

## **Introduction**

Over prescribing of medications by physicians and poor medication compliance with drug regimens by the patients, categorized as drug related problem <sup>1</sup>, may result in wastage of resources and increase resistance of pathogens and serious health hazards form disease complications. There were reports in Thailand that some physicians over prescribed medications such as unnecessary antibiotics, too much of medications and too long period of medication usage.<sup>2</sup> Poor compliance for medication dosage regimens was reported in many diseases, which cause patients to be admitted in hospital with higher morbidity and mortality rate.<sup>3-5</sup> This is not only affect to patients, but it may be hazard to other people surrounding them, especially communicating infectious diseases. Poor medication compliance patients can spread pathogens to surrounding persons and increase the more resistant pathogens. So, the unused medications is not only accounted as the wastage costs of medication but it can increase country health expenditure by the patient hospital admissions and other expenditure related to prevention and treatment of diseases.

Total expenditures of all medications used in Thailand in 1999 were 29,443 million bahts, approximating 460 million pounds at exchange rate of 64 bahts/pound.<sup>2</sup> If the expenditures of unused medications were only 1% of total medication expenditure, the money suffices to operate a medium-size hospital in Thailand for a year. Our aims, therefore, were to determine the type, quantities and costs of unused medications at home including factors affecting them.