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Strengthening actions for controlling pneumonia- a silent killer!

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There is a strong need for urgent interventions to prevent, treat and make progress in beating pneumonia

According to the Asian Pacific Society of Respirology (APSR), a heart-breaking number of 672,000 children fell prey to pneumonia in 2019. It is the world's leading infectious killer of children under the age of five. It may surprise many but pneumonia is preventable if we restrict exposure to indoor and outdoor pollution, enhance nutrition and accelerate vaccinations among children in low and middle-income countries where the infection remains more prevalent than the others.

With nearly 248 million cases across the globe and over 5 million deaths as of November 5, 2021, the COVID-19 pandemic attracted a lot of attention towards pneumonia. Millions died due to the infection that directly affects the lungs by causing severe inflammation owing to bacteria, viruses, or fungi.

Therefore, there is a strong need for urgent interventions to prevent, treat and make progress in beating pneumonia. From generating action to investment, several efforts are required to combat pneumonia and other common yet deadly diseases that affect children. Experts around the world suggest that accelerating the efforts to fight pneumonia could prevent at least 9 million child deaths and other major diseases by 2030.

There are several kinds of pneumonia including bacterial, viral, and mycoplasma and there are over 30 factors that cause the infection.
The most common symptom of pneumonia is cough. In a typical case, it produces green, yellow, or bloody mucus. Other symptoms include fever, shaking chills, shortness of breath, and tiredness.
A physical examination and some tests can easily diagnose the infection.

Depending on the type of infection, antibiotics can be prescribed especially to treat bacterial and mycoplasma pneumonia. While most viral pneumonia does not require treatment and get better on their own, other severe varieties may be treated by including a healthy diet, more fluids, rest, oxygen therapy, and medicine for pain, cough, and fever control.

Pneumonia can be fatal if not treated at the right time. While most patients respond well to the treatment, the infection can cause serious lung and infection issues.

Diagnosis

A patient's health history can usually diagnose the infection and also the severity of it. A doctor may also conduct a few tests to confirm the infection.

These tests would include:

Chest X-ray: A good look at the internal organs (lungs), tissues and bones is usually enough to confirm whether the patient is infected with pneumonia or not.

Blood tests: These tests can determine if the patient is ailing with pneumonia and the degree to which it has spread to the bloodstream (blood cultures).

Sputum culture: This test is conducted on the mucus coughed up by the patient. It is used to determine the infection in the lungs.

Chest CT scan: A combination of X-rays and computer technology, a CT scan produces sharp, and detailed images of any part of the body. Providing a high level of accuracy, these images help clear any uncertainty regarding the infection.

Bronchoscopy: In certain severe cases, a direct examination of the main airways of the lungs or bronchi using a flexible tube called a bronchoscope may be required. The process can evaluate and diagnose lung issues, assess blockages, and take out samples of tissue and/or fluid for testing.

Pleural fluid culture: In the process, a long, thin needle is inserted between the ribs and the pleural space to extract fluid samples. It can find out which bacteria is causing the infection.

YES! It can be prevented

Getting a flu vaccination after consultations with a healthcare provider may help prevent the infection. This is because flu is a common cause of pneumonia. Meanwhile, a pneumococcal vaccine also helps in protecting against bacterial pneumonia. Doctors recommend the inoculation for children younger than age five and adults aged 65 and older and also for all children and adults who are at an increased risk of pneumococcal disease due to other health conditions. Other than that, it is crucial to address environmental factors including indoor air pollution and encouraging good hygiene.

Next steps

Creating awareness about prevention, symptoms and treatment especially in rural areas is crucial and must be prioritised. Further, more studies need to be conducted on different pathogens to understand their mode of action in causing the infection and its spread.

Several Asian countries including India and Bangladesh have developed plans to strengthen actions for controlling pneumonia. Recently, India has also launched the nationwide expansion of Pneumococcal Conjugate Vaccine (PCV) under the Universal Immunization Programme (UIP) intending to reduce child mortality by 60 per cent.