MEDIA RELEASE

RE EMERGENCE OF OLD DISEASES SPARK SUPERBUG FEARS
Rise of MDR-TB has Australian health experts on alert
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(Monday, 18 April 2016): The Australasian Society for Infectious Diseases (ASID) – the peak body representing infectious disease experts from across the region – is today warning that diseases once thought to be under control are re-emerging as the drugs we use to treat them become ineffective.

The primary transmission of multi drug-resistant strains of tuberculosis (MDR-TB) is of particular concern, they say.

“MDR-TB threatens TB control programs in Australia’s region and will not diminish without concerted efforts,” warned ASID President Professor Cheryl Jones.

MDR-TB cases can either be previously treated TB cases that develop resistance due to inadequate, incomplete or poor treatment quality or newly diagnosed TB cases infected with a drug-resistant TB strain. Over half of all global MDR-TB cases occur in the Asia Pacific Region.

New research being presented this week at ASID’s Annual Scientific Meeting in Launceston shows that the problem of MDR-TB is not confined to Australia’s neighbours.

A study of paediatric TB cases diagnosed in Queensland found 16 per cent had MDR-TB, all in children from PNG. Although overall incidence of TB was low, the study’s authors warned of the unique challenges Queensland faces in TB diagnosis and control with a high proportion of children diagnosed in the Torres Strait Protection Zone and over-representation of Indigenous children in Australian-born cases.

“Vigilance is needed given the wide spectrum of clinical presentation and incidence of multi-drug resistance,” said lead researcher Professor Clare Nourse.

Dr Ben Marais, from the Marie Bashir Institute for Infectious Diseases and Biosecurity, also presenting at the ASID conference, warns that drug-resistant TB is now such a problem in the Asia Pacific region that it could overwhelm health systems.

“The rise of MDR-TB has been insidious and risks undermining all the hard-won progress we have made,” he said.

Detection and treatment of MDR-TB is particularly problematic. Conventional diagnostic methods (sputum smear microscopy) don’t work so the majority of cases go undetected. Of the 480 000 cases of multidrug-resistant TB (MDR-TB) estimated to have occurred in 2014, only about a quarter of these – 123 000 – were detected and reported.

Treatment duration is very long, up to two years, and complex due to severe side-effects of second-line drugs. High management costs add to the increased economic burden and catastrophic patient expenditures; and treatment outcome is poor. The stigma associated with the disease has also reduced the impetus of countries to act, despite the fact that it is highly contagious and lethal.
Infectious disease experts are now saying that only improved clinical diagnostics and management in our region will prevent MDR-TB from spreading. A combination of public commitment, enhanced infection control, better diagnostics, new drugs and regimes and more effective vaccines are required, they say.

“MDR-TB is not a problem that will just go away,” said Professor Allen Cheng and Dr James Trauer from the School of Public Health and Preventive Medicine at Monash University, who have an article published on MDR-TB in the MJA today.

“This presents an opportunity for Australian leadership. In our setting, with most TB imported and the emergence of MDR-TB so dependent on the strength of health systems, Australia has a critical role to play in supporting developing countries of our region to improve TB control programs and their health systems generally.

“Given that 60 per cent of MDR-TB cases are in the Asia-Pacific, a similar response to improve clinical diagnostics and management in our region would help keep MDR-TB from our shores,” he said.

RE-EMERGENCE OF OTHER INFECTIOUS DISEASES

The World Health Organisation (WHO) has singled out major pathogens and infectious diseases in the Western Pacific Region as posing serious public health challenges including dengue, HIV/AIDS, malaria, tuberculosis, influenza, sexually transmissible infections (STIs) and healthcare associated infections such as Methicillin-resistant Staphylococcus aureus (MRSA), carbapenem-resistant Enterobacteriaceae and vancomycin-resistant Enterococcus spp. Many of these pathogens are now drug resistant.

Another disease from times past, gonorrhoea, is also re-emerging as increases in antibiotic resistance result in treatment failures. In 2015, the National Neisseria Network reported a marked increase in case numbers with the highest ever proportion of drug resistant strains on record.

In China and Viet Nam, using the first line treatments penicillin and ciprofloxacin to treat N. gonorrhoea is now no longer feasible. Susceptibility to ceftriaxone - the last available treatment - is also decreasing.

In Australia, numbers of new Gonorrhoea diagnoses have reached their highest in a decade with 15,786 cases reported in 2014. Whilst resistance is currently lower than in neighbouring countries, indications are that multi-drug resistant strains are emerging in Australia too, driven by international travel.

Malaria control is also under threat. Recent gains which saw a 75 per cent reduction in malaria in some countries could now be lost as multi-drug-resistant strains take hold in the Mekong Delta. If artemisinin fails, drug-resistant malaria could spread to India and on to Africa.

“We are seeing a dangerous trend as drug-resistant diseases take a foot-hold in the Asia Pacific Region. We clearly need to allocate resources to combat this very real and growing public health threat and the medical and research communities are looking forward to concrete next steps to back the fight back against these superbugs,” said ASID President Professor Cheryl Jones

ABOUT THE ASID ASM 2016

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The Australasian Society for Infectious Diseases (ASID) ASM is the leading regional international meeting for adult and paediatric infectious disease and clinical microbiology specialists. Cutting edge research on issues of greatest concern to the Asia-Pacific region will be presented. This year the Society will be celebrating its 40th anniversary from the ASM in Launceston. Find out more about the ASID ASM 2016.

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