

HIPS/24/22 - Associations Between Antidepressants And Antibiotic Resistance: Population-Based Cohort Studies (The ADAR Study)

Antibiotic resistance (when bacteria don't respond to drugs that normally work) is a major global public health problem. We know that people who have received antibiotics are more likely to have future antibiotic-resistant infections than those who have not. There is new research that shows antidepressant drugs, which are used to treat mental health problems and pain, can cause bacteria such as E. coli (Escherichia coli - a bacteria which can cause infections in your body) to become resistant to antibiotics when tested in the laboratory. There are no published studies that look at whether people who take antidepressant drugs are more likely to have antibiotic-resistant infections.

Depression is also a major global public health problem. There are increasing numbers of people being prescribed antidepressant drugs worldwide. More than one in five people in Scotland received one or more prescriptions for an antidepressant drug in 2019. It is important to know if these commonly prescribed drugs increase antibiotic-resistant infections. Resistant infections are harder to treat and can cause people to be ill longer, or even die. This means it is important that the right antibiotic is prescribed to make sure patients receive the best care.

We will use anonymised Scottish population data to look at possible links between antidepressant prescriptions use and antibiotic resistance in people with E. coli urinary tract infections and bloodstream infections. E. coli is the most common cause of these infections, in Scotland and globally. These findings could have real-world influence on prescribing guidelines and patient care.