HFMD peak period approaching, doctors urge good hygiene practices

SINGAPORE: Singapore is approaching a peak period in the hand, foot and mouth disease (HFMD) cycle, researchers from the National University of Singapore (NUS) said on Monday (Jul 17).

"The hand, foot, mouth disease comes in cycles, so we can see that every two to three years, we will have a big outbreak. This year, we are also coming to the peak period, where the virus will re-emerge and cause an outbreak," said Dr Justin Chu, an associate professor at the Department of Microbiology and Immunology.

However, the number of cases this year is unlikely to surpass the more than 41,000 cases recorded last year, Dr Chu added. According to the Health Ministry, there have been more than 17,000 cases of HFMD this year as of Jul 1, compared to more than 23,000 in the same period in 2016.

Dr Chu was speaking at a conference organised by the International Union of Microbiological Sciences, which is being held in Singapore for the first time.

RESEARCHERS WORKING ON VACCINES

He added that NUS researchers are close to coming up with multivalent vaccines, which help the body to produce antibodies to fight a combination of viruses.

"This can be used to vaccinate children against HFMD. They are caused by more than one type of virus, maybe two or three types concurrently," he said.

But what is most important is prevention, Dr Chu said. He advised parents and childcare centres to take extra steps to ensure proper hygiene as HFMD is transmitted through secretions such as saliva.

Dr Chu, who is also a joint principal investigator at A*STAR’s Institute of Molecular and Cell Biology, is working on tackling not just HFMD but two other major health concerns in the country – dengue and more recently, Zika.

Only one vaccine against dengue, Dengvaxia, has been approved for use in Singapore. Developed by French pharmaceutical giant Sanofi-Pasteur, the vaccine has been available here since last year but is only given on request.

Dr Chu said he feels the vaccine should be pushed higher on the national vaccination agenda.

As for vaccines that are made in Singapore, he said researchers will take another five to eight years before they come up with something viable.

"To come up with specific antiviral for viruses, you must make sure that it targets the virus and not the human, because you will end up having something that kills off the human cells," said Dr Chu, adding that researchers need to find a specific compound that targets the virus, which typically takes at least 15 years.
RISE OF ANTIMICROBIAL RESISTANCE

The International Union of Microbiological Sciences conference brings together industry professionals from all over the world to network and exchange ideas, which is important in tackling issues such as the rise of antimicrobial resistance, said National Development Minister Lawrence Wong, who was at the event.

The phenomenon sees bacteria becoming resistant to antibiotics, which is made worse through the misuse and overuse of antibiotics in both the medical and agricultural industries, said Mr Wong.

He added that infections that are drug-resistant are not only harder to treat – they have been proven to increase mortality and the cost of treatment, as well as decrease productivity and cause economic losses. Tackling this issue, he said, requires a multi-level collaboration.

"It requires a concerted effort of all sectors, stakeholders and organisations to reduce the emergence and spread of drug resistant organisms through education, surveillance, research, prevention and control of infection, and the optimisation of antimicrobial use.

"Ultimately, our ability to detect and treat infectious diseases and tackle antimicrobial resistance is enhanced through collaboration, scientific research and contributions from the field of microbiology", he added.

Source: CNA/dp