

## Myanmar given an international boost to eliminate malaria

Groups from across the Myanmar political spectrum met with US and international bodies to discuss tangible steps toward the elimination of malaria in the region. Sanjeet Bagchi reports.

For more on the **Washington, DC conference** see [http://csis.org/files/attachments/150804\\_Myanmar\\_Conference\\_Statement.pdf](http://csis.org/files/attachments/150804_Myanmar_Conference_Statement.pdf)

For more on **artemisinin resistance and the K13 mutation in Myanmar** see **Articles** *Lancet Infect Dis* 2015; 15: 415–21

On Aug 3, an unprecedented meeting was held in Washington, DC, between the Myanmar government and military officials, representatives from Myanmar's main opposition party (National League for Democracy), and ethnic minority communities to discuss an ambitious plan to eliminate malaria from Myanmar—or, more broadly, from the entire Asia Pacific region—by 2030.

Convened by the Global Health Policy Center at the Center for Strategic and International Studies, the American Society of Tropical Medicine and Hygiene, and the Institute for Global Health at the University of Maryland School of Medicine, the meeting was also attended by representatives from the US Government, the US Pacific Command, the US Centers for Disease Control and Prevention, the National Institutes of Health, the World Bank, and various international organisations.

"Myanmar, as a member of the East Asia Summit and the Association of Southeast Asian Nations, has committed to the ambitious goal of a malaria-free Asia Pacific by 2030", noted a conference statement. The statement, however, added that significant challenges still remain

in this regard. Myanmar's malaria burden is among the highest in the Greater Mekong sub-region, and artemisinin-resistant malaria poses an increasing threat, the statement pointed out, adding that because of malaria, serious burdens have been imposed on Myanmar's economic growth and the health and vitality of people living in the country. According to the statement, "these burdens may also pose risks regionally and globally; with a sustained and successful effort in Myanmar, it will be possible to eliminate malaria in southeast Asia and reverse the spread of resistance, which is a global threat to malaria control".

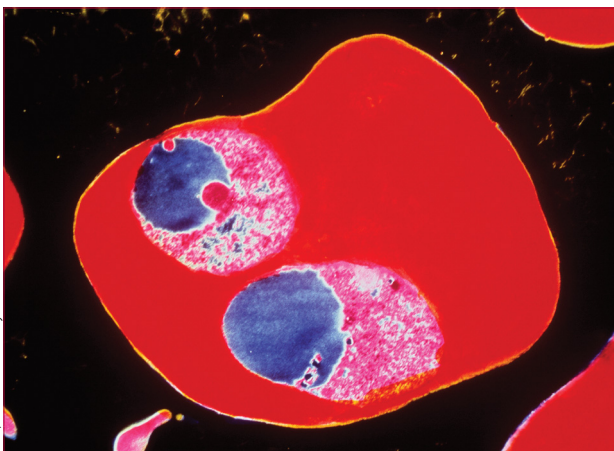
Recent research published in *The Lancet Infectious Diseases*—that aimed at assessing artemisinin-resistant *Plasmodium falciparum*'s spread across Myanmar, by determining the prevalence of the parasites carrying K13 mutations (linked to artemisinin resistance)—has shown that resistance to artemisinin extends across much of Myanmar. According to the research, "the pace at which the geographical extent of artemisinin resistance is spreading is faster than the rate at which control and elimination measures are being developed and instituted, or new drugs being introduced. A vigorous international effort to contain this enormous threat is needed".

To combat the situation, as the participants in the meeting pointed out, durable capacity building within the government and non-government institutions in Myanmar should be prioritised in the next few years. The capacity building includes investing in skilled staff, managerial expertise, laboratories, research, and data systems. The success of malaria elimination in Myanmar depends on

reaching all the people in the country, the participants noted, with effective and targeted implementation of malaria prevention and surveillance tools, along with expedited and quality diagnosis and treatment of those suffering from the disease. "Success requires expanded cooperation among governmental and non-governmental organizations, civil and military medical expertise, ethnic health organizations, and technical and donor partners", the conference statement pointed out.

In the meeting, the diverse Myanmar participants and their partners, who spoke of working collectively to eliminate malaria from the country, also noted that "eliminating malaria in Myanmar has the potential to unify Myanmar society and serve as a catalyst for social change". As the conference statement revealed, "there is a baseline consensus on the way forward that better informs all colleagues about the significance of investing in malaria control and elimination to promote health in Myanmar as well as the surrounding region". "This consensus transcends political and cultural differences, and attracts significant support from external partners", the statement added.

Christopher Plowe, professor and founding director of the Institute for Global Health at the University of Maryland School of Medicine, Baltimore, MA, USA, said, "the most important outcome of the meeting was the building of new lines of communication and trust between groups who will have to work together if malaria is going to be eliminated in Myanmar". "Prospects for elimination are a lot higher now that ruling and opposition party politicians and health officials from the government, the military, and ethnic groups have all publicly committed to work



together to eliminate malaria from Myanmar no matter what happens in the upcoming elections and ongoing cease-fire negotiations”, he added. According to Mehul Dhorda, head of the Asia Regional Centre of WorldWide Antimalarial Resistance Network, “combating resistance to any medicine requires commitment and collaboration from governments, politicians and health-care professionals and so the commitment [made in the meeting] to work together regardless of the outcome of the election is a significant step forward and could make a huge difference to public health in Myanmar”. In Myanmar, landmark elections will be held on Nov 8.

Plowe explained that in Myanmar, artemisinin resistance has emerged independently, presumably in response to sustained selection pressure from artemisinin-based treatments. “But as we have seen with spread of resistance between Cambodia and Vietnam, and in the

past with worldwide spread of drug-resistant malaria, there is also a serious risk of resistance spreading from Myanmar, especially to Bangladesh and India”, he noted. As WHO has recently recommended, Plowe pointed out, tackling artemisinin resistance will need complete elimination of falciparum malaria from the Greater Mekong sub-region of Myanmar. “This is going to require good surveillance and targeted use of drugs and other interventions tailored to environmental and epidemiological circumstances”, said Plowe. “No one tool will do the job—we need to use all the available tools—and the most important factor for success will be good coordination”, he added.

Dhorda said that Myanmar has struggled to get the needed funds and support to scale up its malaria control operations and the situation has been particularly difficult in some areas in eastern Myanmar. According to him, security issues, difficulty of access to remote communities, poor health

facilities, and substandard medicines have all contributed to the issue; in some areas there has been limited access to good quality artemisinin-based combination therapies (ACTs). As Dhorda pointed out, “there are currently no realistic alternatives to ACTs, so we need to ensure that their lifespan is prolonged and their efficacy is maximised, for instance through ensuring that dosing regimens are optimal for all patient groups and that the use of substandard medicines is minimised”. However, Stephen Morrison, senior vice president and director at the Global Health Policy Center, noted that in Myanmar, to be more effective in eliminating malaria, a national plan is needed, which “brings adequate resources, integrates and coordinates the various fragmented programmes, substantially improves data and surveillance, and moves to universal access to programmes to detect, prevent and treat”.

*Sanjeet Bagcchi*

## Infectious disease surveillance update

### Ebola update—Sierra Leone

On Aug 29, 2015, an Ebola virus positive patient was notified from the Kambia district in Sierra Leone. The case was the first to be reported after 22 days with none reported in the country and 48 days of no reported cases in Kambia district. The deceased woman, aged 67 years, fell ill on Aug 20, and was treated in the community by the community herbalist. Almost 1000 people have been quarantined from 225 households in the affected chiefdom of Tonko Limba. 62 of these contacts are considered at high risk. On Sept 5, a patient positive for the virus was also reported from a contact of the first case. More than 8600 cases have been confirmed since the outbreak began in Sierra Leone in May, 2014. The rVSV-ZEBOV ring vaccination trial in Guinea is also

being extended to Sierra Leone to vaccinate eligible contacts.

### Malaria in Uganda

An outbreak of malaria was declared by the Ministry of Health Uganda on July 15, 2015, when more than 22 000 cases and 162 deaths were registered in less than 2 months. As of Sept 1, 2015, the outbreak was continuing to grow with weekly incidence increasing from 3000 to 8000 cases. Before this outbreak malaria cases in the ten affected regions in northern Uganda had been decreasing after an indoor residue spraying programme began 5 years ago. The Ugandan Malaria Control Program is trying to establish the cause of the outbreak by assessing drug quality, possibility of insecticide resistance in the mosquito vector, and any programmatic changes

to the indoor residue spraying programme.

### Measles in DR Congo

As of Sept 1, 2015, more than 20 000 people have been infected with measles in Katanga province in the Democratic Republic of the Congo. More than 300 deaths have also been reported. At least 20 of Katanga’s 68 health districts are now affected; an increase from the ten affected in June. The difficult environment of the province and the cold chain requirements of the measles vaccine make vaccination campaigns more difficult. Médecins Sans Frontières has vaccinated more than 300 000 children and treated more than 20 000 measles patients in the past 3 months.

*Ruth Zwizwai*

For more on **Ebola in Sierra Leone** see <http://nerc.sl/?q=ebola-big-idea-evd-updates>

For more on the **Ebola case in Kambia** see <http://nerc.sl/?q=national-ebola-response-centre-evening-brief-04092015>

For more on the **Ugandan malaria outbreak** see <http://outbreaknewstoday.com/uganda-reporting-up-to-10000-malaria-cases-a-week-in-the-north-28150/>

For more on **measles in DR Congo** see <http://www.promedmail.org/direct.php?id=3628171>