

# 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 infectious diseases, health services research, cancer, gastrointestinal disease, visual system, and reproductive health. In particular, research findings of three projects may provide insights to enhance clinical practices and help inform health policy formulation in Hong Kong.

Early prediction of an impending influenza outbreak would be very useful for mitigating potential public health implications, such as planning for surge capacity in public hospitals. Such prediction in subtropical regions like Hong Kong are difficult not least because the seasonal characteristics of influenza in temperate and tropical locations are quite different and real-time data on influenza infection dynamics are limited. Ali et al<sup>1</sup> attempted to forecast seasonal influenza transmission by integrating multiple surveillance streams on influenza transmissibility in Hong Kong. During the study period 1998-2020, 58 distinct influenza epidemics were identified. Associations between influenza transmissibility and mean ambient humidity and ambient ozone were observed. The mechanistic framework-based forecasting was found to be comparable with statistical framework-based forecasting.

Parkinson disease (PD) is a neurodegenerative disorder associated with motor and non-motor symptoms. Progression of non-motor and motor symptoms such as mood disturbances, cognitive impairment, sleep problems, fatigue, postural instability, and gait disturbance further contribute to disability and reduced quality of life. Mak et al<sup>2</sup> evaluated the effects of a 26-week combined balance

exercise and brisk walking programme, compared with flexibility and strengthening exercise, on improving non-motor and motor symptoms among 99 Chinese people with mild-to-moderate PD. They found that the intervention reduces non-motor and motor symptoms and enhances balance and walking capacity immediately post-training, with positive carry-over effects for all outcomes except non-motor symptoms at 6-month follow-up. Exercise compliance was good and adverse effects were minimal. Thus, a combined balance and brisk walking programme has the potential to modify the progression of PD.

Exercise training is an important component of cardiac rehabilitation (CR) for patients with coronary heart disease (CHD). However, compliance with CR is challenging. Thus, making exercise practical, achievable, and enjoyable would help patients with CHD maintain physical activity. Chair et al<sup>3</sup> examined the effects and cost-effectiveness of a 2-week music-paced physical activity intervention conducted as part of an 8-week CR programme on cardiac health outcomes among 130 Chinese adult patients with CHD. The music-paced physical activity intervention was more effective, compared with usual care, in terms of improvements in exercise capacity and exercise self-efficacy but was more expensive in terms of improving quality-adjusted life years, while the intervention was cost-effective based on the World Health Organization standard (ie, incremental cost-effectiveness ratio <3 times the gross domestic product per capita). This study provided evidence that the application of music into exercise training may lead to positive changes in exercise capacity in the short-term and exercise self-efficacy in the long-term.

## Supplement editors



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## References

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2. Mak KYM, Cheung THR, Ho SL. Combined balance and brisk walking training to improve motor and non-motor symptoms in people with Parkinson disease: abridged secondary publication. *Hong Kong Med J* 2024;30(Suppl 1):S16-7.
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