

Abstract

Background and Objectives : Health systems around the world are facing significant pressure to control costs and improve provided health services. Hospital is one of the environments that allocate a large share of the total expenditure of the health system. hospitals should provide health care services with the acceptable quality and minimum cost. For this purpose, managers should have accurate information about the cost of the services they provide and use of solution for cost reduction. therefore The purpose of this research was hospital cost management from Health system perspective and implementation of proposed solutions in Kerman's shafa hospital.

Methods : the mix-method study was conducted from March 2019 to Febraury 2021. This research was conducted in six phases. In the first phase, we did the costing of shafa hospital and the cost structure of Shafa Hospital was analyzed and its final activity centers unit cost was calculated using top-down approach. In the second phase, we identified cost items that account for more than 80% of hospital costs. These items were manpower and medicine and medical supplies. In the third phase, manpower and drug cost reduction strategies and actions were collected and analyzed through a systematic review and a qualitative study separately . In the fourth phase, strategies and actions were prioritized using a Analysis Hierarchical Process (AHP). In the fifth phase, the prioritized sterategies and actions were delivered to the hospital for implementation. In the final phase, two actions were implemented in the hospital and results were analyzed.

Results : The total cost of the hospital in the studied period was \$ 29752539.1. The highest and lowest cost share was related to human resources and energy consumption (64.33% and 0.48% respectively). The human resources, medicines and consumables account for over 96% of the cost of the final clinical activity centers. The unit cost of final activity centers varies so that among admission wards the unit cost of ICU is the highest (\$ 372.45) and the cost of a one-day bed in the neurology ward is the lowest (\$ 118.9).

After metasynthesis of systematic review and qualitative study of drugs and medical supplies, 81 sterategies and actions were identified. Also, after metasynthesis of systematic review and qualitative study of manpower, 63 sterategies and actions were identified.

Three expensive drugs, reptolysis, albumin and IVIg, were selected by the hospital for cost control and intervention. Comparative findings show that there was a total of 55.95% reduction in the cost of these drugs during the quarter of the intervention. "Case drug request for each

patient from the pharmacy" as a strategy to reduce drug costs did not lead to a reduction in bed-day drug costs.

Conclusion: Clarifying the hospital cost structure can provide a comprehensive analysis of hospital costs for decision making and policy making. The unit cost of the final activity centers also provides insights into the hospital cost management planning. According to the increasing cost of medicines, some hospital managers are seeking to reduce hospital costs using drug chain management. Drug cost reduction strategies can be applied to any component of drug chain management such as procurement, storage, distribution, prescription and use. Proper implementation of these strategies and rationalization of drug use will lead to the efficiency and effectiveness of the hospital. about 60% of the hospital costs are allocated to manpower. so any of the strategies can be very effective in reducing the cost of the hospital. On the other hand, due to the limitation of upstream laws and regulations, it is not possible for the hospital to use more strategies and it needs a legal license. Finally, the present study can be a cost management model for hospital managers and policymakers.

Keywords : cost structure, cost management, cost reduction, unit cost, strategy



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