

EDITORIAL

We are delighted to bring you another series of dissemination reports of research projects supported by the *Health Services Research Fund (HSRF)*^{*}, the *Health and Health Services Research Fund (HHSRF)* and the *Research Fund for the Control of Infectious Diseases (RFCID)*. This edition features projects related to: diagnosis and detection; environment and infection; and the evaluation of interventions. Several projects are highlighted due to their significant findings, impact on health care delivery and practice, and/or contributions to health policy formulation in Hong Kong.

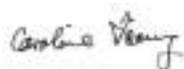
The key to effective communicable disease control and management is early identification. This is especially true for acute respiratory tract infections, which may be caused by many distinct viral and bacterial pathogens. Chan et al¹ developed polymerase chain reaction primer groups that could be used in a multiplex reverse-transcriptase polymerase chain reaction to detect 17 different respiratory pathogens. Using 50 nasopharyngeal aspirates positive for various respiratory viruses by conventional testing, the primer sets were optimised in cell culture preparations and then validated. The multiplex assays were 100- to 1000-fold more sensitive than the conventional tube culture. An additional advantage that may make the assay more applicable in clinical settings was the shortened turnaround time, which is often critical in the investigation and control of urgent outbreaks.

The 2003 severe acute respiratory syndrome (SARS) outbreak introduced a dilemma for clinicians with respect to the use of oxygen delivery devices (ODD). Improving patient oxygenation is an important factor when treating respiratory infections. However, ODD were thought to facilitate the spread of infectious organisms via air contaminated with respiratory secretions. Khaw et al² assessed the different practices adopted for oxygen therapy with respect to modified ODD used in Hong Kong public hospitals during the SARS epidemic and evaluated their performance using a human patient simulator. The most common modifications were the use of nasal cannulae covered with a surgical or N95 facemask. While there was lack of research data regarding the performance of the modified ODD, most health care workers interviewed considered that these modifications (made during the SARS epidemic) were effective in preventing disease transmission to themselves or their patients, without causing harm. This study also found that the modified ODD did not significantly increase airway resistance. These findings will provide a foundation for further assessment and development of modified ODD.

The UK Department of Health recommends that adults perform 30 minutes of moderate physical activity on 5 or more days per week. This minimum level can be accumulated throughout the day and does not need to be achieved in a single session. One simple means of achieving this recommendation cumulatively, is by walking throughout the day. Stair climbing is another way of extending this recommendation. Eves et al³ evaluated the effects of different interventions designed to encourage stair climbing. Posters and banners were located at appropriate points between stairs and escalators in an outdoor setting (the Mid-Levels escalator system) and in an indoor air-conditioned shopping mall. Similar interventions have been shown to be useful in the US and UK. However, only one of the three stair climbing interventions tested in this study was found to have a significant effect on the proportion of pedestrians climbing stairs in Hong Kong. Further analyses indicated that an ingrained attitude to escalator use in the hot, humid and hilly environment of Hong Kong rather than negative perceptions about climbing stairs might be important factors determining physical activity. This study demonstrates the importance of the local environmental and cultural factors in affecting the outcome of lifestyle-related interventions, and should not be taken lightly.

We hope you find this selection of dissemination reports informative and enjoyable. These dissemination reports and the corresponding full project reports may be downloaded individually from the Research Fund Secretariat website (<http://www.fhb.gov.hk/grants>), where more information about the funds, including application procedures, can also be found.

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* The HSRF was succeeded by the *Health and Health Services Research Fund (HHSRF)* in 2002.