

Epidemiological Data of *Schistosoma haematobium* Bilharzia in Rural and Urban Localities in the Republic of Congo

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Abstract : *Schistosoma haematobium* schistosomiasis is an endemic disease in which the level of human exposure, incidence, and fatality attributed to it remains, unfortunately, high worldwide. The erection of hydroelectric infrastructures constitute a major factor in the emergence of this disease. In the context of the Republic of the Congo, which considers industrialization and modernization as two essential pillars of development, building the hydroelectric dams of Liouesso (19 Mw) and the feasibility studies of the dams of Chollet (600MW) in the Sangha, of Sounda (1000MW) in Kouilou and Kouembali (150MW) on Lefini is necessary to increase the country's energy capacities. Likewise, the urbanization of former endemic localities should take into account the maintenance of contamination points. However, health impact studies on schistosomiasis epidemiology in general and urinary bilharzia, in particular, have never been carried out in these areas, neither before nor after the erection of those dams. Participants benefited from an investigative questionnaire, urinalysis both by dipstick and urine filtrate examined under a microscope. Assessment of the genetic diversity of *Schistosoma* species populations was considered as well as PCR analysis to confirm the test strip and microscopy tests. 405 participants were registered in five localities. The sampling was made up of a balanced population in terms of male/female ratio, which is around 1. The prevalence rate was 45% (55/123) in Nkayi, 10.40% (11/106) in Loudima, 1 case in Mbomo (West Cuvette), which would probably be imported, zero in Liouesso and Kabo. The highest oviuria (number of eggs per volume of urine) is 150 *S. haematobium* eggs/10ml in Nkayi, apart from the case of imported Mbomo, imported from Gabon, which has 160 *S. haematobium* eggs/10ml. The lowest oviuria was 2 *S. haematobium* eggs/10ml. Prevalence rates are still high in semi-urban areas (Nkayi). As praziquantel treatments are available and effective, it is important to step up mass treatment campaigns in high risk areas already largely initiated by the National Schistosomiasis Control Program. Prevalence rates are still high in semi-urban areas (Nkayi). As praziquantel treatments are available and effective, it is important to step up mass treatment campaigns in high risk areas already largely initiated by the National Schistosomiasis Control Program.

Keywords : Bilharzia, *Schistosoma haematobium*, oviuria, urbanization, Congo

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