

Session 1: 17:20 – 17:35

Toward lymphatic filariasis elimination by Mass triple-drug administration: a clinical trial in a resource-limited setting.



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Short CV

Taniawati Supali is a professor at the Department of Parasitology, Faculty of Medicine, Universitas Indonesia.

She received her doctorate degree in Biomedical Sciences from Universitas Indonesia.

She has several research projects focusing on the lymphatic filariasis elimination program in Indonesia.

Since lymphatic filariasis is endemic in Indonesia especially in rural areas, her projects were primarily in rural areas with less access to electricity, clean water supply, and communication.

Abstract

Lymphatic filariasis (LF) is still a major public health problem in Indonesia. There are three filarial parasites, *Wuchereria bancrofti*, *Brugia malayi*, and *Brugia timori*, distributed in 236 endemic districts with *Brugia sp* as the dominant species. Currently, all the endemic districts have implemented the elimination program through mass drug administration (MDA) with DEC-Albendazole (DA).

So far about 30 districts have been declared free of lymphatic filariasis by the Ministry of Health. To accelerate the elimination program, WHO has changed the guideline from MDA with two drugs (DA) to three drugs, Ivermectin, DEC, Albendazole (IDA).

Before implementing the new regimen in Indonesia, a community clinical trial of IDA compared to DA was done in Sumba Barat Daya district, Sumba Island, Nusa Tenggara Timur Province. Three villages with the microfilarial (Mf) rate ranging from 2.4% -10.7% in the preliminary survey were chosen. The study area is co-endemic for *B. timori* and *W. bancrofti* with *B. timori* as the predominant species.

The study area is located about 3 hours from the capital city with limited access to clean water and electricity. Most of the people in the villages communicate using local languages. Therefore, local people were involved in the socialization of the study.

Considering the lack of electricity and clean water supply, the research team had to prepare a proper housing to stay during the clinical trial. The team stayed in the housing complex of the primary health centre located in the sub-district, which is about 30 – 45 minutes from the villages. Also, the team had to renovate the houses to get enough clean water and electricity for the whole members. For the internet access, satellite dish and modem were rented from an internet provider to facilitate communication among the field team, principal investigator, and adverse effect monitoring team; and to send daily data from treatment and monitoring of adverse events.

For about three months, the research team has treated IDA and DA to the community with a total population of 2617 people living in three villages. The community clinical trial could be done smoothly without any significant obstacles.