**LETTER**

British Thoracic Society survey of knowledge of healthcare professionals managing patients with acute hypercapnic exacerbation of chronic obstructive pulmonary disease requiring non-invasive ventilation

The use of non-invasive ventilation (NIV) in acute hypercapnic exacerbations of chronic obstructive pulmonary disease (COPD) is the subject of published guidance from the Royal College of Physicians, the British Thoracic Society (BTS) and the Intensive Care Society, as well as international consensus statements. Although these guidelines have been updated, data from the UK COPD audit detailing admissions to UK hospitals have shown that compliance with this guidance is less than satisfactory. In part, it has been suggested that the reason for poor implementation of the guidelines is lack of knowledge of indications, technical and practical aspects of delivering NIV by those healthcare professionals assessing, initiating and managing patients. We performed a BTS staff knowledge survey in nine acute trusts in the UK. All hospitals (eight teaching hospitals and one district general hospital) had an acute NIV service and a local coordinating clinician was recruited through the BTS Respiratory Critical Care Specialist Advisory Group. Questionnaires and data collection guidelines were distributed by e-mail to the local lead who was responsible for distributing, collecting and marking the questionnaires. Three hundred and ninety-four completed questionnaires were returned and scored reflecting their increasing seniority in each group, which adds to the validity of this questionnaire. It was noteworthy that the physiotherapists performed well and had the highest scores for technical knowledge, reflecting their involvement in the initiation of NIV in all the trusts surveyed. The respiratory and critical care nurses showed equivalence to the control group across all the areas examined, which highlights this as an important group for further education. Following further validation, the use of this, or a similar questionnaire, could be incorporated into training and competency assessment to monitor educational needs.

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<table>
<thead>
<tr>
<th>Control Group (119) vs.</th>
<th>n</th>
<th>Indications (total 8)</th>
<th>Technical (total 7)</th>
<th>Practical (total 11)</th>
<th>Published Evidence (total 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior R&amp;CC Nurse</td>
<td>37</td>
<td>-0.6</td>
<td>-0.1</td>
<td>-0.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>Senior R&amp;CC Nurse</td>
<td>39</td>
<td>0.2</td>
<td>0.2</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Senior 2 R&amp;CC Physiotherapist</td>
<td>29</td>
<td>1.1*</td>
<td>3.7*</td>
<td>2.4*</td>
<td>0.9*</td>
</tr>
<tr>
<td>Senior 1 R&amp;CC Physiotherapist</td>
<td>28</td>
<td>1.6*</td>
<td>3.1*</td>
<td>2.5*</td>
<td>1.1*</td>
</tr>
<tr>
<td>R&amp;CC FY1-2</td>
<td>12</td>
<td>0.8</td>
<td>-0.4</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>R&amp;CC ST1-2</td>
<td>30</td>
<td>1.1*</td>
<td>2.1*</td>
<td>1.8*</td>
<td>0.7*</td>
</tr>
<tr>
<td>R&amp;CC ST3/SpR</td>
<td>47</td>
<td>2.0*</td>
<td>3.1*</td>
<td>2.8*</td>
<td>1.1*</td>
</tr>
<tr>
<td>R&amp;CC Consultant</td>
<td>53</td>
<td>2.2*</td>
<td>2.8*</td>
<td>3.0*</td>
<td>1.2*</td>
</tr>
</tbody>
</table>

Mean difference between control group (n=118) and other groups surveyed; * (shaded) = p<0.05; R&CC = Respiratory & Critical Care; FY = Foundation Year; ST = Specialist Trainee; SpR = Specialist Registrar

REFERENCES


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Contributors This survey was performed by the authors on behalf of the British Thoracic Society Respiratory Critical Care Specialist Advisory Group.

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