

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 12 dissemination reports of projects related to advanced technology, non-communicable diseases, primary healthcare, infectious diseases, Chinese medicine, and implementation science. In particular, research findings of three projects may provide insights to enhance clinical practices and help inform health policy formulation in Hong Kong.

Osteoporosis increases the risk of fragility fracture. Hip fractures are projected to increase significantly in Hong Kong and Asia in the coming decades. Fracture prediction models are available but are mainly developed using data from Western populations. Li et al¹ developed and validated sex- and ethnicity-specific machine learning models to predict 10- and 15-year hip fracture risks using data from over 128 000 electronic medical records. The prediction models were developed without bone mineral density as a potential predictor, owing to the limited availability of dual-energy X-ray absorptiometry in Hong Kong. The prediction models achieved an area under the curve of >0.8 after validation in independent cohorts and may be clinically useful and generalisable to the public.

Family members who care for individuals affected by dementia often experience adverse effects, and effective interventions are needed to alleviate this burden. Chou et al² conducted

a prospective, assessor-blinded, randomised controlled study to evaluate the effects of five different intervention components among 250 Chinese adult caregivers. Over 12 months, a mindfulness-based intervention component contributed to a reduction in anxiety and depression symptoms, an increase in psychological well-being, and an increase in functional social support, as well as an increase in dementia management strategies of active management, mindfulness attention awareness, and satisfaction with the support group. The other intervention components provided benefit in fewer domains overall. Results suggested that intervention programmes for distressed family caregivers of individuals with dementia should include components of mindfulness-based intervention and support group, which are cost-effective and can improve coping mechanisms and foster a supportive environment for their well-being.

Preschool children around the world are affected by caries. The occlusal surface of primary molars is highly susceptible to caries. Yiu et al³ determined the relative effectiveness and costs of sodium fluoride varnish and glass ionomer sealants in preventing occlusal caries in primary molars of over 400 preschool children from 16 kindergartens in Hong Kong. Three-monthly application of sodium fluoride varnish and a single application of glass ionomer sealant were equally effective in preventing occlusal caries in primary molars over 24 months.

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