Background

- 1 in 25 hospital patients have at least one healthcare-associated infection (HAI)
- HAI causes prolonged hospital stays, long-term disability, resistance to antimicrobials, economic burden, and death
- While hand hygiene is the single best method to prevent infections, visitors are often neglected in hospitals’ interventions.
- Evidence-based strategies to improve visitor hand hygiene: Education, Audit & feedback, Reminders

Purpose & Aim

**Purpose:** Enhance healthcare workers (HCWs) knowledge on visitor hand hygiene and evidence-based interventions

**Aim:** Evaluate HCWs’ satisfaction with educational video and self-confidence in learning evidence-based strategies to increase visitor hand hygiene

Method

**Design:** One-group posttest only

**Setting:** 32-bed adult general surgical unit in a large academic teaching hospital

**Inclusion criteria:** HCWs who have direct contact with visitors

**Measure:** Student Satisfaction and Self-confidence in Learning Scale (SCLS) - a 13-item Likert scale. The Cronbach’s alpha for satisfaction is 0.94 and for self-confidence is 0.87.

**Statistical analysis:** Descriptive statistics using SPSS version 27

Intervention

A 13-minute educational video that includes:

- Narrated PowerPoint presentation promoting the importance of visitor hand hygiene and evidence-based interventions
- Simulation demonstrating how to implement the evidence-based strategies in an inpatient setting
- Educating visitors about importance of hand hygiene in preventing disease
- Audit and providing feedback to staff
- Verbal and physical reminders

Educational video, demographic questions, and the SCLS survey were distributed via Qualtrics Survey Software

Sample Characteristics

**Table 1. Baseline Participants Characteristics**

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>(N = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age range, n (%)</td>
<td></td>
</tr>
<tr>
<td>25 - 34 years</td>
<td>3 (60)</td>
</tr>
<tr>
<td>35 - 44 years</td>
<td>1 (20)</td>
</tr>
<tr>
<td>45 - 54 years</td>
<td>1 (20)</td>
</tr>
<tr>
<td>Sex, n (%)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5 (100)</td>
</tr>
<tr>
<td>Male</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Clinical Role, n (%)</td>
<td></td>
</tr>
<tr>
<td>RN/LPN</td>
<td>4 (80)</td>
</tr>
<tr>
<td>Nursing unit secretary</td>
<td>1 (20)</td>
</tr>
<tr>
<td>Years of experience, n (%)</td>
<td></td>
</tr>
<tr>
<td>0 - 3 years</td>
<td>3 (60)</td>
</tr>
<tr>
<td>10+ years</td>
<td>2 (40)</td>
</tr>
</tbody>
</table>

Results

**Satisfaction**

- All participants reported either strongly agree or agree that they enjoyed how the educational simulation was conducted

**Self-confidence**

- All participants reported either strongly agree or agree that they felt confident in learning the presented contents.
- Lowest median score statement: instructor’s responsibility to specify what participants need to learn

**Table 2. SCLS Questionnaire Summary Score**

<table>
<thead>
<tr>
<th></th>
<th>Median (IQR)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with current learning</td>
<td>25 (22-25)</td>
<td>23.8 (2.17)</td>
</tr>
<tr>
<td>Self-confidence in learning</td>
<td>38 (34 - 39.5)</td>
<td>37 (3.16)</td>
</tr>
</tbody>
</table>

Strengths & Limitations

**Strengths**

- Simplicity and cost-effectiveness of the intervention
- Convenience of online accessibility

**Limitations**

- Low participation rate (N = 5)
- Limited statistical analysis due to lack of comparison group

Conclusions and Sustainability Plan

**Conclusions**

- Virtual presentation is a feasible method to disseminate knowledge
- Strategies are needed to encourage participation
- Further studies needed to assess the impact of interventions on improving visitor hand hygiene compliance rate

**Sustainability Plan**

- Contribute to unit’s interventions to increase visitor hand hygiene
- Assist with organization’s hand hygiene protocol and healthcare workers education