

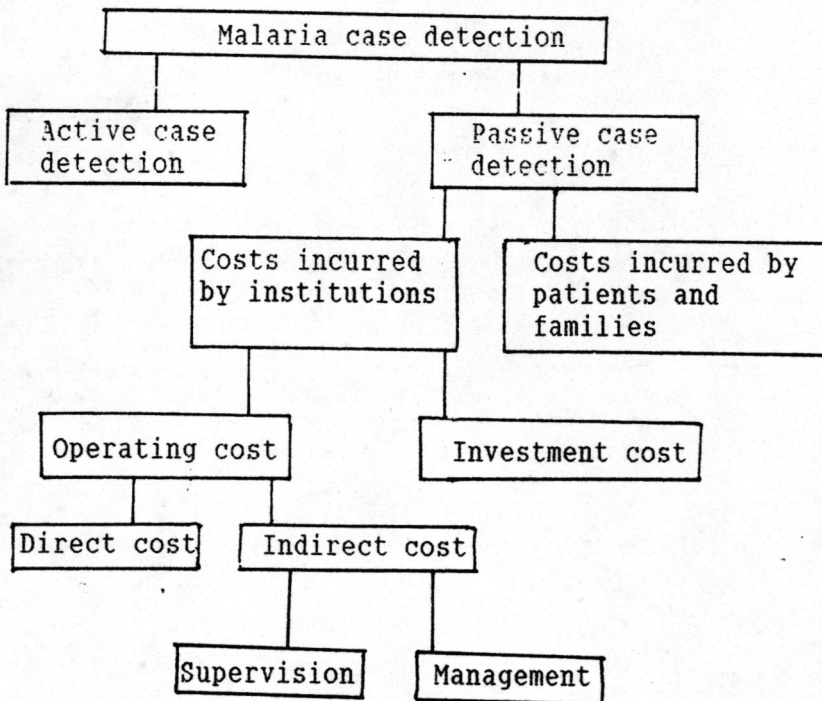
CHAPTER 2

CONCEPTUAL FRAMEWORK

This research was a study of cost analysis which was empirical and evaluative. It just considered the direct operating cost to be measured by institutions.

For the malaria case detection, there are two ways: active case detection and passive case detection. The concern of the research was passive case detection. The present focus (Figure 2-1) was on the direct costs incurred by institution at the county level for implementing the two schemes for malaria case detection. The costs incurred by higher institutions related, that is, Province, Ministry of Public Health, were external costs to the institutions at the county level.

Figure 2-1 Framework of the Research

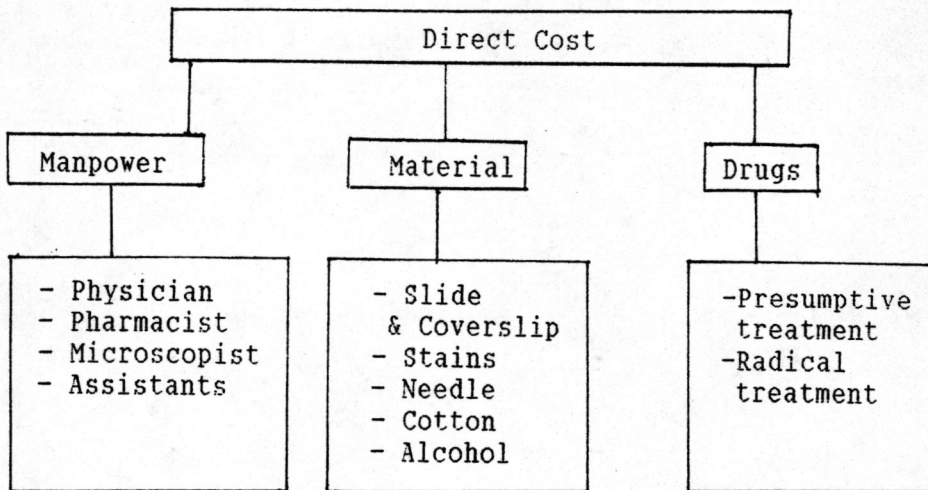


In order to provide the service of malaria case detection, the institution incurred both investment costs and operating costs. The operating costs included direct and indirect costs. The direct costs were the costs which were incurred by institutions for diagnosis and treatment (both presumptive and radical treatment) when performing the two schemes. The indirect cost included the costs of supervision and management, and costs incurred due to misdiagnosis of positive malaria cases.

For the passive case detection, there were costs to be incurred by patients and their families such as travelling costs, food costs, travelling time costs, and other opportunity costs due to visiting health services, and losing work days.

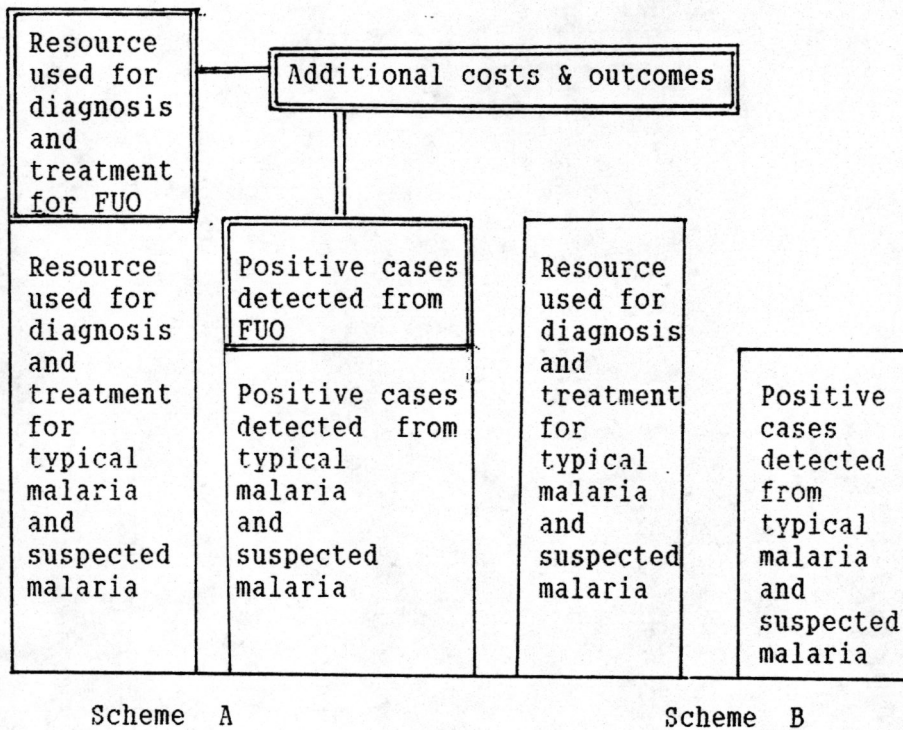
The direct cost components of detecting malaria cases from outpatients services considered in this study were the costs of manpower (physician, pharmacist, microscopist and related assistants), material (slide and coverslip, stains, needle, cotton and alcohol) and antimalarial drugs (for presumptive treatment and radical treatment) (Figure 2-2).

Figure 2-2 Direct Cost Components of Detecting Malaria Cases from Outpatients Services



When Scheme A rather than Scheme B was implemented for malaria case detection, the additional direct costs which were needed for additional positive cases detected were the direct costs spent on dealing with the outpatients with FUO. Correspondingly, the additional positive cases detected were the cases from the FUO patients: these were the incremental costs and outcomes. Both would be detected in this study (Figure 2-3).

Figure 2-3 Estimating the Additional Direct Cost for Additional Positive Cases Detected



The unit costs in terms of cost per slide examined and cost per positive case detected of the two schemes were the immediate products of inputs when the factors such as malaria incidence rate, slide positive rate and number of slides examined for FOU which may influence the inputs and outputs were constant at a special level. Here, only two of the three factors considered: slide positive rate and the number of slides examined for FOU were considered. This meant under changes of conditions, the unit costs would change (Figure 2-4).

Figure 2-4 The Relation Between the Input and Performance Under Changing Conditions

