

preventive efforts to eradicate this endemic disease in our community should be made.

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Accepted for publication 7th February, 1985.

Systematic chemotherapy of febrile cases: a substitute strategy for malaria control in rural areas of Africa

Malaria is still endemic in 90% of tropical Africa. Developing countries meet difficulties in controlling the disease due to technical, economic, logistic and human problems. However, specific strategies against this endemic disease have been developed, such as vector control mass drug administration, health education and environmental improvement. Their efficacy has been proven. But in order to pass from an experimentally proven efficacy to large scale implementation, it is necessary to employ a 'feasible strategy'.

We suggest such a strategy based upon the result of a recent three-year field study. In 12 villages of a savanna area of Burkina Faso (West Africa), we compared, from 1980 to 1982, two malaria control strategies: (i) systematic chemotherapy of febrile attacks with a 10 mg/kg body-weight single dose of chloroquine, and (ii) chemoprophylaxis for children (0 to 9 years) with a 10 mg/kg body-weight weekly dose. Chloroquine tablets were distributed by health workers chosen by the whole population.

The results can be summarized as follows: no difference in the infectivity of anopheline vectors was noticed in either area. Correctly performed chemo-

prophylaxis over one year produced a fall in the parasite rate (children two to nine years) from 51.9 to 26.2% during the rainy season and from 38.4 to 7.7% during the dry season. Immunological studies showed that correctly performed chemoprophylaxis during one year caused a significant decrease of fluorescent antibody levels whereas there was no difference in the immunological response between the results of chemotherapy in control villages. There was no difference in mortality (age group one to two years old) between the two control strategies. The feasibility study showed that chemoprophylaxis could be well conducted for about one year, but this was followed by decreasing interest of the population in chemoprophylaxis while chemotherapy was always accepted. In villages where chemoprophylaxis was well conducted, the consumption of chloroquine to cover the 0 to nine years group was three times higher than in villages under chemotherapy.

This study leads us to propose systematic chemotherapy of all febrile cases for malaria control in West Africa, where no case of *P. falciparum* resistance to amino-4-quinoline has been demonstrated in semi-immune and immune populations. We recommend a single dose of 10 mg/kg body-weight of chloroquine which should cure any possible malaria attack.

This strategy, well accepted by the population, is realistic on a large scale in the field within the framework of primary health care, permits effective control of malaria mortality and is not followed by problems related to chemoprophylaxis such as selection of *P. falciparum*-resistant strains, decrease of specific immunity, high cost or poor acceptability by the population.

This investigation received financial support from the Malaria Applied Field Research component of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases.

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Accepted for publication 11th April, 1985.

The experimental transmission of *Leishmania mexicana amazonensis* Lainson & Shaw, between hamsters by the bite of *Lutzomyia furcata* (Mangabeira)

WARD *et al.* (1977) reported the experimental transmission of *Leishmania mexicana amazonensis* by the proven vector *Lutzomyia flaviscutellata*. The only other laboratory transmission of this parasite has been by *Lu. longipalpis* (see KILLICK-KENDRICK *et al.* 1977). We report here the transmission of *Le. m. amazonensis* by *Lu. furcata*.

Strain FLA/BR/83/M7890 was isolated in a hamster from a female *Lu. flaviscutellata* captured on the 11th