Patient SafetyNet for the Evaluation of Postoperative Respiratory Status by Nurses: A Presurvey and Postsurvey Study

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Purpose: The purpose of this pre-post survey study was to assess the effect of the Patient SafetyNet system (Masimo Corp, Irvine, CA) on postoperative respiratory evaluation by nurses in general wards. Patient SafetyNet is a wireless monitoring system that evaluates respiratory rate and percutaneous oxygen saturation.

Design: Survey of nurses at a single medical center.

Methods: Staff nurses (n = 75) were queried using a questionnaire asking about methods and problems of postoperative respiratory monitoring, usefulness of this system, and suggestions about suitable cases of this system.

Findings: A total of 75 questionnaires were completed and returned. The nurses reported that central/remote (89.3%) or continuous (98.7%) monitoring was useful in the postquestionnaire. Moreover, the average frequency of clinical examination was reduced from 11.0 ± 2.3 to 5.1 ± 1.3 . Using the Patient SafetyNet system led to a reported 61.3% reduction in nursing workload related to respiratory assessment postoperatively.

Conclusions: Continuous monitoring of respiratory rate and percutaneous oxygen saturation after general anesthesia is recommended for patients' safety. Moreover, Patient SafetyNet can decrease the number of physical assessments of respiratory status for postoperative patients in the general wards, resulting in reduction of nurse's workload.