RESEARCH ARTICLE

Comparison of the treatment practice and hospitalization cost of percutaneous coronary intervention between a teaching hospital and a general hospital in Malaysia: A cross sectional study

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Abstract

Introduction

The increasing disease burden of coronary artery disease (CAD) calls for sustainable cardiac service. Teaching hospitals and general hospitals in Malaysia are main providers of percutaneous coronary intervention (PCI), a common treatment for CAD. Few studies have analyzed the contemporary data on local cardiac facilities. Service expansion and budget allocation require cost evidence from various providers. We aim to compare the patient characteristics, procedural outcomes, and cost profile between a teaching hospital (TH) and a general hospital (GH).

Methods

This cross-sectional study was conducted from the healthcare providers’ perspective from January 1st to June 30th 2014. TH is a university teaching hospital in the capital city, while GH is a state-level general hospital. Both are government-funded cardiac referral centers. Clinical data was extracted from a national cardiac registry. Cost data was collected using mixed method of top-down and bottom-up approaches. Total hospitalization cost per PCI patient was summed up from the costs of ward admission and cardiac catheterization laboratory utilization. Clinical characteristics were compared with chi-square and independent t-test, while hospitalization length and cost were analyzed using Mann-Whitney test.