

Thesis Title Factors affecting drug cost in big health centers,
Nakhon Ratchasima province

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ABSTRACT

The general objective of this study was to analyse the average drug cost per visit of patients in big health centers in Nakhon Ratchasima province and to study factors affecting cost of drug utilization. A retrospective research was used. Data about patient and prescriber characteristics as well as drug utilization were collected during February 1 and May 31, 1994 from 23 big health centers in Nakhon Ratchasima province. A systematic random sampling was used to select prescription records of patients visiting the health centers. We selected prescription record number 5, 10, 15, 20, 25, ... and so on from each health center.

Eight thousand two hundred and fifty eight prescription records were compiled and analyzed. We found that 57.36% of patients were females, 41.87% of them were less than 21 years old. One-third of the patients (31.08%) had respiratory diseases. Most of the patients (67.16%) were under government welfare. About one-third (31.11%) of patients live within one kilometer from the health center, and most

of the patients (52.68%) live within 11-20 kilometers from the nearest hospital.

There were 8.07% of patients treated at the health centers without using drugs. An average drug cost per patient was 17.33 bahts. An average number of items per prescription was 2.72. Percentages of patients who received injections were 14.59%, with an average injection cost per prescription of 6.03 bahts. Percentages of patients who received antibiotics were 46.36%, with an average antibiotic cost per prescription of 14.98 bahts. Percentages of patients who paid for their prescriptions were 26.59%, with an average charge per prescription of 40.40 bahts. Percentages of drug revenues recovered from patient's charges were 62.01% of total drug costs.

Patients' characteristics associated with the cost of drug utilization were sex, age, disease, and patient class. And prescribers' characteristics associated with the cost of drug utilization were sex, age, education level, position, marital status, domicile, population under responsibility, and doing private practice. Multiple regression analysis was done to predict the cost of drug utilization. The equation explained 14% of the relationships between patients' and prescribers' characteristics and drug cost (adjusted $R^2 = 0.14$, $p < .0001$).

In process of drug budget allocation for each health center, the committee should consider difference in pattern of patients such as disease and patient class among health centers, because pattern of patients influenced to cost of drug utilization. Moreover, we should study about prescribing habit of health personnels at health centers on rationality of drug utilization.