“Capturing the changes in the work environment of nurses: using photographic research methods from the field of ecological restoration”

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Introduction

Mortality in USA ICUs - 8% to 10%

Prevalence: 10.5 errors per 100 patients/day

High number of diagnostic and therapeutic interventions

Adverse Events in ICUs

Health care environments as risk factors for adverse events

- Physical resources
- Technological resources
- Material resources
- Human resources

Moyen, Camiré e Stelfox (2008)
Introduction

Medication Errors

- Result of multiple system failures;
- Common errors: prescription (30%), dispensing (24%) and administration (41%);
- Risk factors:
  - Work environment
  - Fatigue
  - Work load
  - Communication failures
  - Lack of information
  - Problems in materials and equipment

(PHILLIPS et al., 2001; BALAS; SCOTT; ROGERS, 2006)
To examine whether the photographic research methods from the field of ecological restoration help nursing practitioners of a Brazilian ICU to strengthen the safety of their work environment.
Theoretical and Methodological Approach

Restaurative Research in Health Care

- Ecological restoration (Higgs 2003)
- Ecosystem management (Gunderson et al. 1995)
- Health care ethics (Marck 2004)
- Nursing (Marck et al. 2006)

Place Ethics
Customer Science
Engaged Practice
Adaptive Learning

These principles guide the ethics, science, and practice of our research relationships and our scientific work

(Backman et al. 2012; Marck 2012)
METHODS

Type of Study: qualitative approach;
Local of Study: Brazilian ICU of a medium size general hospital in São Paulo state;
Participants: 23 nurses;
Ethical Issues: approved by the appropriate ethics committee. Participants signed a consent form voluntarily.
Data Collection and Management

Adapted from Creswell (2009)
RESULTS AND DISCUSSION

Theme 1 - Visible changes in the work environment of nurses

The medication preparation counter before and after the redesign
RESULTS AND DISCUSSION

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Easily cleaned tiles on the backsplash of the medication preparation counter before and after the redesign
RESULTS AND DISCUSSION

Theme 1 - Visible changes in the work environment of nurses

The positioning of the sharps collector before and after the redesign
Theme 1 - Visible changes in the work environment of nurses

Ampoules different in size, color, label, and appearance before and after the redesign
RESULTS AND DISCUSSION

Theme 1 - Visible changes in the work environment of nurses

The storage of insulin inside the refrigerator before and after the redesign
RESULTS AND DISCUSSION

Theme 2 - Visible changes in the culture of safety

The Risk Management box after the redesign
Photographic research methods from the field of ecological restoration helped participants to (re)think and to redesign their work environment towards a safer place for medication management;

Some changes may contribute to other risks for patient safety.
REFERENCES