

# OVERWHELMING MALARIA PREVALENCE IN CAMEROONIAN SCHOOLCHILDREN

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## Introduction

Malaria is still the main children killer in sub-Saharan countries in 2010 despite numerous efforts to tackle the disease (1). The implementation of control programs including distribution of ITNs to pregnant women and delivery of IPT has widely been adopted in endemic regions (2). Fetching parasitological data is crucial for any control strategy (3) and this has become easier with the use of battery-operated fluorescence microscope on the field. Nevertheless, school children who constitute one of the main targets are not yet focused enough for malaria control interventions.

## Objectives

To conduct a cross-sectional survey to assess the prevalence of malaria in schools of semi-urban and rural areas in south-west Cameroon (in order to propose integrated control measures).

## Methodology

542 primary schoolchildren in rural and relatively urbanized areas aged 6 to 14 years were visited in their schools by researcher's team in April 2010. The inclusion criterion was the handing over of an informed consent form signed by parent/legal guardian. Demographic and Clinical data were recorded and the axial temperature was then measured. Blood was collected from the children by pricking the finger.

Parasitaemia was assessed using a CyScope® fluorescence microscope (Partec, Görlitz, Germany) using a high power Royal Blue Light Emitting Diode (LED) for incidence fluorescence excitation and a white light LED for transmitted light. The CyScope® was operated with a built-in rechargeable battery.

## Results

Prevalence of malaria in the schoolchildren with parent's informed consent (PIC)

Overall prevalence of malaria in the schools

School	Total number of Children in school	Children with PIC	Rate of adhesion (%)	Positive cases	Malaria Prevalence %
GPS Group I MOLYKO / BUEA	259	110	42.5 %	39	32.5 %
GPS Group II MOLYKO / BUEA	235	80	34.04 %	21	26.25 %
CATHOLIC SCHOOL MUEA	445	183	41.12 %	99	54.1 %
GS BOMAKA / BUEA	428	169	39.5 %	154	91.12 %
<b>TOTAL</b>	<b>1367</b>	<b>542</b>	<b>39.65 %</b>	<b>313</b>	<b>56.7 %</b>

Morbidity was assessed before and after blood sampling. Prostration, fever, headache, abdominal pains were the most common symptoms for children with high parasitaemia.

## **Discussion**

Our study has shown that malaria prevalence remains extremely high in the schools of the semi-urban and rural areas of the Buea Health district. The low adherence rate may be due to ignorance on the part of many parents as some of them do link the collection of their children's blood to witchcraft. The results can be biased by the fact that parents who accept to participate may have more frequent malaria in their family.

## **Conclusion**

Sensitisation has to be intensely conducted and malaria screening encouraged in schools.

## **References**

- 1 – WHO 2008. New report finds more funding leading to increased coverage of malaria control interventions WHO report, 18 September 2008
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- 3 - Breman JG and Holloway CN. 2007 Malaria Surveillance Counts *Am. J. Trop. Med. Hyg.*, 77 (Suppl 6), pp. 36–47