

A longitudinal contact survey in residential care homes for the elderly in Hong Kong.

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Abstract

Background

The residential care home for the elderly (RCHE) was considered as one of the health-care settings with high transmission risk of many respiratory infections. These infections were determined by the contact patterns between infectious and susceptible residents and health care workers. Up to date, there are no published data for quantifying social contact patterns in this setting.

Methods

To provide empirical contact data, a longitudinal survey was conducted in 53 RCHEs in Hong Kong. The baseline recruitment was conducted between July 2017 and July 2018 and the follow-up recruitment took place between August 2018 and November 2018.

Results

In baseline recruitment, 549 residents from 45 RCHEs were approached. Recruited residents aged 80 or above accounted for majority of the sample population. For baseline staff recruitment, a total of 286 staff from 53 study RCHEs were recruited. Majority of recruited staff were female, aged 40 or above, full-time and had physical contact with the residents. In terms of hand hygiene practice, majority of staff had daily hand hygiene frequency of 6 times or above. An average of 2.5 daily resident-to-resident and 4.2 resident-to-HCW physical contacts on a typical day were recorded. In terms of contacts made by staff with physical contacts with the residents, the number of staff-to-staff and staff-to-resident contact in a typical day were 4.9 and 18.7 respectively.

Discussion

Our findings could help to improve the design of future social contact surveys in RCHE, parameterize transmission models of respiratory infectious diseases, and inform intervention strategies based on model outputs.