

Abstract

Cost analysis of routine immunization by activity based costing in 7 towns of Kerman

Medical Science University: 2015

Introduction and objectives: In the recent century, the world has witnessed the great advances relating immunization. As the most effective and strong world intervention, vaccination during the childhood yearly saves the millions of children lives throughout the world from the death and disease. In every country, the Ministry of Health and Treatment depending on the public immune level and the lethal prevalent diseases regulates a certain vaccination table and program for the children and adults. Therefore, there are the cost diversity to immunize completely the child which depends on the kind of the vaccine technology, services strategy, action scale, country and environmental characteristics. The present study has been performed to calculate the cost price of the prevalent vaccination in 7 towns of Kerman Medical Science University.

Methods: The present study is of a retrospective kind based on the data of 2015. In this research the sum of costs related to the prevalent vaccination according to the healthcare provider and considering the particular classification of the widespread immunization program studies has been calculated as follows: the employee rights, vaccine, the safe supplies of vaccination, the other supplies, transportation and fuel, maintenance, vehicles, construction, energy, cold chain equipment depreciation, the other equipment depreciation, the vehicles damping, structural damping and rent money. The sample studied included 52 health centers in which all the prevalent immunization program vaccines of Iran such as BCG, oral polio, hepatitis B, MMR(measles, mumps and rubella), triple vaccine (Diphtheria, tetanus and whooping cough) ,Pantavalan (triple vaccine, hepatitis B, Haemophilus Influenza) have been investigated.

Findings: The average cost related to per dose of Pantavalan vaccine with the amount of 1337276 RIs had the highest cost and hepatitis B vaccine with that of 8774361 RIs had the lowest cost among the vaccines. In our study, the cost of every target child was estimated 19378011 RIs and that of every completely immunized child on average was estimated 165573420RIs. The average cost of the human resource is 147016566 RIs and includes 65% of the costs. The personnel cost is followed by the vaccine cost with the average cost of 36964612 RIs and it includes 17% of the costs. The cost of the equipment and structural damping is totally 9%, the energy cost is 1/5%, the staff cost is 2/63%, the fuel and transportation cost is 1/46% and the costs of each immunized supplies of vaccination and the vehicles maintenance are 1%.

Conclusion: The results obtained demonstrate that the personnel and vaccine costs include the most contribution of the vaccination costs. But every vaccine dose cost is very high which due to the large contribution of the personnel cost and the vaccine to the vaccination contribution, one may conclude that in the present study in addition to pays the mission rate, overtime work and bonus are included in the calculations. In Iran, the number of vaccine doses for every children is 16 doses which is higher than that of the previous studies. But not only due to such high costs we can not delete some vaccines from the national vaccination table, but also considering these vaccines effectiveness provides more actual information with the policy maker.

Keywords: Routine immunization, Expanded program on immunization (EPI), activity based costing (ABC), Kerman



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