

Quality indicators on infection control in residential care homes for the elderly in Hong Kong

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The population of Hong Kong is ageing. The number of elderly persons aged ≥ 65 years is projected to increase from 0.85 million in 2005 to 1.68 million in 2024. Moreover, there will be a rapid increase in the old-old population aged ≥ 85 years, reaching 0.237 million in 2024.¹ These elderly individuals face substantial healthcare-related problems, including dementia,²⁻⁴ fragility hip fractures,^{5,6} frailty,⁷ carriage of multi-drug resistant organisms in residential care homes for the elderly (RCHEs),⁸ and provision of end-of-life services.⁹ In 2017, there were 74 257 residents in RCHEs in Hong Kong, which is equivalent to 6% of the elderly population.² Approximately one-third of these residential care places are non-private (subvented).¹⁰ With an increasing old-old population, the demand for RCHEs is expected to greatly increase. As elderly care is one of the most important government agendas, ageing in place should be given a higher priority.¹¹ The Social Welfare Department is responsible for the issue of licences to all RCHEs and for regulating them through the Code of Practice.¹² The quality standards in the Code of Practice focus mainly on the structure (eg, space, furniture, fire safety, equipment, and staff) and process of care (eg, record keeping, diet, nutrition, drug administration, urinary catheter care, feeding tubes and other nursing procedures, and infection control measures), but not outcomes (eg, mortality, morbidity, or hospital admissions) for their elderly residents. The infection control chapter in the Code of Practice was added after the 2003 SARS outbreak in Hong Kong. The aim was to improve infection control processes in RCHEs.

In the current issue of the *Hong Kong Medical Journal*, Wong et al¹³ report an audit study of the performance of infection control processes and procedures in RCHEs, in relation to the quality standards set by the Code of Practice, from 2005 to 2014. This is the first study of its kind in Hong Kong. The authors found that there has been an improvement over time in terms of residents-to-staff manpower ratio, proportion of RCHEs with isolation rooms/areas, health records of staff and visitors, and infection control skills and practice. However, the authors also found that non-private

RCHEs often performed better than private RCHEs. For example, 93.0% of non-private RCHEs assigned nurses as Infection Control Officers (ICOs), whereas only 18.5% of private RCHEs followed this practice. In addition, 90.3% of non-private RCHEs provided isolation rooms/areas for infected residents, whereas only 73.3% of private RCHEs did so.

Some caution is recommended when considering these results. The authors assessed only two frontline care staff (the ICO and one care worker) per RCHE.¹³ Therefore, the results on the skills of infection control (ie, hand washing, donning and doffing of personal protective equipment, and using bleach solution for environmental disinfection) might not reflect the performance of the majority of the frontline care staff. A previous study by Chan et al¹⁴ reported that 46% of the staff in private RCHEs have a low education level. These care staff might perform less well than the ICOs. The authors also did not include data on the outcomes of infection control on elderly residents (ie, mortality, morbidity, hospitalisations). Among the different types of infections occurring in among elderly residents in RCHEs, influenza-like illnesses (including bacterial and viral infections) are the most common. In a study on 3857 residents in 46 RCHEs, the overall prevalence of all infections was 2.7%, and the most common infections were respiratory tract infection (1.3%).¹⁵ Hui et al¹⁶ reported an influenza-like illness-related mortality rate of 9.7% at 1 month or discharge from hospitals among elderly residents in RCHEs.

Further studies are recommended to evaluate the effect of infection control measures on the health outcomes of residents in RCHEs. Health outcomes including mortality, morbidity, hospitalizations should be included.

Author contributions

The author approved the final version for publication, and takes responsibility for its accuracy and integrity.

Conflicts of interest

As an editor of the journal, LW Chu was not involved in the peer review process.

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