The buzz around malaria

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The reputed medical journal, The Lancet, recently published an article on malaria-related deaths in India, which were estimated to be two lakh per year, and 13 times higher than the estimate of the World Health Organisation. WHO representatives contested these numbers and the methodology behind them, but conceded that their own numbers were too low. Earlier this year, two of the study’s authors had derived an estimate for HIV-related deaths in India using a similar methodology (“verbal autopsy”) and published in another British journal that markedly differed from the official WHO estimate, except that in this case it was much lower.

To the people affected, it hardly matters that disease-related deaths are “overestimated” (in the case of malaria) or “underestimated” (in the case of HIV). Vector-borne disease control programmes, including malaria diagnosis and treatment, should be integrated into the general health system rather than acting as vertical programmes in silos. The National Rural Health Mission (NRHM) which is meant to do this, is moving in the right direction but at a glacial pace — it was only recently that its army of eight lakh ASHA (accredited social health activist) workers were permitted to be equipped with malaria rapid tests and tablets. In how many districts and areas they will effectively identify and treat malaria, however, is not clear.

Involving the private sector is another government initiative, but this is limited to free provision of the same tests and tablets whereas a government subsidy programme — in which Indian generic pharmaceutical companies could offer cheap, effective anti-malarial drugs through chemist outlets with the potential to reach many more patients — is not even being considered. The current reality in small-towns and rural areas is that private providers will ask patients with suspected malaria to return on three consecutive days to get injections of a highly active but also expensive malaria drug called artemisinin when most of them could be treated with tablets containing artemisinin-based compounds along with another anti-malarial drug from a different class, thus preventing the development of drug resistance.

To someone who has spent the last 13 years, on and off, in malaria-endemic areas in rural central India (where India’s official malaria map places the highest burden), the countrywide number of two lakh malaria deaths does not seem surprising at all. Mosquito plagues, limited access to diagnostic and treatment services, especially during the rainy season (when farmers are reluctant to leave their fields and mud roads become impassable), and recourse to traditional healers and home remedies in case of fever or other ailments, are a familiar picture in rural India.

Cerebral malaria, which affects the brain, is potentially fatal, but infection with the malaria parasite can also lead to life-threatening severe anaemia, since it destroys red blood cells. These febrile conditions may resemble viral encephalitis, meningitis, sepsis and pneumonia, which also claim a large number of lives. The Lancet study quotes that 1.3 million annual deaths in rural India have fever as the main symptom and that therefore 15 per cent of these are attributable to malaria. The WHO suggests that it is less than 4 per cent. A more relevant question may be how many deaths are attributable to diseases transmitted by mosquitoes and how effectively these can be
controlled or prevented from transmitting disease through integrated pest management, indoor residual spraying, and insecticide-treated bed nets.

This is where the National Vector-Borne Disease Control Programme must deliver, especially in hard-to-reach geographies. Those infectious diseases not transmitted by mosquitoes must similarly be detected and treated early at the community level by the aforementioned ASHAs who, according to one UP government tender document for “child survival kits”, may administer the potent drug amoxicillin along with a previously used slow acting antibiotic. The NRHM’s Integrated Management of Neonatal and Childhood Illness strategy has been designed to assess children for and treat malaria, pneumonia and other life-threatening diseases at the village level, but its roll-out has taken years and its implementation has been patchy.

Most of these diseases are particularly prevalent during the rainy season during which access to health services is severely limited, hospital wards overflow with patients and the death toll touches the highest point. Planning public health interventions pro-actively by stocking up on commodities at the village level before the monsoon months, raising awareness and training volunteers among the community, may result in the reduction of fever-related mortality. This should be the real focus of research and evaluations rather than debating the absolute numbers of deaths due to a single disease like malaria.

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