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**ONE-YEAR OF SDD APPLICATION IN A TERTIARY-CARE UNIVERSITY HOSPITAL: IMPACT ON COLONIZATION AND NOSOCOMIAL INFECTIONS**

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**OBJECTIVE.** Effects of Selective Digestive Decontamination (SDD) on colonization and infection in ICU after 1 year.

**METHOD.** We applied SDD in all patients admitted whose received mechanical ventilation for more than 48 h, from 1 October 2010 to 30 September 2012. A 4 days of intravenous cefotaxime course on admission and enteral solution and oral paste with tobramycin, colistin and amphotericin B was applied. Rectal and oropharyngeal swabs were obtained on admission and once weekly. We compared results with patients without SDD admitted from October 2010 to September 2011, which had nosocomial infections. ENVIN infection diagnoses criteria were used. We also studied exogenous and endogenous primary and secondary infections, colonized isolates resistant to tobramycin and colistin, and infections etiology. Categorical variables were summarized as frequencies and percentages and the continuous ones as means and standard deviations (SD) when data followed normal distribution or medians and interquartile ranges (IQR) when they did not. Percentages were compared using the Chi square test or Fisher exact test, means with t-test and medians with Wilcoxon test for independent samples. For each one of acquired infections incidences per 1000 days of exposure in each cohort and corresponding relative risks were obtained using the Poisson regression. Statistical significance was of acquired infections incidences per 1000 days of exposure in each cohort and corresponding relative risks were obtained using the Poisson regression. Statistical significance was

**RESULTS.** 165 patients admitted from October 2010 to September 2012 were included. Demographic and clinical data are shown in Table.

**CONCLUSION.** NP, secondary bacteremia, urinary tract and ARBs infections significantly decreased after a year of ICU SDD application. Pseudomonas aeruginosa was the commonest pathogen isolated after SDD. There was also a significant decrease in ESBL enterobacteria. There was no Clostridium difficile infections.

**Table 2. Infection rates**

**Table 3. NP isolates**

**Most common isolates were Klebsiella pneumoniae (18.1 %), Pseudomonas aeruginosa (12.9 %), Enterobacter cloacae (11.7 %), Acinetobacter baumannii (11.1 %). MRSA 1.8 % in non-SDD group and Pseudomonas aeruginosa (24.7 %), Klebsiella pneumoniae (12.3 %), Escherichia coli (8.6 %), Acinetobacter baumannii (4.9 %) in SDD group. ARBs isolates also significantly decreased (p < 0.001) and there was no Clostridium difficile infection isolates. The most frequent infections were 433333.2 % (87.7 %). Twenty per cent of all SDD patients were colonized and 11.1 % of them were resistant to tobramycin and 3.1 % to colistin, respectively. NP data are shown in Table 3. **Table 3. NP isolates**

**CONCLUSION.** NP, secondary bacteremia, urinary tract and ARBs infections significantly decreased after a year of ICU SDD application. Pseudomonas aeruginosa was the commonest pathogen isolated after SDD. There was also a significant decrease in ESBL enterobacteria. There was no Clostridium difficile infections.

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**DOES THE IMPACT OF VAP STAFF EDUCATION DIFFERS BETWEEN 2 ICUS IN ALEXANDRIA UNIVERSITY HOSPITALS?**

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**INTRODUCTION.** Successful implementation of any VAP bundle depend on several factors, including implementation strategies that need to be tailored to local situation.1 However, do tailoring need to be done only between organizations or inside each organization?

**OBJECTIVES.** To explore the differences in the impact of VAP staff education in 2 different ICUs in the same department for purpose of tailoring the educational program inside the same organization.

**METHODS.** The same VAP staff educational program was held in ICU1 (operational mainly as extended ER) and ICU3 (operational mainly as tertiary ICU) whom worked with same policies, procedures, and rotational physicians within the same department during the period from July 2009 till August 2012. The percent of change of parameters of efficacy of VAP program were compared between both units.

**RESULTS.** The baseline characteristics for both patients were similar. The VAP rate decreased in the post-intervention phase in ICU1 and ICU3 by 34.8 and 33 % respectively in spite of significant increase of ventilator utilization ratio by 62.5 and 41.3 % respectively. Similarly, the clinical defined and laboratory confirmed VAP decreased significantly by 6.6 and 3.8 % in ICU1 and significantly by 24 and 31.9 % in ICU3 respectively. On the other hand, the incidence of early and late onset VAP decreased significantly by 59 and 6.6 and 3.8 % in ICU1 and significantly by 24 and 31.9 % in ICU3 respectively. The mortality rate decreased insignificantly in both units with attributable mortality for VAP increased by 37 % in ICU1 and decreased by 14.5 % in ICU3. The MV and ICU days changed insignificantly with excess MV and ICU days increased by 42 and 17 % in ICU1 and by 39.8 and 32.3 % in ICU3 respectively. The antibiotic days decreased insignificantly with excess antibiotic days decreased by 37 % in ICU1 and decreased by 14.5 % in ICU3. The MV and ICU days increased by 37 % in ICU1 and decreased by 14.5 % in ICU3. The MV and ICU days increased by 37 % in ICU1 and decreased by 14.5 % in ICU3. The MV and ICU days increased by 37 % in ICU1 and decreased by 14.5 % in ICU3.

**CONCLUSIONS.** In spite of some exceptions, there was no major discrepancy in the impact of VAP staff education and it was effective in both units, there is no need for tailoring of educational programs in different units of the same department or organization.