Bare Below the Elbows: Perception of Patients and Providers on the Impact on Patient Care in an Adult Oncology Setting

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Abstract

Background: Introduced in several European countries, Bare Below the Elbows (BBE) (short sleeves, no wristwatches, no jewelry, and no neckties when carrying out clinical activity) is intended to reduce healthcare associated infections (HAIs) and the potential negative impact on the patient/physician relationship. Healthcare worker workwear is an evidence base for preventing transmission of pathogenic microorganisms. Despite its introduction, there is no clear evidence that BBE reduces the threat of infection. Objectives: To determine differences in provider perceptions of patient views of BBE and patient perceptions of care between intervention and control units. Methods: Monthly surveys were given to 276 individual patients in two oncology units (BBE, no BBE) over a three month period. Results: No differences were detected in age, gender, race or required isolation precautions in both units. In adjusted analysis white, younger patients were less comfortable with BBE, while patients did not report an increased or decreased threat of infection, and unchanged or improved confidence in and satisfaction with care. Conclusion: BBE was not perceived as controversial even if not practiced. Education efforts improved patient perception significantly. The majority of patients (>90%) in both units positively viewed BBE. No significant changes in distribution when neutral responses were removed. Logistic regression analysis indicated that the patients are comfortable with BBE, while patients did not report an increased or decreased threat of infection, and unchanged or improved confidence in and satisfaction with care.

Introduction

The concept of Bare Below the Elbows (BBE) continues to be hotly debated by medical professionals. In 2007 as a general uniform and dress-code guideline in the United Kingdom by the National Health Services (NHS), proponents refer to the presence of white coat looks to identify their doctors and agree that the absence of white coat looks equally positive over the survey duration (p>0.05). Over 70% of providers (nurses and physicians) are willing to adopt a change in patient/physician relationship. The majority of patients (>90%) in both units positively viewed BBE.

Methods

Setting: Two adult oncology units

Design:

- Case-Control Design - BBE unit (intervention unit), no BBE unit (control unit)

Methodology:

- Weekly surveys given to 179 individual patients in the intervention unit; 115 nurses, and 56 physicians

- Study duration: Three months

- Main Outcomes and Measures: Survey response frequency

- Analysis: Chi-Square tests, logistic regression analyses

Results

- **Mean BBE compliance:** 79%
- **Patient Characteristics:**
  - No differences detected in patient age, gender, race, isolation precautions or care satisfaction between units.
  - Length of stay longer in the BBE unit (8.0 vs 4.5 days; p<0.05).
  - BBE patient education higher in intervention unit (40% vs. 12%; p<0.0001)
  - BBE provider knowledge high for nurses (89%) and physicians (84%)
- **Nursing Characteristics:**
  - No differences in age, gender, profession (NA, RN), and knowledge of BBE between units.
  - Length in current position longer in the BBE unit (7.2 vs 4.2 years; p<0.05)
- **Physician Characteristics:** Intervention and Control units combined for analysis
- **Laundry Frequency:**
  - Daily: 4, 5.41%
  - Every other day: 2, 2.70%
  - Weekly: 26, 35.14%
  - Never: 3, 4.05%

No significant change in distribution when neutral responses were removed.

Logistic Regression Analysis

- **Patients:** Younger patients are more likely than older patients to find it easy to identify their doctors and agree that the absence of white coat looks professional.
- **Nurses:** Over the course of the survey, nurses felt less confident that patients are comfortable with BBE, while patients did not.
- **Physicians:** Physicians serving longer in their role are more likely to endorse a change in patient care activities without definite empirical data.

- Over the course of the survey periods, physicians are less likely to agree that items below the elbows can be used to identify their doctors and agree that the absence of white coat looks equally positive over the survey duration (p>0.05).

Conclusions

- The majority of patients (>90%) in both units positively viewed BBE.
- Identification of physicians in BBE was unchanged/easier for >70%.
- Provider perceptions of patient views of BBE were significantly less favorable.
- Education efforts improved patient and provider perception.
- Over 70% of providers (nurses and physicians) are willing to adopt a change in patient care activities even if no definite empirical data support such change.

References

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