



Editorial

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World Malaria Day 2015- What's New?

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World Malaria Day is observed on 25th April every year. April 25 was designated as Malaria Awareness Day in 2007 by President George W. Bush. World Malaria Day theme for 2013-14-15 is "Invest in the future. Defeat malaria".

Burden of Malaria

Approximately half of the world's population is at risk of malaria. 97 countries and territories had ongoing malaria transmission in 2014. Plasmodium knowlesi – a species that causes malaria among monkeys has been detected in recent years in certain areas of South-East Asia. The new strategy, which aims to reduce malaria cases and deaths by 90% by 2030 from current levels, will be presented to the World Health Assembly in May. In the last decade, only four countries have been declared malaria-free. The goal has been set up to eliminate the disease from a further 35 countries by 2030.^[1]

Antimalarial drug resistance

Resistance to antimalarial medicines is a worrying issue; which first appeared in Cambodia in 2007 and then reached southern Burma. There is urgent need to address the situation in Cambodia, where the once-potent combination of artemisinin with a second antimalarial is failing in more than 40 per cent of cases. Laos, Myanmar, Thailand and Viet Nam have reported antimalarial resistance in recent years.^[2] Oral artemisinins as monotherapy is thought to be an important cause for this problem. Development of resistance to artemisinins and its spread to other large geographical areas, could have serious the public health consequences. It is reported that the resistance to this vital drug has spread across Burma. It could spread across to India and then extend to Africa if not tackled promptly. Africa has 90 per cent of the world's malaria cases. Resistant malaria parasites have mutations in a gene called K13 that can be tracked and tackled in our flight to defeat malaria. Mutant genes have been found in the blood of people with malaria in northern and eastern Burma in more than a fifth of samples from seven of Burma's 10 provinces. It is reported that this gene mutation was detected in nearly half the blood samples from a clinic merely 25 kilometers from the border with India.^[3]

On the positive note, India has outperformed in the number of microscopic examinations to diagnose malaria by 120 million slide examinations out of the global total of 197 million. It is welcome news to know that India could see up to a 75% reduction in malaria infections by 2015, but the country's dependence on a single drug to treat the disease could prove counterproductive in the long-run, possibly resulting in a drug-resistant form of malaria, a report by the World Health Organization (WHO) has said. India reported 870,000 malaria infections in 2013 and this number could go to between 435,000 and 220,000 in 2015. India and Thailand are on track to achieve a 50-75% decrease in malaria cases by 2015, according to the World Malaria Report 2014.^[4] The report also highlighted India's dependence on the oral drug artemisinin to treat malaria. The use of such single-drug therapies threatens the long-term efficacy of artemisinin-based combination therapy (ACT), a key intervention to treat malaria, as it increases resistance to the drug. Hence, WHO has recommends the routine monitoring of antimalarial drug resistance with its support to countries to strengthen their efforts in this area of malaria resistance.

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Insecticide resistance

Malaria Control success is largely due to effective vector control to date.

Currently, pyrethroids are the only recommended insecticides for ITNs (insecticide treated nets) or LLINs (long lasting insecticidal nets) to prevent parasite transmission. However, mosquito resistance to pyrethroids has emerged in many countries recently and resistance to all 4 classes of insecticides has been detected. The positive aspect of this resistance is that it has not been associated with decreased efficacy with rare exceptions. LLINs and IRS (Indoor Residual Spraying) remain highly effective tools in almost all settings. After having said that; it is to be noted that India and sub-Saharan Africa still have significant issues in insecticide control.

These countries have high levels of malaria transmission and reports of insecticide resistance. The development of new, alternative insecticides has been undertaken on high priority. There are a few insecticide products in the pipeline, which can address this issue. It is expected that a new insecticide for bed nets will be developed and available on priority in near future.

It is to be emphasized that detection of insecticide resistance has to be an essential component of all national malaria control efforts in the vector control measures. The choice of insecticide for IRS should always be based on the most recent local data on the susceptibility of vectors to be eliminated.

WHO has worked with many of stakeholders to develop the "Global Plan for Insecticide Resistance Management" (GPIRM) in malaria vectors. This plan has been in force since May 2012 in order to ensure coordinated and timely global response to the threat of insecticide resistance

Vaccines against malaria

As of today there is no vaccine against malaria. One research vaccine against *P. falciparum*, known as RTS, S/AS01, has been evaluated in a large clinical trial in 7 countries in Africa and has been submitted to the European Medicines Agency for regulatory review. Recommendation by WHO about the use of this vaccine will depend on the outcome of this large clinical trial as well as regulatory review. The recommendation as to whether or not this vaccine should be added to the existing malaria control tools is expected in late 2015.

Elimination of Malaria

The Asia Pacific Malaria Elimination Network (APMEN) announced the joining of the Republic of India as a Country Partner in 2015. APMEN is bringing together 17 countries in the Asia Pacific region and these countries have adopted a national or sub-national goal for malaria elimination. APMEN connects these countries to a large number of regional and global malaria partners, with the aim of regional malaria elimination. India is prepared for its first official representation as a Country Partner at APMEN's 7th annual meeting in Vietnam in March 2015.

As the region's second largest malaria-endemic country with a population of more than 1.2 billion, India is an essential Country

Partner in achieving a malaria-free Asia Pacific by 2030; a commitment made by the Secretary of Health and Family Welfare representing the Government of India at a meeting of Asia Pacific Leaders' Malaria Alliance (APLMA) last year. According to the latest data from the World Health Organization, India has more than halved the number of malaria cases since 2000. However, there were still just over 1 million confirmed cases and 578 deaths attributed to the disease in 2014.

Let us be more enthusiastic and proactive towards World Malaria Day 2015.

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