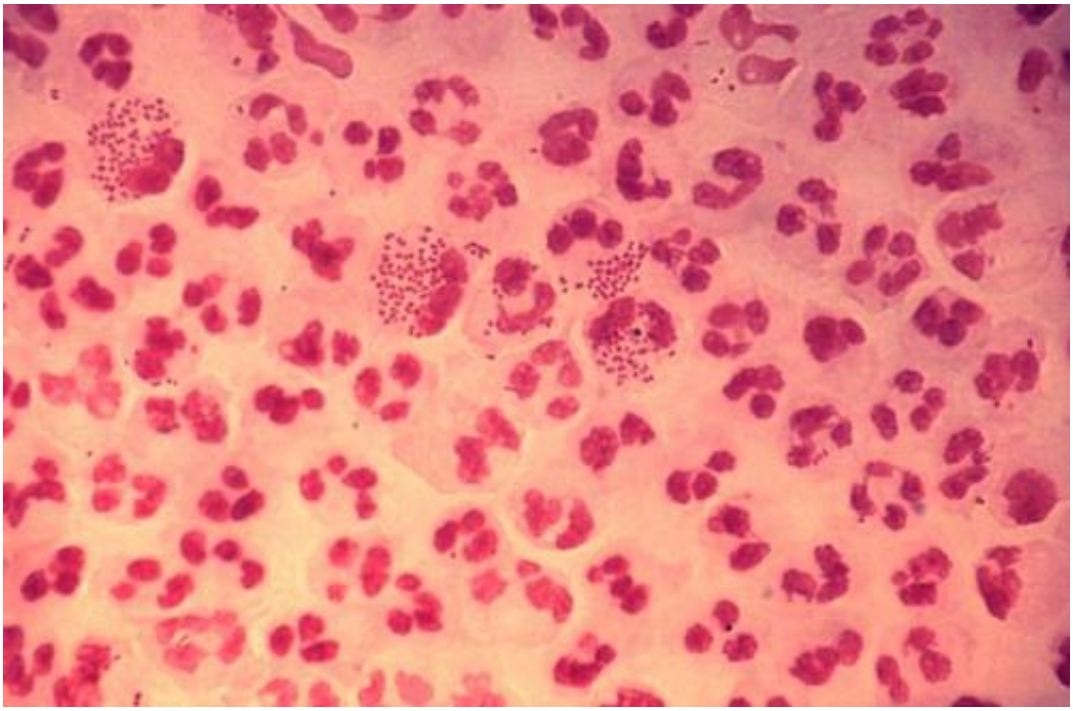
MedicalXpress

New drugs needed against gonorrhoea: UN

July 7 2017



Credit: CDC

New drugs are urgently needed to treat gonorrhoea, a sexually-transmitted disease threatening to veer out of control as it develops resistance to existing antibiotics, the UN's health agency said Friday.

Nearly 80 million people are infected with the disease every year, the World Health Organization (WHO) said in a statement.

Among these, doctors are finding more and more cases of infection

untreatable by all known antibiotics.

"To control gonorrhoea, we need new tools and systems for better prevention, treatment, earlier diagnosis," said the WHO's director of antimicrobial resistance, Marc Sprenger.

"We need new antibiotics, as well as rapid, accurate, point-of-care diagnostic tests."

Gonorrhoea, also called "the clap", is a disease caused by a bacteria spread through vaginal, oral and anal sex.

Untreated, it can cause painful pelvic inflammation in women, and infertility in both genders. In extreme cases, the bacteria can spread in the blood to cause life-threatening infections in other parts of the body.

It can be passed directly from a pregnant woman to her baby and cause blindness in the unborn child.

Gonorrhoea resistance to penicillin and tetracycline, a common broad-spectrum antibiotic, first emerged in the 1970s in Asia, spreading to the rest of the world during the early 1980s, according to the WHO.

Resistance to the next level antibiotic, ciprofloxacin, developed in the mid-2000s.

A third generation of drugs called cephalosporins—orally-administered cefixime and injectable ceftriaxone—then came into use.

Tip of the iceberg

"But resistance to cefixime—and more rarely to ceftriaxone—has now been reported in more than 50 countries," said the WHO.

These are so-called multi-drug resistant (MDR) strains.

"The bacteria that cause gonorrhoea are particularly smart," said WHO official Teodora Wi. "Every time we use a new class of antibiotics to treat the infection, the bacteria evolve to resist them."

Most countries reporting a rise in MDR gonorrhoea are in the developed world, where surveillance is best.

"These cases may just be the tip of the iceberg, since systems to diagnose and report untreatable infections are lacking in lower income countries where gonorrhoea is actually more common," said Wi.

As a result, the agency last year updated its treatment recommendations, urging doctors to use two antibiotics combined: ceftriaxone and azithromycin.

"The R & D (research and development) pipeline for gonorrhoea is relatively empty, with only three new candidate drugs in various stages of clinical development," said the agency.

Creating new gonorrhoea drugs is not economically attractive for pharmaceutical companies—the treatments are taken for a short period of time, unlike chronic medicines, and the drug range must be continuously expanded as resistance develops.

Bacteria can become resistant to drugs when people take incorrect doses of antibiotics. Resistant strains can also be contracted directly from animals, water and air, or other people.

When the most common antibiotics fail to work, more expensive types must be tried, resulting in longer illness and treatment, often in hospital.

Scientists have long been warning of a future without working antibiotics, a world in which people die from diseases easily treatable today.

© 2017 AFP

Citation: New drugs needed against gonorrhoea: UN (2017, July 7) retrieved 25 April 2024 from https://medicalxpress.com/news/2017-07-drugs-gonorrhoea.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.