**Título:** THIRTY-DAY MORBIMORTALITY OF PATIENTS ADMITTED IN AN ACADEMIC MEDICAL CENTRE PACU

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**Área Terapêutica/Tema:** Prática baseada na evidência e melhoria da qualidade (Evidence-based Practice and Quality Improvement)

**Resumo:**

BACKGROUND: The maximum purpose of an PACU is to minimize morbidity and mortality in a vulnerable period for patients, due to the risk of post-anesthetic-surgical complications, resulting, consequently, in a reduction of the costs associated with health care(1).  
The main aim of the present study was to evaluate postoperative mortality until discharge or 30 days after the procedure. Secondary aims were complications and disability graded according to Clavien-Dindo classification, need for re-intervention and hospital stay, in comparison with previous data published by GlobalSurg initiative(2).

METHODS: This was a retrospective cohort study of patients who were admitted to the PACU, after elective surgery during October 2020.  Logistic regression was used to test differences in mortality and the incidence of complications, including all variables with significant association with respective outcomes in univariate analysis (p<0.1). Significance-level considered in multivariate analysis was 5%.

RESULTS: A total of 1068 surgeries were identified, with a total of 998 (93.5%) patients admitted to the PACU for postoperative recovery. Median age (interquartile range) was 65 (60-65) years, 77.1% were male, 83.5% of the patients were classified as ASA-PS II. The 30-days post-operative incidence of complications was 23.0% (230 patients), including 10 deaths (1.1%).   
In the multivariate analysis only procedure time above 60 minutes (OR 120 to 360 min= 2.89, CI95: 1.39-5.97; OR >360min= 3.53, CI95: 1.70-7.3), ASA-PS≥3 (OR= 3.12, CI95: 1.86-5.23), procedure on weekend vs weekdays (OR= 0.57, CI95: 0.39-0.83) and general surgery procedures (excluding hepato-biliary procedures) (OR for gastro-intestinal procedures = 1.75, CI95: 1.02-3.03; OR for other procedures = 0.44, CI95: 0.27-0.71) remained independently associated with postoperative complications. For mortality only ASA-PS≥3 (OR=6.14, CI95: 1.21-31.18) and vascular surgery (OR=7.58, CI95: 1.80-31.97) remained significantly associated with the outcome. None of the variables related to re-intervention remained significant after multivariate analysis.

DISCUSSION: Incidence of complications was similar to previously reported by Hines et al.(23.0% vs 23.7%) (1).Mortality was comparable to the observed by the Global Surg initiative high income countries (1.1% vs. 1.9%)(2,3). Longer procedure times and higher ASA-PS score were independently related to overall 30-day post-operative complications and mortality. Interestingly, procedure on weekends have 43% less odds of having a postoperative complication.   
Low rate of mortality and of complications should draw our attention for the need of postoperative monitoring facilities (PACUs) where these patients can be adequately followed to prevent complications(2).

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