Doctors too trigger-happy with antimicrobials?

Doctors appear to be a bit too trigger-happy when it comes to giving patients antibiotics.

A study conducted in 2015 and 2016 found that at any one time, more than half the patients in acute hospitals were on one or more antimicrobials – an umbrella term for drugs, including antibiotics, that destroy micro-organisms.

Not all patients on antimicrobials had infections; some received the drug as a precaution against infection.

The government-funded study, spanning 13 public and private hospitals, found the use of antimicrobials here “surprisingly high”.

It was much higher in the five private hospitals in the study than in the public sector. Two in three of their patients were on at least one antimicrobial, while 7 per cent had been prescribed three or more.

Associate Professor Hsu Li Yang, head of the Infectious Diseases Programme at the Saw Swee Hock School of Public Health and a member of the study team, said: “One in two is an astoundingly high number.” A more reasonable level – one seen in European hospitals – would be one in three hospitalised patients on such drugs.

In some cases, antimicrobials were given to patients who had no infections, but as a precaution. This is standard for patients in hospital for surgery as they are 1.8 times more likely to get an infection than other patients.

But keeping them on antimicrobials for more than 24 hours was not only “non-evidence-based practice” but “may be associated with increased surgical site infection risk”, the researchers noted.

Dr Kalisvar Marimuthu, a senior consultant at the National Centre for Infectious Diseases and the study’s principal investigator, said inappropriate use is not good for the body. “Antibiotics kill millions of good bacteria in our gut. We have been rearing these since childhood. It will take time to build them up again,” he said. “Antibiotics should not be given unless absolutely necessary.”

Of the patients on antimicrobials, 22 per cent were on two different types while 4 per cent were on three or more.

The study also found that “a large number of patients” who had fever but no other symptoms were on antibiotics. The researchers suggested reducing such “unnecessary antibiotic prescriptions”.

They pointed out that a high use of antimicrobials is known to increase resistance to the bugs.

They suggested that “reducing inappropriate antimicrobial prescribing practices may curb the development of antimicrobial resistance”.

The researchers also noted that the increasing emergence of resistant bugs is of global concern, since the number of new antimicrobials being developed is dwindling.

All public hospitals have antimicrobial stewardship programmes that aim to ensure the correct use of these medications. But they did not exist in private hospitals here when the study was conducted in 2015 and 2016.

A spokesman for the Parkway group, which runs Mount Elizabeth, Gleneagles, Mount Elizabeth Novena and Parkway East hospitals, said this programme was introduced in February this year.

Raffles Hospital has also introduced a similar programme.

A Health Ministry spokesman said Singapore has a National Antimicrobial Resistance Control Committee to monitor the use of antimicrobials and resistant infection rates.