

Correspondence

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To the Editor

NOTICE

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COPYRIGHT LAW (TITLE 17 U.S. CODE)**Prevalence of malaria in Indians of Xingu Indian Reservation (Brazil)**

SIR—Examination of Indians living in the Upper Xingu River area, in the south of the Xingu Indian Reservation (Mato Grosso State, Brazil) was undertaken during the first half of July 1976. Samples of blood and spleen measurements (according to Hackett) were taken from 71 Indian children (37 males and 34 females, aged two to nine years). The total population for this age group was 200 individuals. Two thin blood films were obtained from each child, each one stained with Giemsa and examined within 10 minutes. The parasite rates of the 71 children were 4.2% of *Plasmodium vivax*, 4.2% of *P. falciparum* and 2.8% of *P. malariae*. The total parasite rate was 11.3%. The spleen rate in 63 of the 71 children was 44.4%.

D'ANDRETTA *et al.* (1969), working in 1968 in the same place and under the same conditions, reported the following data: the parasite rate in 101 children aged two to nine years was 66.3% and the spleen rate in 95 of the 101 children was 92.6%.

Since 1969, a malaria control programme has been carried out in the Xingu Indian Reservation, all the houses in the Reservation being sprayed with DDT every six months and all cases of fever being treated with antimalarial drugs.

Comparison between the parasite and spleen rates of 1968 and 1976 indicated significant differences ($\chi^2 = 22.498$, $p < 0.001$ and $\chi^2 = 7.467$, $0.001 < p < 0.01$, respectively).

We are, etc.,

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Reference

- D'Andretta Jr., C., Baruzzi, R. G., Sarmiento, M. F., Kameyama, I., Souza Dias, L. C. & Penteado Jr., H. (1969). Estudo da prevalência da malária em índios do Parque Nacional do Xingu—Determinação dos índices parasitários e esplênico. *Revista da Sociedade Brasileira de Medicina Tropical*, 3, 12.

Intestinal parasites in Kenyan roadworkers

SIR—In 1974, the Ministry of Works in Kenya with support from the World Bank and International Labour Organization initiated a Rural Access Roads Programme which is undertaking the construction of roads by labour-intensive methods involving local people. The programme also provides for investigations into the relationship between the health and nutritional status of the workers and their productivity. One of the first construction units was established in Kwale District near the coast south of Mombasa. The region is inhabited by the Wadigo and Giriama people whose staple diet is maize and whose main cash crop is coconuts.

During a roadworker health and productivity study at two sites near Kwale town, the need arose to examine the participants for intestinal parasites. Fresh stool samples were collected from 122 adults in May 1976. The samples were preserved in Schaudinn's fluid containing polyvinyl alcohol (BROWN & BELDING, 1964). In the laboratory, each sample was filtered and processed by a tested modification of the method described by BAYER (1968) and then examined for the presence of cysts, eggs and larval stages of parasites. Eggs of hookworm were found in 79 (c. 65%) of the samples, eggs of *Trichuris trichiura* in 54 (c. 44%), cysts of *Entamoeba* sp. in 34 (c. 28%) and eggs of *Ascaris lumbricoides* in 28 (c. 23%) of the samples. 21 (c. 17%) of the samples contained evidence of infections with a variety of parasites including *Enterobius vermicularis*, *Hymenolepis nana*, *Schistosoma mansoni*, *Strongyloides stercoralis* and other parasites which have not yet been identified with certainty. No evidence of intestinal parasites was observed in 20 (c. 16%) of the stool samples. Thus, seven (c. 6%) of the people were found to harbour four types of intestinal parasite concurrently, 28 (c. 23%) had three types, 37 (c. 30%) had two types and 30 (c. 25%) had one type when the samples were collected. In addition, an examination of urine specimens demonstrated that *Schistosoma haematobium* was well established in the region. A full report on the findings and recommendations of the study, including observations on the impact of the parasites on the health and productivity of the labour force, will be published later. In the meantime, health workers and epidemiologists may be interested in this estimate of the point prevalence of parasites in roadworkers from Kwale District, Kenya. Unlike other studies often based on hospital findings, these people were examined as