

SLEEPING SICKNESS ON THE BUMI RIVER
A PRELIMINARY NOTE

1. Dissections of Glossina during the last 12 months have shown that the infection rate with brucei group trypanosomes is, as elsewhere in Africa, of the order of 1 per thousand or less. It also seems possible that, again as elsewhere, brucei-group infections are more frequent in G. pallidipes than in G. morsitans. Of these infections it is likely that only a small proportion are due to T. rhodesiense. From the aspect of the vector, therefore, the picture is the same as elsewhere in Africa where rhodesiense sleeping sickness occurs.
2. It must be assumed that rhodesian trypanosomiasis is a zoonosis (as has been demonstrated elsewhere) and that a reservoir of T. rhodesiense exists in the wild game. No doubt animals carrying this trypanosome are rare. Because of this rarity and the low natural rate of infection in the tsetse flies, the infected human becomes of great importance in the spread of the disease. The first step to be taken, therefore, is the sterilization of the human reservoir of infection by removal of infected persons and/or their treatment with drugs. Such a course should have the effect of breaking the incipient epidemic, leaving the population once more only subject to the rare chance of infection from a tsetse fly infected from the wild game or from a human carrier from another centre of infection.
3. Thus, while medical treatment of an incipient epidemic can ignore the game as a source of infection, long term policy in relation to social and economic development of communities living in fly belts where T. rhodesiense has been known to exist, must be based on the assumption that the disease is a zoonosis.
4. Even if this were not so, the situation of active sleeping sickness foci, on the one side from Chirundu eastwards and on the other in the Caprivi Strip, make it extremely dangerous to allow communities to develop in the Zambezi Valley in their present form, for it must be quite impossible so to control the movements of the native population as to ensure that no infected African from the known centres of infection ever enters the area. Blair's (1939) examination of Southern Rhodesian cases of sleeping sickness with its demonstration
 - (a) that indigenous Africans may become healthy carriers of the disease and
 - (b) that non-indigenous persons are, by comparison with local inhabitants particularly liable to infection

is also very relevant to the argument.

5. In short, it must be assumed that under present conditions outbreaks of sleeping sickness will continue to occur in the Zambezi Valley communities and that probably the visitor from outside will suffer an enhanced risk of

reported plans for the encouragement of tourism will exacerbate the position - e.g. a road along the shores of Lake Kariba which will encourage greater freedom of movement among the Batonka and certainly will result in increased dispersal of potentially infective tsetse flies.

6. Nevertheless it should be recalled that sleeping sickness in Rhodesia has never assumed the large-scale epidemic form of the disease that has characterized it in countries further north. Outbreaks have been small and the number of known cases is very few (though with a remarkably high proportion of Europeans) since records began to be collected.

7. It is assumed that current medical activity will prevent spread of infection in the communities in the neighbourhood of the Bumi. Thenceforth a choice of courses is open to us.

(a) The right one, undoubtedly, would be to remove the scattered Batonka communities from their present situation, where, of necessity they receive a minimum of attention either from the Administration or the Health or the Agricultural authorities. It is extremely unlikely that a flourishing agricultural community could be created on the present site of the settlements, since apart from their remoteness the poverty of the soil will not permit this. On the other hand, removal to areas of higher fertility on the periphery of the Zambezi fly belt could

(i) remove much of the danger of repetitions of the present outbreak.

(ii) reduce the size of the Zambezi fly belt.

(iii) do much to secure some of the present fly front against further advances. The obvious place would be on the west bank of the Sanyati river. The occupation, under proper supervision, of the basins of the Gungungwe and Umvumvudzi Rivers would be a major step in our plan to break through the tsetse belt to the shores of Kariba and to extend the area available to cattle from the eastern portion of the Urungwe Reserve, down to the East bank of the Sanyati River.

(b) The Batonka of the Bumi and Sengwa Rivers may be left in situ. If this course is adopted the least that should be done would be to ensure the maximum concentration of population compatible with the meagre resources of arable land. This concentration should be done in consultation with tsetse control officers. Facilities for the periodical examination of the population by health inspectors should be provided.

8. It is difficult to see any advantage in these Batonka settlements. They are practically unadministered,

they are a source of infection, and politically they must be a nuisance. There can be little future for them except, possibly as fisherman on Lake Kariba or as a somewhat dubious tourist attraction. If communities of African peasant fisherman are desired along the shores of the lake they should be regulated by rules similar to those operating in Kenya and Uganda, which govern the fishing industry around the sleeping sickness areas of Lake Victoria. It is worth noting that the present hot season aspect of the vegetation along the present lake shore suggests that conditions will become more favourable for the propagation of tsetse than they were in the past when the Zambezi floods must have prevented the build up of tsetse along the now no longer existing river banks.

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