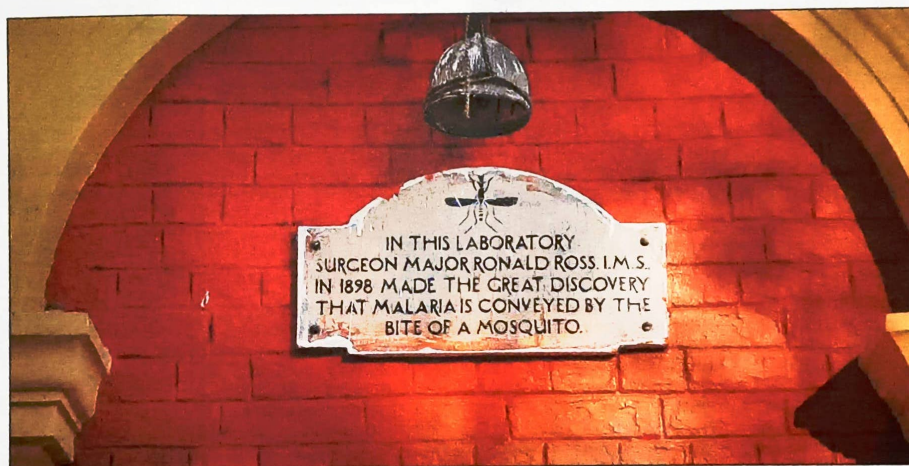


Brilliant but eclipsed

Partha P. Majumder rescues an eminent Bengali scientist, Kishori Mohan Bandyopadhyay, from the shadow of Ronald Ross

Recent newspaper reports on a surge of malaria in Jharkhand with about 4,500 recorded cases in June that had pushed this year's total to over 16,000 recorded cases till then in that state reminded me not only of Ronald Ross but also of a man who many believe should have shared the Nobel Prize with Ross. The Nobel prize in Physiology or Medicine was awarded to Ross in 1902 "for his work on malaria, by which he has shown how it enters the organism and thereby has laid the foundation for successful research on this disease and methods of combating it." Indeed, the methods of combating the disease — primarily by the use of bed nets that prevent mosquito bites, antimalarial drugs, and control over mosquito breeding — have had great successes against malaria.

A year after Ross received the Nobel Prize, Kishori Mohan Bandyopadhyay, a research assistant of Ross, was awarded the King Edward VII Gold Medal. Several eminent persons of Bengal, including Upendranath Brahmachari, Acharya Jagadish Chandra Bose, Brajendra Nath Seal, Sivanath Sastri, Surendranath Banerjee and Acharya Prafulla Chandra Ray, met the then viceroy of India, Lord Curzon, and pleaded with him to adequately recognise Kishori Mohan for his contributions to understanding how malaria is transmitted and how the disease can be controlled. Lord Curzon was convinced and arranged for the Gold Medal to be awarded during the Delhi Durbar by the Duke of



Shared honour

Connaught in the presence of Indian princes and dignitaries at a function in Delhi in 1903.

After his return from Delhi, a felicitation function — presided over by Chittaranjan Das — was held in the Senate Hall of Calcutta in honour of Kishori Mohan. Upendranath Brahmachari delivered the main lecture. The other speakers included Brajendra Nath Seal, Sivanath Sastri and Bidhan Chandra Roy.

Kishori Mohan was born in 1877 in the Entally area of Calcutta in a family deeply rooted in education. Ross had built a laboratory in Mahanad village in Hooghly

district, about 8 km from Pandua, for conducting research on malaria. He needed a research assistant. After interviewing many potential candidates, he was impressed with Kishori Mohan for his enthusiasm and his confidence and recruited him in 1898. Kishori Mohan had graduated in science from Presidency College.

Ross and Kishori Mohan embarked on a quest to unravel the relationship between mosquito and malaria. This necessitated testing the blood of malaria patients, observations and dissections of mosquitoes. Kishori Mohan regularly visit-

ed villages, identified patients with malaria, and brought them to Ross's lab. Ross then collected their blood samples for further studies in which Kishori Mohan also provided assistance. By 1899, their collaborative work had helped establish the role of the female *Anopheles* mosquito in transmitting malaria to humans.

Kishori Mohan, with the help of his friend and the country's first roaming photo artist, Lakshminarayan Roychowdhury, made slides about malaria and its transmission by mosquitoes. He started to tour villages with his 'Magic Lantern', projecting the slides and

informing the public about malaria and how to prevent it. He lived in his ancestral home in Panihati across the river from Mahanad.

In 1918, a malaria epidemic struck the country. Some physicians started a public health movement to control the spread; Kishori Mohan joined them. The Anti-Malaria Co-operative Society was formed in Panihati in 1918 with 27 members; Kishori Mohan was its founder secretary. It organised the cleaning of ponds and drains of Panihati and other areas, removed garbage, and sprayed kerosene. The spread of malaria was brought under control. This success resulted in the formation of similar anti-malaria societies in other villages and, eventually, of the Central Anti-Malaria Co-operative Society in 1919.

Kishori Mohan possessed a deeply humanitarian outlook. During his anti-malaria campaigns, he felt that the poor villagers needed to be freed from the stranglehold of moneylenders. He pooled his savings and sold his wife's gold ornaments to start the Panihati Co-operative Bank in 1927. The bank was a great success in ameliorating the condition of poverty-stricken villagers around Panihati and is still operational. However, he himself became penniless.

Kishori Mohan died on August 20, 1929. As India continues to battle periodic outbreaks of malaria, we should remember him with deep respect. His work helped lay the foundations of malaria control, and he was one of the architects of our country's public health movement. His life reminds us that scientific discovery achieves its greatest impact only when it is carried to the people with compassion, dedication and a spirit of service.

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