CHAPTER 6

IMPLICATIONS

This chapter should focus on the policy implications from the costs which could be saved if outstation leprosy patients were to receive care at their local clinic. However, given weaknesses in the data available, and therefore the confidence in the costing this chapter briefly reviews four issues; methodological weaknesses, costs, policy implications and areas for further research.

6.1 Methodological weaknesses

The basic principles of the costing model presented in the original proposal was sound. Data limitations, notably the number of outstation patients from each district (XD_{ij}, XR_{ij}, XC_{ij} , forced a restructuring of the model and the introduction of i,j distance based proxies for the number of outstation patients. However study of the outstation patients shows that there is no significant relationship between distance i,j and demand at clinic j. As a result cost calculations could only be based upon the five Regional and one central clinic for which distances and number of patients was known. Costs incurred by outstation patients attending district clinics can only be derived from the sampled clinics making assumptions about the percentage of outstation patients, average distances and average costs. Clearly study has to be made of normal district clinics.

A second area of concern is the definition of local and outstation. It was originally argued that if patients used their local health post cost savings would be considerable. For this study local was assumed to be within the patients district of residence. The extent to which patients travel to another health post, a low cost action which may overcome some of the fears of exposure to the local population is not known.

The third limitation of this study is that the costing did not include cost incurred by patients seeking diagnosis and treatment prior to the current station. Both the magnitude and components of these costs in such cases may be significantly higher than that presented in this study.

Finally, cost analysis is based upon the assumption of a stable behavior pattern of patients; always attending the health post, district, regional or central clinic. But the decision tree show a wide range of alternatives and behavior may not be stable. In fact one of the arguments underpinning this research is that a change in behavior should be sought. That outstation patients should receive treatment at local clinics. But it is not unreasonable for any patient to seek confirmation of diagnosis at a higher level clinic.

6.2 Costs

The scenarios for costs and cost saving at national level based upon assumptions and a small sample survey which can be questioned show the following:

1. Opportunity cost of the delay between the onset of symptoms and seeking diagnosis/treatment finds expression as a loss of income for the 8% of new patients each year with grade 2+ deformity. This loss of income with current incidence, 297 * 10^6 rupees, far outweighs the annual budget of the leprosy control organization providing services (21 * 10^6 rupees) and also the total cost incurred by all patients in receiving care (44 * 10^6 rupees), assuming the worst cost scenario.

2. The possible cost saving if all patients were to receive treatment in their local district (note not only local health post) show a maximum of 33.8 * 10^6 rupees but a more likely figure in the order of 10 * 10_6 rupees. However without more accurate information these figures can be no more than a guesstimate.

6.3 Policy Implications

It would be comforting at this point to be able to propose sound and feasible policy options in response to potential cost savings. However, given uncertainties over the conclusions and many unanswered questions only two points can be proposed.

1. Given the high opportunity cost incurred by patients due to the delayed time between onset of symptoms and seeking diagnosis and treatment, together with other costs incurred by patients much more should be done to ensure early detection and reduce the prevalence of deformities.

2. It seems likely that lack of confidence in the effectiveness of drug therapy may contribute to delay in seeking care, continued levels of deformities, continued stable prevalence and the continued high costs incurred by patients and society. Therefore the administration of dapsone monotherapy should be seriously reconsidered

6.4 Further Research

Several research questions emerge from the study. Which of these warrants further research will depend upon the costs of research, time and the actions which are possible with the information obtained.

1. Develop a survey/monitoring method to determine the number of outstation patients at various types of clinics, the areas from which they travel and the number of registered patients

in the district. Without this key information no reliable costing is possible.

2. A small but properly designed survey should be made of costs incurred by patients at health posts (true local treatment centers) and of cost incurred as outpatients to the local health posts and between districts.

3. The general demand function for leprosy care at different levels of clinics should be examined to identify major factors affecting the behavior of local and outstation patients which could be used as a basis for resource allocation to those clinics.