

## SUMMARY OF THESIS\*

TAUIL, Pedro Luiz - **Avaliação de uma nova estratégia de controle da malária na Amazônia brasileira**. Brasília, 2002. (Tese de Doutorado - Universidade de Brasília).

### EVALUATION OF A NEW STRATEGY IN THE MALARIA CONTROL IN THE BRAZILIAN AMAZON

**BACKGROUND.** Malaria is still a very important public health problem in tropical and subtropical countries. In Brazil, 99.9% of malaria cases occur in the Legal Amazon Region, which includes the states of Pará, Amazonas, Rondônia, Acre, Roraima, Amapá, Maranhão, Mato Grosso and Tocantins. In this Region, there are favorable conditions to malaria transmission as suitable temperature, humidity, altitude, and vegetable coverage for the proliferation of mosquito vector. Other factors as temporary houses, like huts, and bad conditions of working become easier the vector-human being contact. On the other hand, there are difficulties to apply malaria control measures as houses with total or partial absence of walls for insecticide spraying, difficult access to many localities and insufficient network of permanent health services. The change of the global strategy of fighting against malaria from eradication to integrated control and the implementation of the Unique System of Health in Brazil, with decentralization of planning and execution of medical assistance and disease control, determined a new way of applying malaria control measures in the Amazon Region. A plan of intensification of malaria control actions in the Legal Amazon Region (PIACM) was elaborated in July 2000, promoted by Fundação Nacional de Saúde (FUNASA), Ministry of Health.

**OBJECTIVES.** To evaluate the effectiveness of this plan in the region as a whole, and, specifically, in two states where occurred time differences in its implementation.

**METHODOLOGY.** An ecological study. The independent or explanatory variable is the implantation of the plan and the effect variables are malariometric indicators. The main characteristic aspect of the plan is the integration of malaria control measures in the Unique System of Health. Data were obtained from eight evaluation meetings promoted by FUNASA, which took place in different states of the region, and in

supervision visits accomplished by FUNASA staff and by the author of this paper. Rain fall data were provided by Instituto Nacional de Meteorologia.

**RESULTS.** In the preparatory phase of the plan, the Acre State implanted it in December 2000, while the Amapá State only did it in June 2001. The other states implanted it in 2000 or in the beginning of 2001. Malaria incidence reduced in every state of the region, between 1999 and 2001. The reduction for the whole region was 38.9%. The number of *P. falciparum* cases decreased in 34.4%, in the same period. In the Acre State, the overall incidence diminished in 67.2% and the *falciparum* cases in 76%. In the Amapá State, the reduction of malaria incidence was only 14.5%. The cases produced by *P. falciparum* increased in 106.2%. The Acre State has adopted a strategy of state decentralization in the endemic diseases control. Meanwhile, every other state has adopted the municipality strategy of decentralization. There are not definitive data on fatal and hospitalized malaria cases for 2000 and 2001 yet. No correlation was obtained between rainfall data and malaria incidence.

**CONCLUSIONS.** The plan was effective to control malaria transmission. The observed incidence reduction was the largest one registered in a two-year period since 1960. Malaria incidence reduction in the Acre State was 4.6 times more than the incidence in the Amapá State. In the first semester of 2001, it was observed an increase of malaria incidence compared with the same period in 1999, in Amapá. However, in the second semester of 2001, after the implantation of the plan, malaria incidence reduced 52.4%.

**Pedro Luiz Tauil**  
E-mail: pltauil@unb.br

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