

Analysis of Factors Affecting *Benign Prostatic Hyperplasia* Treatment Cost in Dr. Soetomo Teaching Hospital Surabaya

ABSTRACT

BACKGROUND - INA-CBGs tariff enacted by Ministry of Health toward National Health Insurance (JKN) patients was not always the same with hospital tariff. The fare difference will lead to the difference that can be detrimental to hospitals. Since September 1, 2014 INA-CBGs rates was changed (the new tariffs, Indonesian Health Minister Regulation 59/2014), where rates for transurethral resection of the prostate (TURP) or Millin's prostatectomy INA-CBGs code decreased 4.5% compared to the previous rate (the old tariffs, Indonesian Health Minister Regulation 69/2013). Otherwise, hospital tariff still based on East Java Governor 9/2010, which was the same until 2015. According to the last research and references, *Benign Prostatic Hyperplasia* (BPH) surgical inpatient treatment cost was affected by *length of stay* (LOS). LOS itself was affected by many factors, such as patients' age, number and types of comorbid, number and types of pre and post operative complication, and surgery types. Treatment cost was consisted of many cost components which should be maintained so that the hospital did not suffer loses.

OBJECTIVE - To analyze cost discrepancy between INA-CBGs and hospital tariff, to analyze the effect of factors affecting LOS dan total treatment cost and to analyze the main cost component of inpatient with BPH as main diagnose.

METHOD - This study based on hospital perspective and was an observational, retrospective, and cross-sectional on 25 class III BPH surgical inpatient in RSUD dr. Soetomo Surabaya from January 2014 – June 2015. The cost discrepancy was analyzed descriptively and statistically by using Wilcoxon test. All factors' effect toward LOS and total treatment cost was analyzed using multivariate linear regression. Main cost component gained by calculating cost percentage of those toward total treatment cost.

RESULTS AND CONCLUSIONS – Results of this study showed that from 12 patients who subjected to the old tariff there were eight patients (66.7%) with a positive difference and four patients (33.3%) with a negative difference with average hospitals profit IDR 1,033,134.42 per patient. Whereas in 13 patients who were subjected to the new tariff there were six patients (46.2%) with a positive difference and seven patients (53.8%) with a negative difference with average hospital loss of IDR 142.154,43 per patient. Based on 2010 hospital tariff, which compared with INA-CBGs tariff, it was concluded that hospital suffered losses from BPH with TURP or Millin's prostatectomy surgery service. Factors which affected LOS were comorbid, pre operative complication and surgery types. Factors which affected total treatment cost were comorbid types, number and pre operative complication types, surgery types, patients' age, and LOS. Main cost component of total treatment cost were surgery, laboratory, and medicine cost.

Keywords: factors, treatment cost, BPH.