An evaluation of SARS and droplet infection control practices in acute and rehabilitation hospitals in Hong Kong

Key Messages

1. This study has demonstrated that great efforts have been made by the Hospital Authority and the studied hospital cluster to contain and prevent infection, and that high levels of vigilance have been enforced in anticipation of future outbreaks of SARS and other droplet infections.

2. Most health care workers and support workers have good hospital infection control and isolation precaution knowledge levels.

3. Compliance with infection control guidelines is satisfactory and has increased compared with previous studies.

4. Most participants had positive perceptions of the guidelines and found the training programmes useful.

5. This study has identified several structures and infection control practice areas that need strengthening, including improving the clarity of some guidelines and minimising barriers to their implementation.

Introduction

hospital infection control standards are inadequate and identified a need for the

Methods

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Results

Knowledge survey
Table. Means, standard deviations (SDs) of total Hospital Infection Control Knowledge Questionnaire (HICKQ) scores and scores on three aspects of knowledge

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Total HICKQ scores</td>
<td>5</td>
<td>24</td>
<td>19.19</td>
<td>2.52</td>
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<tr>
<td>Knowledge of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital infection</td>
<td>0</td>
<td>11</td>
<td>8.93</td>
<td>1.57</td>
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<tr>
<td>control</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Droplet isolation</td>
<td>0</td>
<td>6</td>
<td>4.93</td>
<td>0.97</td>
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<tr>
<td>precautions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mode of transmission</td>
<td>0</td>
<td>7</td>
<td>5.33</td>
<td>1.17</td>
</tr>
<tr>
<td>of droplet infection</td>
<td></td>
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Review of the infection control surveillance activities and structures in the hospitals

Non-participant observations

elements of stratification was used. A stratified sample years of working experience of ≤5, 6-10, >10 respectively. stratified on the basis of total numbers of HCW and SW contaminated equipment” (31%) and “body fluids” (39%). There were significant differences between the total had significantly higher total HICKQ scores and knowledge PT/OT had significantly higher total HICKQ scores and compared with SW. No significant differences were found significantly higher HICKQ scores compared with TSA,
for each individual. There were no significant differences

Barriers to the implementation of the infection control guidelines
Content analysis demonstrated that the barriers identified in

with ≤5, 6-10, and >10 years of working experience.

Significant differences were found between the total

and lack of resources. Barriers identified by most staff

barriers identified by the three groups were the workload

The training needs of health care workers and support staff

Interviews

including nursing officers, ward managers, nurse specialists,

Discussion

appropriateness of the guidelines. An important finding

to find that the infection control committees in the study

avian flu scare in Tsing Hai, China. Therefore, the protocol
specified that we must ask whether a patient has been to

negative perceptions included the guidelines being difficult

This was illustrated by one nursing officer who said:
The level of compliance with HA and CDC infection control guidelines was also satisfactory and showed a higher compliance rate than overseas studies. Several infection control practices followed by HCW and SW need improvement including the use of hand rubs, use of gowns and the handling of patient care equipment. Education on the need for full compliance is required.

Most health care staff had positive perceptions of the infection control guidelines and found the training programmes useful. The guidelines were described as easier to follow and as facilitating increased alertness to possible infectious diseases. These results suggest that factors influencing the uptake of infection control practice are multi-dimensional. Overall, HCW and SW understand the value of implementing appropriate infection control practices; however, they need the support of policy makers and health service managers, particularly in the provision of resources.

Finally, very few visitors were observed rubbing their hands with the alcohol hand rub provided in the hospital. The non-compliance with the infection control policy by visitors was also perceived as a major barrier to the implementation of the guidelines. Educating the public about the importance of hospital infection control policies such as: when not to visit, the maximum number of visitors attending one patient, and other precautionary measures such as general hygiene and hand hygiene, could help to minimise hospital-acquired infections and cross infection.

Acknowledgements

References

factors influencing the uptake of infection control practice