cohorts who were able to receive nonavalent HPV vaccines via immunisation programme, cervical screening was less likely to be cost-effective if vaccine uptake was  $\geq 75\%$  and the routine screening interval was 5-yearly or shorter.

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## References

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