Coordinated action needed to tackle antimicrobial resistance

STAR HEALTH DESK

Antibiotic resistance (AMR) is one of the biggest public health challenges of our time. Fighting this threat is a public health priority that requires a collaborative global approach across sectors. It requires urgent multisectoral action in order to achieve the Sustainable Development Goals (SDGs) The World Health Organisation (WHO) has declared that AMR is one of the top 10 global public health threats facing humanity.

AMR occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. Misuse and overuse of antimicrobials are the main drivers in the development of drug-resistant pathogens. Also, lack of clean water and sanitation and inadequate infection prevention and control promotes the spread of microbes, some of which can be resistant to antimicrobial treatment.

The cost of AMR to the economy is significant. In addition to death and disability, prolonged illness results in longer hospital stay, the need for more expensive medicines, and financial challenges for those



According to World Bank, each year, 700,000 people die of AMR. Without action, the death toll could rise even higher, to as many as 10 million deaths annually by 2050. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly difficult or impossible to treat.

Every year, from November 18 to 24, World Antimicrobial Awareness Week (WAAW) is observed. The 2021 theme, Spread Awareness, Stop Resistance, calls on stakeholders, policymakers, healthcare providers, and the general public to be Antimicrobial Resistance (AMR) Awareness champions.

Among the primary causes

of mortality and morbidity, maternal infections and sepsis account for at least 11% of maternal deaths. Most maternal infections and their repercussions can be avoided by implementing appropriate practices, prenatal screening, and antibiotic use.

Also, antifungal resistance is becoming a significant public health concern around the world. Antifungal medications now on the market are frequently linked to severe side effects. Few new drugs are under development. Other ailments are commonly made worse by fungal infections.

The severe consequences of mucormycosis and invasive aspergillosis during the COVID-19 pandemic recently demonstrated this. This event

will introduce World Health Organisation (WHO)'s solution to the problem, including creating a worldwide priority

fungal infections list with public

health implications.

This year's event looked at how chosen technologies, such as linked diagnostics and AMR (Anti-Microbial Resistance) stewardship, can support the proper use of antimicrobial drugs and how they can help accomplish relevant United Nations (UN) Sustainable Development Goals (SDGs) and associated targets.

This year, an event also took place to enlighten about the Tailoring Antimicrobial Resistance Programmes (TAP) Quick Guide and Toolbox

recently developed by the WHO Regional Office for Europe.

Through a behavioural insights approach, these technologies attempt to boost efforts to combat antibiotic resistance. The TAP Quick Guide is a practical, step-by-step approach to designing and implementing a targeted behaviour modification intervention to address human and animal health AMR factors.

The HIV Drug Resistance Report 2021 was launched as a part of the World Antimicrobial Awareness Week 2021. It aimed to spread awareness of the burden of HIV drug resistance and advocated to stop HIV drug resistance by implementing a comprehensive prevention and response approach involving all stakeholders as outlined in the WHO global action plan to prevent, monitor, and respond to HIV drug resistance.

Common illnesses will become untreatable as antimicrobial resistance rises unless the world takes coordinated action across the human, animal, plant, and environmental health sectors. Therefore, there is a need for immediate action. Civil society has a critical role in mobilising different stakeholders, including governments, donors, academia, and the general public, in taking

GLOBAL HEALTH

Pandemic reform agenda is moving, but not fast or cohesive enough

The Co-Chairs of The Independent Panel for Pandemic Preparedness and Response presented their findings recently in the new report titled Losing Time: End this pandemic and secure the future.

In May 2021, Her Excellency Ellen Johnson Sirleaf and the Right Honourable Helen Clark issued the Independent Panel's findings following a nine-month deep-dive into the global and national response to COVID-19. They recommended immediate actions to end COVID-19 and a package of international, interlinked reform solutions to prevent future outbreaks from becoming another devastating pandemic.

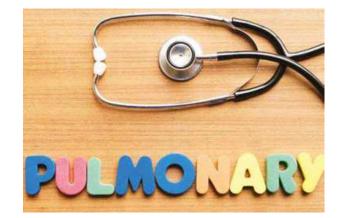
The former Co-Chairs find uneven and sometimes fragmented efforts as the pandemic continues at pace. They note that in just the six months since tabling their action plan, at least 90 million more people have contracted COVID, and 1.65 million more people have died, and those are only the illnesses and deaths that have been recorded.

Of grave urgent concern remains vaccine inequity, which has changed very little since May 2021. Analysis shows inadequate full coverage in the poorest countries; in some, under 1% of the population are fully vaccinated.

The former Co-Chairs say that global health cannot be left hostage to a pharmaceutical industry that buys up patents and develops them in the interest of making profits. Instead, they say that the development of an accurate end-to-end global public goods model remains the answer.

Overall, the report underscores that a more focused and coherent reform package should be done with urgency. The Co-Chairs stress that the reforms required now can contribute to ending the current pandemic and preventing another.

HEALT H bulletin



Pulmonary rehabilitation after hospitalisation for **COPD** exacerbations

In clinical trials, pulmonary rehabilitation lowers the risk for readmission following hospitalisation for chronic obstructive pulmonary disease (COPD) exacerbations. In this retrospective cohort study, researchers evaluated nearly 200,000 Medicare patients hospitalised with COPD across more than 4,000 medical centres to determine if this association holds up in routine practice.

Patients who underwent pulmonary rehabilitation were healthier overall than those who did not. Therefore, the researchers assembled and compared two propensitymatched cohorts, each with 2,700 patients: One group received rehabilitation, and the other did not, but baseline characteristics were well-matched in the two groups.

Patients who initiated pulmonary rehabilitation within 90 days of discharge were significantly less likely to be rehospitalised (for COPD or any other reason) within 1 year. On average, the probability of rehospitalisations was 0.95 per person in the rehabilitation group and 1.15 per person in the no-rehabilitation group. The number of days spent in the hospital per person-year also was lower in those who initiated pulmonary rehabilitation (7.9 vs 11.7 days).

This large study of a diverse patient population verifies the generalisability of prior randomised trial data and highlights the need to encourage pulmonary rehabilitation participation following discharge among patients hospitalised with COPD.

Manage your sinus attack this winter

A sinus stack usually involves pain in the forehead or between the eyes, upper teeth ache, heavy full face feeling, stuffed and congested nose. In addition, you may have a common complaint that sends many people to a doctor's office.

Sinuses are air spaces in your skull lined with mucous membranes. Most people have four sets of nasal sinuses. They are like fingerprints. Everybody's is different. Some people have no frontal sinuses or just one. Sinusitis is inflammation in the

sinuses. Tiny, hair-like structures called cilia move mucus across sinus membranes and toward an exit. All of your sinus cavities connect to your nose to allow a free exchange of polyps. They can jut out from the air and mucus. Infections or allergies make sinus tissues inflamed, red, and swollen.

Sinusitis usually starts with inflammation triggered by a cold, allergy attack, or irritant. But it may not end there. Colds, allergies, and irritants make sinus tissues swell.

Most people have a stuffy nose and pain or pressure in several areas around the face or teeth. There is usually a nasal discharge that may be yellow, green, or clear. You may also have fatigue, trouble with sense of smell or taste, cough, sore throat, bad breath, headache, pain when you bend forward, and fever.

Inflammation of the sinuses that lasts for more than three months is chronic sinusitis. Bacteria can make their home in blocked sinuses. but they are not the only cause. Anatomy, allergies, polyps, immune system problems, and dental diseases may also be to blame.

If your sinuses remain inflamed, sinus membranes can thicken and swell. The swelling may be enough

to cause grape-like masses called sinus into the nasal passage and

block your nasal airway. Nasal decongestants sprays open swollen nasal passages and allow your sinuses to drain. But you should use these drugs only for a few days. After that, there is a kickback effect, making your nasal passages swell shut again. Nasal steroid sprays, or saline sprays or washes, maybe other options.

Now the question is if you need antibiotics. The common cold is a viral infection. Colds can lead to sinusitis symptoms, but these are usually clear by themselves. Antibiotics do not treat viruses so that they will not help the sinus symptoms of a cold. Your cold should be over in a week or two. Usually, cold-related sinusitis goes away then, too.

Have you tried irrigation with saline solution with a squeeze bottle? Nasal steroid sprays might help, too, if your sinus symptoms are due to allergies. Antihistamines could also come in handy, especially if you are sneezing and have a runny nose.

Yellow or green mucus can mean a bacterial infection. Even then, it usually clears up in 7 to 14 days without antibiotics. But if you keep feeling worse, your symptoms last

> is time to see a doctor. Functional Endoscopic Sinus Surgery (FESS), a kind of operation, can bring some relief if nothing else works. But start with the simplest solution, Avoid things that irritate your sinuses, and then work with your doctor to see if medicines help. Surgery is the last resort.

and are severe, or if you get a fever, it

Unfortunately, you cannot prevent sinusitis. But you can do these three things that help: • Keep your sinuses moist. Use

- saline sprays, nasal lubricant sprays, or nasal irrigation often.
- Avoid arid indoor environments.
- Avoid exposure to irritants, such as cigarette smoke or strong chemical odours.
- Stay healthy and stay away from risk factors that initiate sinus attacks.

Source: WebMD



Complex cardiovascular procedure successfully carried out by Evercare hospital Dhaka

First JCI-accredited hospital of Bangladesh, Evercare Hospital Dhaka, has recently reported the successful completion of Transcatheter Aortic Valve Replacement (TAVR), a complex procedure in cardiovascular surgery, says a press release.

Kazi Md Abdur Rouf, aged 72, was recently admitted to Evercare Hospital Dhaka with various ailments including issues with his kidney and lungs, among other complications associated with old age. Later, Mr Rouf recently underwent heart bypass surgery, it was discovered that one of the valves of his heart was damaged. Following this news, the doctor in charge. Prof Dr Md Shahabuddin Talukder, Senior Consultant of Evercare Hospital Dhaka's Clinical & Interventional Cardiology department, advised Mr Rouf to undergo Transcatheter Aortic Valve Replacement (TAVR). Recently the suggested procedure was carried out successfully by Evercare Hospital Dhaka, and Mr Rouf is safe and healthy at present.

There are two valves in each of the four chambers those assist in proper blood circulation in the body. Among these valves, an aortic valve is important because it supplies oxygenated blood to the vital organs and other organs of the body. For various reasons however, sometimes these valves can become narrow, which causes the normal flow of blood to be disrupted. Consequently, various complex diseases and complications afflict the body.

Prof Talukder said, "Conventionally, aortic valve stenosis is treated with open heart surgery, and it is extremely risky, especially for elderly patients. The alternative to this is TAVR. This procedure is minimally invasive (like an Angioplasty) and is not very complicated."

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