Prospective Study to Evaluate Mechanical ventilator Associated Pneumonia Rate in Intensive Care Units in a Peruvian Public Hospital: Benchmark with NNIS American Rates. SHEA Meeting, Philadelphia, USA, April, 17th - 20th - 2004

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Objectives: To measure the incidence of mechanical ventilator associated pneumonia (VAP) in ICU in Peru. To compare with NNIS rates.
Methods: We performed a prospective nosocomial infection surveillance study during three months in one Peruvian ICUs of one public hospital. Nosocomial pneumonias were identified using the Centers for Disease Control and Prevention National Nosocomial Infections Surveillance system definitions. Definitions: Criterion 1: a patient has rales or dullness to percussion on physical examination of the chest, and at least one of the following: new onset of purulent sputum or change in character of sputum; organism cultured from blood; isolation of an etiologic agent from a specimen obtained by trans-tracheal aspirate, bronchial brushing, or biopsy.
Criterion 2: a patient has a chest radiographic examination that shows a new or progressive infiltrate, consolidation, cavitation, or pleural effusion and at least one of the following: new onset of purulent sputum or change in character of sputum; organism cultured from blood; isolation of an etiologic agent from a specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy. VAP rate was calculated by dividing the number of associated pneumonias by the total number of device days
Results: The VAP rate was 36.14 per 1000 device-days (benchmark with NNIS rate: 8.7 per 1000 ventilator days, RR: 4.18; CI 95% 1.35-12.97; P value 0.0070).
Conclusion: When we compare with NNIS rates we found our VAP rate 4 times above NNIS rate. In Peruvian public hospitals we need to develop interventions to reduce nosocomial infections, especially VAP.