

LEAGUE OF NATIONS.

C.H./Malaria/221.

Geneva, September 28th, 1934.

MALARIA COMMISSION.

Note by the Secretariat.

In its Third General Report on the therapeutics of malaria, the Malaria Commission took account, indeed, of the progress achieved in this field, but did not fail to point out at the same time the many questions which still await a solution.

It drew up a list of research work to be undertaken, which appeared in the report of the President of the Commission (C.H/Malaria/209) and which has been received by all the members and corresponding members.

In order that it might be in a position to compare and use the results of this research work, the Commission recommended, in Chapter IV of its Third General Report, the methods of work to be followed.

It was also careful to specify what research should be carried out in the field, and to plan it on the lines of experimental work that could be effected in countries possessing centres for the study of artificially induced infection and centres for the observation and treatment of natural infection.

In drawing up this programme of research (which is appended hereto) the Commission, mindful of the assistance obtained in the past, hoped to secure once more the valuable support of those members and corresponding members whose anti-malarial work is carried out in close contact with national institutions where such research could be undertaken under the best conditions.

This programme was accepted in full in Roumania, where several stations began to apply it in 1933. Several points of the programme are also being carried out in England and in Italy.



## A N N E X

### Programme of co-ordinated research of treatment.

#### 1) Research into artificially induced infection.

##### a) Benign tertian.

- 1) Comparative study of the action (abortion of the attack) of a single dose of drug administered after the patient has had 4 or 5 febrile paroxysms:  
quinine 0.40 grammes or  
atebrin 0.10 grammes or  
plasmoquine 0.20 grammes + 0.40 grammes of  
quinine.
- 2) Comparative study of the therapeutic efficacy of a short treatment (7 and 15 days respectively) and its effect in reducing relapses, using the same reduced doses as under 1) above.

##### Malignant tertian.

- 1) Comparative study of the therapeutic efficacy (abortion of the attack) of a single dose of drug administered on the fifth day of the fever.  
Dose of quinine to be used: 1 gramme.  
In cases which have parasites in the circulating blood but no fever, the action of a single dose of quinine, 0.15 grammes, should be studied.
- 2) Comparative study of the therapeutic efficacy of 7 days' treatment with a daily dose of 1 gramme of quinine or 0.30 grammes of atebrin.
- 3) Research to determine the minimum dose of plasmoquine required to devitalize the gametocytes, beginning with a single dose of 0.02 grammes. (In these mosquito infection experiments the donor's blood should contain at least 25 exflagellating microgametocytes per cubic millimetre. Batches of 20 to 25 mosquitoes should be fed before the ingestion of plasmoquine, 4 hours after, and daily during the following 4 or 5 days. The results as determined by the number of oocysts should be estimated in comparison with the number of exflagellating microgametocytes previously found per cubic millimetre of blood (daily enumeration).)

##### Quartan.

Comparative study of the therapeutic efficacy and action in preventing relapses of 7 days' treatment with 0.30 grammes of atebrin per diem or 0.30 grammes atebrin + 0.02 grammes of plasmoquine.

#### II. Research work on spontaneous infection:

Anti-malarial measures limited to treatment, excluding any anti-mosquito measures.

##### a) Experiment in "clinical prophylaxis".

Select two villages of the same type having the same epidemiological conditions: administer to the population of

one village daily doses of 40 cgr. of quinine (adult dose) throughout the malarial season from April 1st to October 31st).

In the other village substitute a daily dose of 0.10 grammes atebirin for the daily dose of quinine.

It is most important that all children and infants should receive a daily dose in the same way as the rest of the population.

b) Treatment of all attacks and relapses for 7 days:

Select two villages of the same type and the same epidemiological conditions: use in one quinine in daily doses of 60 cgr. for all primary attacks and relapses of benign tertian and of 1 gramme for primary attacks and relapses of malignant tertian and quartan.

In the other village use atebirin in daily doses of 0.15 grammes for benign tertian and 0.30 for malignant tertian and quartan.

The results of these experiments should be compared as regards the percentage of relapses and the effect of the treatment upon the general health of the patients.

c) Determination in the hyperendemic and endemic areas of the age groups in which the disease is most severe, and which accordingly call for the greatest efforts in the matter of treatment. Consider first the indigenous and subsequently the immigrant population.