

## Key messages

- Injectable artesunate (Inj AS) distribution without building health workers' knowledge of its correct administration may result in Inj AS misuse and drug resistance.
- An intensive training including theoretical and practical sessions to health workers managing severe malaria is key in ensuring appropriate Inj AS use in management of severe malaria.



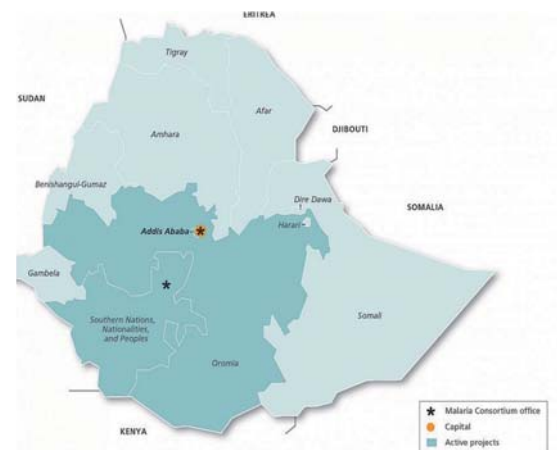
## Introduction

The World Health Organization (WHO) recommends Inj AS as the first drug of choice for the treatment of severe malaria. Ethiopia adopted the WHO malaria case management guidelines in 2012. However, despite the availability of the national malaria treatment guidelines, health workers in the country did not receive training on appropriate use of Inj AS for treatment of severe malaria. Malaria Consortium is leading a multi-country project in three sub-Saharan African countries including Ethiopia to reduce severe malaria related deaths through improved access to and use of Inj AS. The project supports health workers' capacity building, Inj AS procurement at a reasonable price, and supply chain management for improved forecasting, quantification and distribution of Inj AS.

**Study aim:** To assess the knowledge of health workers about Inj AS and its proper administration for treatment of severe malaria cases in selected health facilities.

## Methods

- Self-administered questionnaires were used to assess health workers' knowledge of appropriate Inj AS administration before training.



- The study was conducted with 320 health professionals randomly selected from 1,149 and 349 health facilities in malarious districts of Oromia and Southern Nations, Nationalities and Peoples Regional State (SNNPR).

## Results

**Table 1:** Baseline characteristics of the study participants

Characteristic	n (%)
<b>Profession</b>	
Physician	50 (15.6)
Health officer	31 (9.7)
Nurse	175 (56.7)
Pharmacist	39 (12.2)
Druggist	22 (6.9)
Other	3 (0.9)
<b>Professionals by health facility level</b>	
Hospital	256 (80.0)
Health centre	54 (16.9)
Regional Health Bureau (RHB)	10 (3.1)
<b>Region</b>	
Oromia	212 (66.8)
SNNPR	108 (33.2)
<b>Sex</b>	
Male	218 (68.1)
Female	102 (31.9)

**Table 2:** Responses to key questions assessing knowledge of Inj AS administration

Questions	Correct response n (%)
Knowledge on clinical feature of severe malaria	229 (71.6)
Inj AS is recommended for severe malaria	301 (94.1)
Safety of Inj AS in different age group	211 (65.9)
Correctly calculate dose of Inj AS	191 (59.7)
Administration time after reconstitution	115 (35.9)
Time interval between doses of Inj AS	24 (7.5)
Demonstrate steps for proper preparation and administration of Inj AS	11 (3.4)
Safety of Inj AS during all trimesters of pregnancy	6 (2.0)

## Summary

Most health workers know that Inj AS a first drug of choice for treatment of severe malaria in Oromia and SNNPR. However, the study demonstrated that there is a lack of knowledge to prepare and administer Inj AS.

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