3837791 PYPY/M : MAJOR : PHARMACY ADMINISTRATION: M.Sc IN PHARMACY (PHARMACY ADMINISTRATION).
KEY WORD : COST-EFFECTIVENESS / MALARIA / ARTEMISININ / QUININE / DOXYCYCLINE / PHUOC LONG HOSPITAL

HA VAN THUY: COST-EFFECTIVENESS OF ANTIMALARIAL TREATMENT OF ARTEMISININ PLUS DOXYCYCLINE VS. QUININE PLUS DOXYCYCLINE IN PHUOC LONG HOSPITAL IN VIETNAM. THESIS ADVISOR: KORBTHAM SATHIRAKUL, Ph.D., CHA-ONSIN SOOKSRIWONGSE, Dr.P.H., 90 p., ISBN 974-589-006-5

The study of cost-effectiveness of antimalarial treatment of quinine plus doxycycline (A-regimen) vs. artemisinin plus doxycycline (B-regimen) was carried out from February to June 1997. The study was an analytical cohort research design and the studied population was 171 uncomplicated falciparum patients in Phuoc long hospital in Vietnam.

The major reason of this research was to identify and compare the cost-effectiveness of two antimalarial drug regimens. The instruments used for this research were data collection forms on 171 uncomplicated falciparum patients, of those 84 patients treated by A-regimen and 87 patients allocated by B-regimen.

The results showed that the study population was identical in terms of sociodemographic situation as well as illness level. There were only three components of cost differences between the two regimens; labor costs, cost of antimalarial drug, and cost of symptomatic treatment. Artemisinin was more expensive than quinine when patients received a 5-day treatment period (A-regimen: 10,600.0 VND; B-regimen: 12,300.0 VND). A-regimen had 52 patients with symptoms (61.9%) much higher than B-regimen (0%). Furthermore, cost of symptomatic treatment in B-regimen (0 VND) was lower than A-regimen (41,284.0 VND for 52 patients). Labor cost/patient/28 inpatient days in A-regimen (151,199.5 VND) was somewhat higher than B-regimen (151,050.5 VND) because of symptomatic treatment. In addition, governmental costs were 340,570.7 VND ($US 29.615) in A-regimen and 341,567.6 VND ($US 29.702) in B-regimen.

The effectiveness was demonstrated by cured rate as 92.6% in B-regimen, statistically significantly higher than in A-regimen (81.7%; $P_{value} = 0.074308$; $\alpha = 0.05$; df = 1). As a result, cost-effectiveness ratio of A-regimen for both government (416,855.2 VND: $US 36.3), and patient (931,045.4 VND: $US 81) was higher than B-regimen (government: 368,863.5 VND: $US 32.1; patient: 861,305.7 VND: $US 74.9). Thus, B-regimen was more cost-effectiveness than A-regimen.

Based on the results of this research, it is suggested that, B-regimen could be chosen as first treatment line for uncomplicated falciparum patients in Phuoc long hospital in Vietnam.