# Promoting Visitor Hand Hygiene Among Healthcare Workers: A Quality Improvement Project

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## Background

- 1 in 25 hospital patients have at least one healthcareassociated 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 evidencebased 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		
Demographic characteristics	(N=5)	
Age range, n (%)		
25 - 34 years	3 (60)	
35 - 44 years	1 (20)	
45 - 54 years	1 (20)	
Sex, n (%)		
Female	5 (100)	
Male	0 (0)	
Clinical Role, n (%)		
RN/ LPN	4 (80)	
Nursing unit secretary	1 (20)	
Years of experience, n (%)		
0 -3 years	3 (60)	
10+ years	2 (40)	

## 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		
	Median (IQR)	Mean (SD)
Satisfaction with current learning	25 (22-25)	23.8 (2.17)
Self-confidence in learning	38 (34 - 39.5)	37 (3.16)

## 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