Reviewer's report

Title: Patterns of Schistosoma haematobium infection, impact of praziquantel treatment and re-infection after treatment in a cohort of schoolchildren from rural KwaZulu-Natal/South Africa

Version: 2 Date: 20 September 2004

Reviewer: David W Crompton

Reviewer's report:

The paper is well prepared and adds to our knowledge of how this schisto interacts with its human host before and after intervention with the commonly available anthelminthic drug. The work is important in the light of the 54th WHA's resolution about governments providing access to anthelminthic drugs in areas endemic for schisto.

1 I have started to labour this point: people are infected with S, haematobium and NOT with schistosomiasis. Schistosomiasis is better reserved for the disease and to be used in conjunction with morbidity.

2 If you have space for Figs 1 and 2 so be it, but I do not think these are needed. There will be other ways of identifying the place.

3 On page 5 - I should stress that the drugs were given as single oral doses (with water?). I should describe what was done to be sure the drugs were actually swallowed and I should explain if anything was done about side effects. How was the PZQ dose calculated? [These points can help others working on helminth control programmes].

4 Given the merits of using primary schools as treatment centres - I would welcome a statement about how permission/collaboration was obtained with the educational authorities.

5 Egg counts give an indirect measure of intensity. Perhaps mention that on page 8. We never know what the worms are up to if - as happens to all of us - we have to count eggs in excreted material.

6 The authors raise the point that PZQ might not be particularly effective against juvenile schisto. I wonder if that has any relevance to the argument at the bottom of page 10. As far as I recall, not every expert is convinced about this matter.

7 In practice during public health programmes, all this egg counting is not possible in many places; the resources to do it - cash and technicians - are not available. I hope the thoroughness of this study will not make health professionals decide that schisto is too difficult to tackle.

8 On page 12 - I would be inclined to write "Our data indicate that in the study area S. haematobium transmission occurred MAINLY during the..."
9 On Fig 4 - do we still use "centilitres"?