

# Schistosomiasis *Mansoni*. A survey of its incidence at Luampa Hospital

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Because of the frequent finding of *Schistosoma Mansoni* in the stools of patients seen at Luampa Mission Hospital, it was decided to endeavour to determine the incidence of the parasite in this area. Luampa Mission is located on the Luampa River in the Mankoya District of Barotse Province, 35 miles S-W. of Mankoya Boma. The report is based on stool examinations of 436 patients picked at random from people attending the Out-Patient Department between June 1st and July 31st, 1968.

The specimens were examined by the direct smear method, and many of those proving negative were then concentrated and examined again. However few of the latter were found to be positive, and we came to the conclusion that it was not worth the extra time to repeat the examination. Also because of shortage of personnel, we examined only one specimen in the majority of patients. (Where a second or third examination was made the parasite was found in at least a few cases, justifying the assumption that the incidence in this locality is even higher than our figures show.)

Urinalysis was done on most of the patients in this series, but *Schistosoma Haematobium* was not found in a single instance in the urine. In one patient both *S. mansoni* and *S. haematobium* were found in the stool. (In the past two years only about 5 cases of urinary bilharzia have been diagnosed in this Hospital.)

One patient in this series, and one seen prior to the commencement of this survey had clinical and X-Ray evidence of cor pulmonale. Both had *S. mansoni* present in the stools, and enlargement of both liver and spleen. (The latter of these two was also one of the few cases of urinary bilharzia we have seen here.)

67 of the patients were children (i.e. under 15 years) and 369 were adults, of whom 265 were women and 104 men. There was an equal number of boys and girls in the series, and the incidence of positive results was approximately the same—60%. Among the adults however, there was a much higher incidence among women than among men—65% and 43% respectively. See Table 1.

TABLE I.

Age incidence:	0—15 years		Over 15 years		Total %
	M	F	M	F	
Positive	19(56%)	21(64%)	40(42.8%)	171(64.4%)	251 57.6%
Negative	15(44%)	12(36%)	64(57.2%)	94(35.6%)	185 42.4%
Total	34	33	104	265	436 100%

Thus it appears that the parasite is harboured at about the same frequency rate in children as in women, and is

considerably less frequently encountered among men. This probably reflects the habits of the community: women going to the river more frequently than men (to draw water and wash clothes, etc.) and taking the children with them. The over-all incidence was 57.6%.

During the period of the survey 150 of the positive cases were clinically examined. 81 or 54% of these complained of no symptoms which were thought to be attributable to schistosomiasis. The commonest symptom complained of was abdominal pain, usually in the upper left quadrant or epigastric region. 18 patients complained of diarrhoea, sometimes with blood in the stool; but this was not necessarily due to bilharzia.

The chief clinical evidence of the disease was enlargement of liver or spleen or both, being present in 85 or 57% of cases. 30 had enlargement of liver only, 11 of spleen only, and in 44 (29%) both organs were palpably enlarged. 103 (69%) had enlargement of these organs and/or abdominal pain.

An attempt was made to correlate abdominal pain with enlargement of liver and/or spleen. Of the 69 patients with abdominal pain 51 (74%) had one or both organs enlarged. Whereas of the 81 without this symptom only 34 (42%) had clinical enlargement of these organs. See Table 11.

Table II.

## Relation of abdominal pain to enlargement of liver and spleen:

	Abdominal Pain	No Pain	Total
Splenomegaly	3	8	11
Hepatomegaly	18	12	30
Both enlarged	30	14	44
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	51(74%)	34(42%)	85(57%)
Neither enlarged	18(26%)	47(58%)	65(43%)
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	69(100%)	81(100%)	150(100%)

All the patients were treated with Ambilhar for seven days. Follow-up studies are being done.

The only conclusion to be drawn from this survey is that Schistosomiasis *Mansoni* is a very prevalent condition in this area and that it presents a serious health problem.

## SUMMARY

436 unselected patients from the O.P.D. of Luampa Mission Hospital were examined for *S. mansoni* infestation. The results reveal a high incidence (58%) of this condition in this area. Two-thirds of those harbouring the parasite have clinical signs or symptoms of Schistosomiasis. On the other hand, *S. haematobium* appears to be practically nil. It is suggested that this constitutes a serious Public Health problem in this area.

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