

# A MODEL FOR BATTLING FUTURE DISEASE

*A pioneering campaign to control leprosy in Pakistan provides a powerful model for future science cooperation among nations, researchers and NGOs.*

✍ by Rabia Hussain



Rabia Hussain of Pakistan in 2014 was named by MuslimScience.com as one of the 20 most influential women scientists in the Muslim world. She has won honours for her work in immunology, with a focus on leprosy and tuberculosis. A 2003 TWAS Fellow, she serves as vice president for Central and South Asia. She is a Fellow of the Royal College of Pathologists and the Pakistan Academy of Sciences and distinguished national professor at the Central and Higher Education Commission, Pakistan.

► Dr. Ruth Pfau examining a woman in Pakistan. (Photo: Marie Adelaide Leprosy Centre)

One of the most challenging issues when dealing with control of communicable diseases is to obtain the right kind of support and trust from the people. To do so in a country wracked by terrorism and extremism is no less than a miracle.

Dr. Ruth Pfau, a German physician and nun, visited Karachi, Pakistan, 55 years ago and was affected by the plight leprosy patients, a totally marginalized group. She decided to stay and help. In 1963 this project was moved to a hospital in the heart of Karachi despite vehement opposition from both the medical community and civil society. This hospital became the nerve center of the control programme and was named Marie Adelaide Leprosy Center [MALC].

The plan to achieve leprosy control in Pakistan by 2000 was conceived in 1983, and launched in 1984. A network of field clinics and field technicians was developed covering more than 80% of the population. This programme extended into Azad Kashmir and Afghanistan, to be later handed over to local partners. This activity was to pay dividends when Afghan refugees flooded Pakistan, particularly Karachi, and were willing to trust Dr. Pfau, which allowed uninterrupted leprosy-control activities.

Control was achieved in 1996, making Pakistan the first country to achieve this target in the World Health Organization [WHO] Eastern Mediterranean region, four years ahead of the target date. However, control is not eradication of a disease, which requires every last patient to be treated and rehabilitated. This challenge is monumental as leprosy-causing bacteria



survive for more than 30 years in the body and can activate if the host immune system is compromised, thereby renewing the disease. Continued vigilance and training will therefore be required for several decades to come.

To keep this network viable, diversification of the programme was needed. Using the basic skills and experience already available, but keeping in mind the primary objective of moving towards leprosy eradication, a triple merger was conceived and implemented based on the needs of various provinces: Blindness control in Baluchistan and tuberculosis control in Sind was combined with the anti-leprosy project in Pakistan. Community-Based Rehabilitation was an essential part of the services for leprosy patients and now it is being extended to patients with non-leprosy deformities as well.

The future vision is to network with other non-governmental organizations carrying out similar activities so that separate campaigns against different diseases can benefit from each other's strengths while reducing inefficient duplication. ■