

The world is running out of antibiotics

STAR HEALTH DESK

A report, Antibacterial agents in clinical development — an analysis of the antibacterial clinical development pipeline, including tuberculosis, launched by the World Health Organisation (WHO) shows a serious lack of new antibiotics under development to combat the growing threat of antimicrobial resistance.

Most of the drugs currently in the clinical pipeline are modifications of existing classes of antibiotics and are only short-term solutions. The report found very few potential treatment options for those antibiotic-resistant infections identified by WHO as posing the greatest threat to health, including drug-resistant tuberculosis which kills around 250,000 people each year.

"Antimicrobial resistance is a global health emergency that will seriously jeopardise progress in modern medicine," says Dr Tedros Adhanom Ghebreyesus, Director General of WHO. "There is an urgent need for more investment in research and development for antibiotic-resistant infections including TB, otherwise we will be forced back to a time when people feared their common infections and killed their



lives from minor surgery."

In addition to multidrug-resistant tuberculosis, WHO has identified 12 classes of priority pathogens — some of them causing common infections such as pneumonia or urinary tract infections — that are increasingly resistant to existing antibiotics and urgently in need of new treatments.

The report identifies 51 new antibiotics and biologicals in clinical development to treat

priority antibiotic-resistant pathogens, as well as tuberculosis and the sometimes deadly diarrhoeal infection Clostridium difficile.

There is a serious lack of treatment options for multidrug- and extensively drug-resistant *M. tuberculosis* and gram-negative pathogens, including Acinetobacter and Enterobacteriaceae (such as *Klebsiella* and *E. coli*) which can cause severe and often deadly infections that pose a particular

threat to hospitals and nursing homes.

There are also very few oral antibiotics in the pipeline, yet these are essential formulations for treating infections outside hospitals or in resource-limited settings.

To counter this threat, WHO and the Drugs for Neglected Diseases Initiative (DNDI) set up the Global Antibiotic Research and Development Partnership (known as GARDP).

On 4 September 2017, Germany, Luxembourg, the Netherlands, South Africa, Switzerland and the United Kingdom of Great Britain and Northern Ireland and the Wellcome Trust pledged more than €56 million for this work.

"Research for tuberculosis is seriously underfunded, with only two new antibiotics for treatment of drug-resistant tuberculosis having reached the market in over 70 years," says Dr Mario Raviglione, Director of the WHO Global Tuberculosis Programme. "If we are to end tuberculosis, more than US\$ 800 million per year is urgently needed to fund research for new antituberculous medicines".

New treatments alone, however, will not be sufficient to combat the threat of antimicrobial resistance. WHO works with countries and partners to improve infection prevention and control and to foster appropriate use of existing and future antibiotics. WHO is also developing guidance for the responsible use of antibiotics in the human, animal and agricultural sectors.

Source: World Health Organisation

HEALTH bulletin



25.5 million unsafe abortions take place worldwide every year

Every year, of the 55.7 million abortions that take place worldwide, 25.5 million are unsafe according to a new study published in The Lancet. This means that nearly half of all abortions are unsafe, with the vast majority of these (97%, 24 million) taking place in Africa, Asia and Latin America.

Globally, approximately 55% of all abortions (30.6 million each year between 2010 and 2014) were safe, meaning they were done via a WHO recommended method and provided or supported by a trained individual.

An estimated 30.7% of all abortions (17.1 million) were classified as less safe — for instance if the abortion was done by a trained provider but with an outdated method (e.g. sharp curette), or if the abortion was done with a safe method (e.g. misoprostol) but without the support of a trained person. An estimated 14.4% of all abortions (8 million) were classified as least safe if they were provided by untrained individual using dangerous or invasive methods (e.g. ingestion of caustic substances, insertion of foreign bodies or use of traditional concoctions).

Ending child marriage critical to achieving SDGs

STAR HEALTH REPORT

As the world marks International Day of the Girl Child on 11 October, Girls Not Brides is calling upon the international community to prioritize investments to end child marriage, stressing that ending the practice is critical to achieving the Sustainable Development Goals (SDGs).

Lakshmi Sundaram, Executive Director of Girls Not Brides, said eight of the 17 SDGs could not be

achieved without significant progress to end child marriage, including those related to poverty, health, education, nutrition, food security, inequality and economic growth.

Girls Not Brides is a global partnership of more than 800 civil society organizations from over 95 countries committed to ending child marriage and enabling girls to fulfill their potential.

"A lack of attention to child marriage held us back from reaching six

of the eight Millennium Development Goals. It's vital that we don't make the same mistake again," said Ms. Sundaram. "Child marriage is not just a gross human rights violation, it also prevents us from achieving many other development goals. How can we make progress on education, health or gender equality for example, when so many girls are married off, kept out of school, have children before they are ready, and exposed to violence and exploitation?"

Across the world, 15 million girls are married each year before the age of 18. Evidence shows that ending child marriage will catalyse efforts towards achieving the SDGs by improving educational attainment, income and maternal and child health.

A recent study by the World Bank and International Center for Research on Women found that the practice costs the global economy trillions of dollars.

To illustrate how ending child marriage will help to achieve the SDGs, Girls Not Brides has launched a short film, available online in nine languages.

"Our film shows that child marriage isn't a niche issue, it's a key barrier stopping us from achieving half of our development goals," said Ms. Sundaram. "If we truly want to alleviate poverty and improve the lives of the 15 million girls married every year, ending child marriage must be a global priority."



NEW DRUG

Ultra fast-acting insulin got approval from the US FDA

Novo Nordisk announced that the US Food and Drug Administration (FDA) has approved Fiasp® (fast-acting insulin aspart), a new fast-acting meal-time insulin, for the treatment of adults with diabetes. The FDA's decision comes after Fiasp® in clinical trials demonstrated benefits for people in need of improved overall glucose control.

Fiasp® is an innovative formulation of insulin aspart (NovoLog®) developed with the aim of obtaining pharmacokinetic and pharmacodynamic properties that more closely match the natural physiological insulin mealtime response of a person without diabetes.

In clinical trials Fiasp® demonstrated clinically relevant improvement in long-term glucose level (HbA1c). These results were achieved with a comparable overall rate of severe or blood-sugar confirmed hypoglycaemia, between Fiasp® and insulin aspart.



Partnership to improve access to diabetes care in Bangladesh

To address the need for increased screening, diagnosis, and treatment, Medtronic and the Diabetic Association of Bangladesh jointly aim to improve access to world class diabetes care by offering diabetes care therapies and clinical expertise to patients registered with Diabetic Association of Bangladesh through a strategic partnership, says a press release.

The International Diabetes Federation (IDF) estimates that there are 7.1 million people with diabetes in Bangladesh and almost an equal number with undetected diabetes. This number is estimated to double by 2025.



Apollo Hospitals Dhaka marked World Heart Day

Apollo Hospitals Dhaka in collaboration with Incepta Pharmaceuticals Ltd. organised activities to mark World Heart Day, says a press release.

The activities included patient forum along with free ECG for the patients and special paediatric cardiology package of Patent Ductus Arteriosus (PDA) and Atrial Septal Defect (ASD) in which all patients got the device free of cost for the procedure.



What is Lung Cancer

This is a malignant lung tumor characterized by uncontrolled cell growth in tissues of the lung. If left untreated, This growth can spread beyond the lung by the process of metastasis into nearby tissue or other parts of the body

Facts

Lung cancer is the number one of cancer deaths in both men and women in the U.S. and worldwide

Cigarette smoking is the principal risk factor for development of lung cancer

Passive exposure to tobacco smoke also can cause lung cancer

The general prognosis of lung cancer is poor because doctors tend not to find the disease until it is at an advanced stage. Five-year survival is around 54% for advanced stage lung cancer that is localized to the lungs, but only around 4% in advanced, inoperable lung cancer

Lung Carcinoma or widely known as Lung Cancer

