# IMPACT OF INTEGRATED MALARIA CONTROL AMONGST COMMUNITIES DISPLACED BY CONFLICT ON THE CHAD/DARFUR, SUDAN BORDER

Sarah Hoibak<sup>1</sup>, Antonella Scifo<sup>1</sup>, Jean-Bernard Bouvier<sup>1</sup>, Richard Allan<sup>1</sup>

¹The MENTOR Initiative, United Kingdom

### INTRODUCTION:

Since 2004, over 200,000 Chadians living in the border region of Chad with southern Darfur, Sudan (Goz Beida Health District) have hosted >35,000 Sudanese refugees. In the period from October 2006 to April 207 this conflict expanded across the border into Chad internally displacing 166,700 Chadians.

The conflict region lies in the southern region of the Sahel, features savannah/scrub vegetation and experiences a rainy season that typically starts in early June and lasts through September. Malaria transmission in the region is mesoendemic and epidemic prone. The MENTOR Initiative established an integrated malaria control programme for October 2006 for all refugee, internally displaced (IDP) and host communities in the conflict affected area. The programme continued despite ongoing conflict throughout the period.

### **METHODS:**

Through 2007/2008, 100% of accessible refugees, IDPs and host populations were provided with Indoor Residual Spraying (IRS) and/or long lasting insecticide treated nets (LLINs), along with continuous malaria prevention education (Image 1) by the MENTOR Initiative.

Image 1: Malaria Education at LLIN Distribution



In 2006 6 health facilities were functional and by 2008 this expanded to 13 health facilities (6 MoH and 7 NGO supported) to reach the IDPs. 13 health centers were trained, equipped and supervised for two years to provide differential diagnois, confirmatory diagnosis with rapid diagnositc tests (RDTs), treatment of uncomplicated malaria with artemisinin based combination therapies (ACT) - Artesunate- Amodiaquine, and severe malaria with IM artemether. Monitoring of supplies, and health worker coaching was sustained for two years.

Consultation data from inpatient and outpatient facilities was collected by the MENTOR team from all functional centers on a monthly basis from 2006 until the end of 2008, when security and access permitted, to track the proportion of presumed and confirmatory malaria cases.

## **RESULTS:**

In 2006 malaria data from the national malaria control programme for the functional health facilities accounted for 22% (Figure 1)of all health facility consultations.

Health facility data showed that malaria dropped to 7.0% (Figure 2) of all health facility consultations by the end of 2007 and to 3.93% (Figure 3) by the end of 2008.

Figure 1: Goz Beida Health District 2006

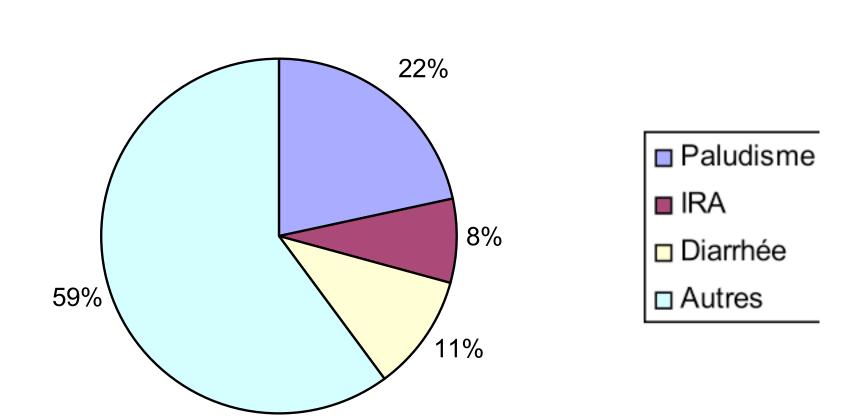


Figure 2: Goz Beida Health District 2007

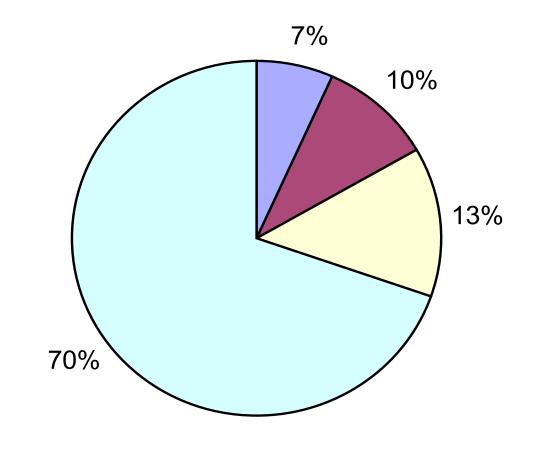


Figure 3: Goz Beida Health District 2008

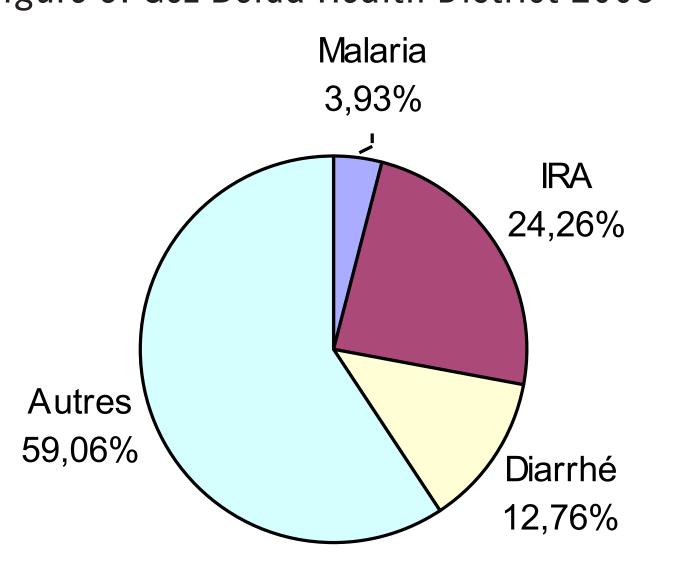






Image Top: Health Facility Worker performing RDT; Image Bottom: IRS equipment prepared for IRS Campaign

# **CONCLUSIONS:**

Despite insecurity and conflict access to effective malaria diagnosis and treatment prevention methods can be significantly increased and maintained. This strategy has measurably shown the reduction in the proportion of health facility consultations for malaria, and demonstrates that integrated malaria control in humanitarian crises is feasible and can result in significant reduction of malaria.



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