Title:
Effectiveness of active and passive implementation of ventilator associated pneumonia guideline on nurses' performance in critical care units.

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Abstract

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Background and objective: Ventilator Associated Pneumonia (VAP) is the most common infection in critical care units which leads to more length of stay, costs and mortality. So prevention is a priority. The aim of this study is to determine the effects of passive versus active implementation of ventilator associated pneumonia guidelines on nurses' performance in critical care units.

Methods: In this non-randomized clinical trial, 111 nurses who working in critical care units in selected hospitals affiliated to Tehran University of Medical Sciences were enrolled to study by purposeful sampling at 3 groups including active intervention (41 people), passive intervention (33 people) and control group (30 people). At first nurses' performance in prevention of ventilator associated pneumonia was evaluated by an observational checklist. For passive intervention group a poster containing recommendations of prevention of ventilator associated pneumonia installed over the wall for each bed. For active intervention group in addition to install a poster over the wall for each bed, educational workshops and feedback about nurses' performance were given. In control group, without any intervention, just nurses' preventative performance evaluated before and 1 month later. One month later nurses' preventative performance was observed. Data was analyzed in SPSS-V 13.

Findings: Study showed that nurses' mean percentage score in 3 groups was 37.6±8.9. After intervention it reached from 37.8±9.1 to 39.7±9.7 in active intervention group (P < .001), from 39.3±9.2 to 39.3±9.7 in passive intervention group (P < .001) and from 39.9±9.6 to 39.9±9.6 in control group (P=.123). Nurses' performance in active group improved significantly in comparison to passive group and in passive group, it improved significantly in comparison to control group (P < .001).

Discussion and conclusion: This study showed that both active and passive implementation is effective on nurses' performance in prevention of ventilator associated pneumonia. So considering our country's condition and nurses' work overload, we can offer ventilator associated pneumonia guideline as a protocol in critical care units.

Keywords: active intervention, passive intervention, guideline, prevention of ventilator associated pneumonia, nurses' performance