

Fungal infections no less lethal than TB, AIDS

Aarti Dhar

NEW DELHI: Fungal infections kill close to 1.3 million people globally every year, matching the mortality rate of AIDS, cancer, malaria and tuberculosis, and also cause blindness to 300 million people annually.

The magnitude of the problem is particularly serious in India because of overcrowding in hospitals, malnutrition and unhygienic tropical environments, Professor Arunaloke Chakrabarti from the Department of Microbiology at the Post Graduate Institute of Medical Education and Research told reporters here on Wednesday.

“But our challenge goes beyond mere numbers. The majority of our clinicians are poorly trained to recognise and manage these infections;

most microbiology laboratories across the country lack even basic infrastructure and training to provide diagnostic support or monitor antifungal resistance and most antifungal drugs remain prohibitively expensive. Worse, there is hardly any research in the area.”

Major infections

From the limited data available in India, among the three major fungal infections in hospitals, the prevalence of candidemia (300-500 cases per year) at any tertiary care institute (with 1,500 beds) is more than what obtains in the whole of Australia. Unhygienic handling by healthcare staff causes invasive candidemia and the infection flows right up to the blood stream.

Likewise, the rate of invasive mucormycosis, involving

brain and lungs – 50 cases per year in each of most hospitals in India – is more than half of the total cases reported annually from all European countries put together.

“Up to 60 per cent of invasive infections, majority of which can be prevented with timely diagnosis and appropriate treatment, eventually kill a patient. In fact, a million farmers get blind due to fungal keratitis in India, 17-30 million suffer from asthma and 1.7-4.7 million suffer from allergic asthma, also caused by fungal infections,” Professor Chakrabarti explained.

Two initiatives

With a view to addressing these issues, international experts have come together and launched two initiatives – Leading International Fungal Education (LIFE) and Global

Action Fund for Fungal Infections (GAFFI) – to improve fungal infections outcomes in patients through awareness and education and improve diagnostics and access to appropriate antifungal therapies. Prof. Chakrabarti is one of the international advisors.

The LIFE target is to reduce mortality by 70 per cent of Cryptococcal meningitis; reduce mortality by 80 per cent of Pneumocystis pneumonia, and reduce significantly morbidity caused by chronic pulmonary aspergillosis and fungal keratitis (causing blindness).

In India, LIFE will offer educational material, conduct training workshops for healthcare personnel, strengthen the network of laboratories and establish new ones, and provide better diagnostic tools.