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## Centre for health Systems Research & Development

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Prevalence of onchocerciasis, attitudes and practices and the treatment coverage after 15 years of mass drug administration with ivermectin in the Tombel Health District, Cameroon

## CITATION

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## ABSTRACT

**Introduction**: onchocerciasis is an infection caused by Onchocerca volvulus. It affects 37 million people of which 99% are in Africa. This study assessed the prevalence of onchocerciasis after 15 years of mass drug administration with ivermectin.

**Methods**: this was a population based cross sectional study. Questionnaires covering participants' identity and attitudes and practices of community respondents towards ivermectin were administered. The treatment coverage was obtained by review of records of mass drug administration from 1999 to 2015. The epidemiological evaluation of infection status was done by parasitological examination of skin snips and nodule palpation in individuals in five health areas of the district.

**Results**: a total of 400 participants were randomly selected. Of these, 56.0% were males, 62.0% single, 59.5% farmers and 98.0% Christians. Participants with good attitudes towards community directed treatment with ivermectin made up 80.5% while 47.8% of the participants had good practice. The highest treatment coverage achieved was 88.0% in 2010 while lowest was 57.0% in 2002. Less than 2% had microfilaria and 6.0% had nodules. There was no statistically significant difference in the prevalence of microfilaria with respect to age. There was a statistically significant difference in the distribution of nodules ( $\chi$ 2=73.6, p=0.001) among the different age groups. The greatest rate of infection (2.1%) was among farmers.

**Conclusion**: this study showed that the prevalence reduced compared to other prevalence studies in Cameroon. The study area was hypo-endemic for onchocerciasis.