

INCIDENCE AND OUTCOME OF VENTILATION ASSOCIATED PNEUMONIA IN HOME CARE PATIENTS

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Introduction: Home care has grown exponentially with a progressive increase in complex clinical conditions, such as invasive mechanical ventilation (MV). Ventilation-associated pneumonia (VAP) is the leading cause of death related to hospital-acquired infections. Data about VAP incidence at home are scarce.

Objective: Analyze home care (HC) density of VAP, clinical outcome and rate of continued MV in patients treated by a private Brazilian HC Company.

Methods: Retrospective cohort. VAP diagnosis was based on criteria proposed by APIC¹, CDC² and ANVISA^{3,4}. Data were compared with the latest Brazilian intensive care data.

VAP density was calculated as number of VAP/number of ventilation-days x1000 and the density of continuous MV through the number of ventilation-days/number of patient-days x1000.

Results: Between August 2019 and July 2020, we treated an average of 475 patients-day with ventilatory support, 60% invasive and 40% non-invasive. Rate of continuous MV was 17%. 64 patients had VAP, 27% children, 33% adults and 41% elderly (Figure 1).

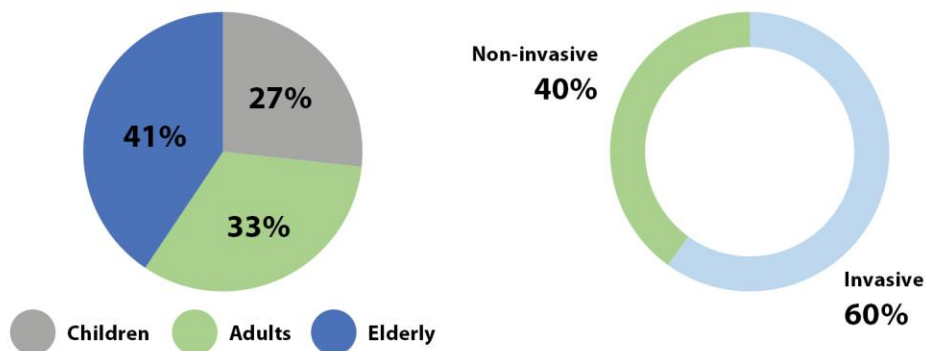


Figure 1. Distribution by age and ventilatory support

Density of VAP was 1.26 cases/1000 patient-days, much lower than that demonstrated in ICUs (9.4) (Figure 2).

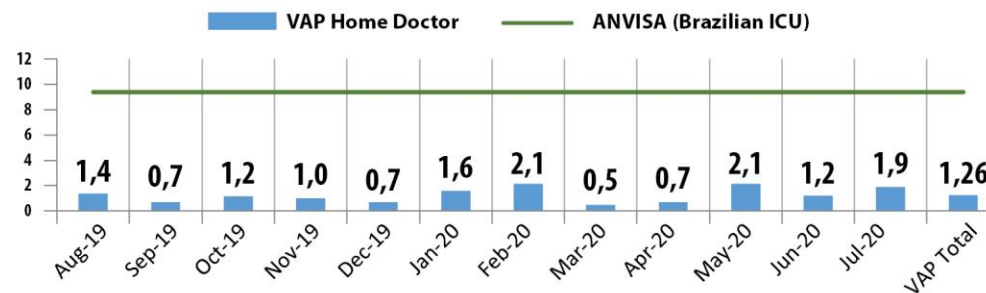


Figure 2: VAP density incidence: Home Doctor x ANVISA

Average time between HC admission and VAP was 380 days. Most prevalent underlying diseases were neurological (73.4%) and amyotrophic lateral sclerosis was the most prevalent (13 patients) (Figure 3).

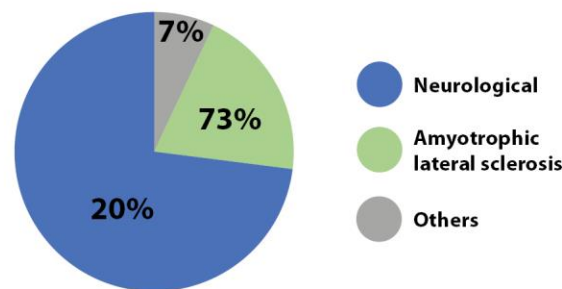


Figure 3. Distribution underlying diseases

48 patients (75%) were treated at home. Most frequently prescribed antibiotics were: ceftriaxone (14%), axetilcefuroxime (9%), amoxicillin-clavulanate (8%), levofloxacin (6%), cefepime (6%), ertapenem (6%) (Figure 4).

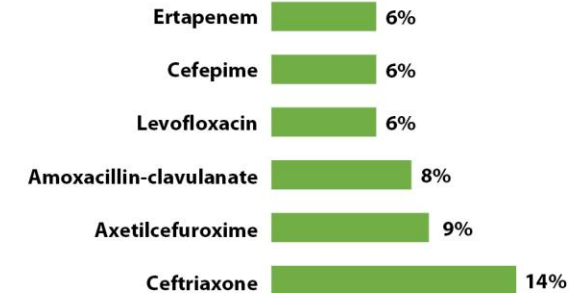


Figure 4. Treated at home

Conclusion: Patients at home MV have lower rates of VAP than ICUs patients, usually can be treated at home, without the need for broad-spectrum antimicrobials and with good clinical outcome.