Malaria incidence rate: confirmed cases

From a scientific viewpoint, it may well be argued that all malaria diagnosis should be confirmed using approved laboratory methods. This approach has merit where funding, transport, communications, human resources are in plentiful supply to permit rapid confirmation of clinical impression. But where communities or nations are too poor to restrict clinical case management to this ideal course of action, a compromise has to be struck. At the same time it is indeed appropriate to aim for greater coverage of laboratory confirmation in an acceptable time frame to facilitate good treatment.

All 6 Mekong countries provide diagnostic confirmation to some extent, while two of them (China/Yunnan, Thailand) report only confirmed cases. Data are available for the 6-year period (1996 - 2001); two years' data (1998, 2001) are shown in Figure 16a,b. Although there were changes in diagnostic methodology during this period, the overall pattern shows only modest variation over the 3 years. When compared with the maps of total case incidence for the corresponding years (Figure 15c, 15f), the confirmed case numbers were much lower, and were especially so in certain unit areas, reflecting the proportion of cases for which confirmation was obtained. In many instances the rate of confirmation obtained was very low because of the remoteness of villages and the absence of testing facilities. Figures for confirmed case incidence in China/Yunnan and Thailand of course reflect exactly the figures for total reported case incidence since all cases are so reported, even from remote sites.

It should be noted that mapping of confirmed versus total reported case incidence provides only a part of the desired database. Time lag in taking blood smears on-site, delivery of blood smears to the laboratory, and return of diagnostic results to the clinic may be too long to be useful in case management. Development of rapid dipstick diagnosis in the field has progressed and may provide a partial answer to the clear need for greater accuracy of diagnosis in relation to drug therapy. Certainly the ideal goal for the region as a whole should be to confirm the diagnosis of all malaria cases at clinic level. This goal requires consideration of the costs and benefits to national disease control programs in the regional context. It is important to recall (Table 2) that while a country such as Myanmar does not confirm all clinically diagnosed cases, the total number of cases confirmed is greater than in China/Yunnan and Thailand which confirm all reported cases.

