



Effect of multimodal comprehensive care methodology training on both delirium and physical restraints in intensive care unit

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Background.

Delirium is common in intensive care unit (ICU). A French care methodology, which consists multimodal comprehensive communication skills, has been widely implemented in hospitals and nursing homes in European countries for 40 years.

This methodology; *Humanitude*®, focuses on 4 elements of communication with patients; *gaze, talk, touch, and assistance of standing up*, and all the care are provided in one sequence with 5 structures; *1-notification, 2-preparation, 3-integration of communication, 4-emotional consolidation, 5-next appointment*.

Although this methodology was effective for elderly patients with delirium and Behavioral Psychological Symptom of Dementia in acute and long-term care settings, there is no previous study conducted in ICU.

Objectives.

Objectives: To assess the effectiveness of multimodal comprehensive care methodology training for nurses to prevent delirium in ICU.

Study design.

Single center, historical cohort study

Method.

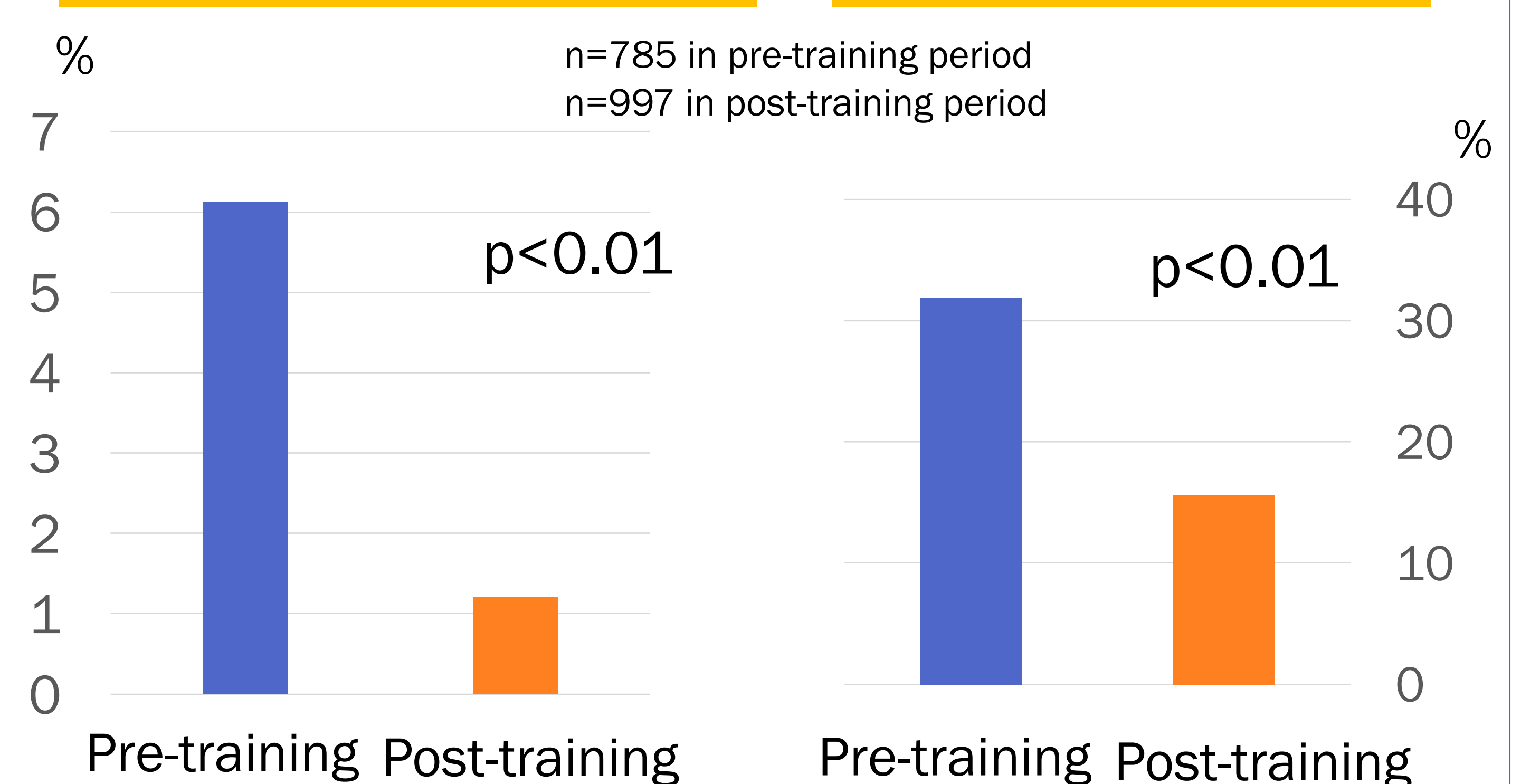
1. A nurse received training of *Humanitude*® and certified as a trainer.
2. The nurse provided 3-hours lectures and bedside trainings to all the nursing staff in the ICU with 17 beds, the training was followed by daily individual consultations of challenging cases for 12 months.
3. All the patients who admitted to the ICU were evaluated for delirium by the diagnosis criteria of DSM-IV-TR. The incidences of delirium and physical restraints were compared between pre- and post-training.

Results.

- 30 nurses were enrolled the study.
- The training was held in August 2016. Research period was 12 months before (pre-training) and 12 months after (post-training) the training.
- The number of the patients who admitted to the ICU were 785 in pre-training period and 997 in post-training period.
- The incidence of delirium was 6.1% in pre-training and 1.2% in post-training ($p < 0.01$).
- Use of physical restraint was 31.8% in pre-training and 15.8% in post-training ($p < 0.01$).

Incidence of delirium

Ratio of restraints



Discussion.

Multimodal comprehensive care methodology training with daily bedside consultation by in-house trainer was effective to reduce the incidence of delirium and physical restraints. The in-house trainer of the methodology is considered as the key role of the long-term effect to maintain the skill of the methodology.

Conclusion.

The training and bedside consultation by in-house trainer of *Humanitude*® reduced the incidence of delirium and use of physical restraints in ICU.

COI. There is no real or perceived, direct or indirect conflicts of interest that relate to this presentation.