

Experts: Young Adults With Underlying Conditions Risk Pneumonia

KUALA LUMPUR, July 18 — Young adults with underlying health conditions, as well as those aged 65 years and older, are at increased risk of contracting pneumococcal pneumonia^{1,2} a disease that may be prevented with pneumococcal vaccination, experts said.³

Globally, pneumonia affects approximately 450 million people a year. The elderly are more likely to suffer from pneumonia compared with normal adults.⁴

According to the **Department of Statistics Malaysia (DOSM)**, pneumonia was the second leading cause of death in Malaysia after ischaemic heart diseases in 2020.⁵

“Individuals with other diseases like heart diseases, diabetes, and respiratory diseases are at risk of contracting pneumococcal pneumonia,”⁶ said Dr Hazlee Abdul Hadi, occupational health specialist and medical advisor at the Berkat Group of Companies.

“Besides them, those with immunodeficiency and malignancy are also at high risk of getting pneumococcal disease”.⁶

Certain conditions or treatments can affect the immune system of an individual, rendering them more vulnerable to a range of communicable diseases.⁷

Patients with human immunodeficiency virus (HIV), cancer and transplant patients, patients who undergo immunosuppressive treatment, and patients with Hepatitis B and C are some of the individuals who do not possess adequate immunity.⁷

“This condition makes them to be vulnerable to pneumococcal pneumonia,”⁷ Dr Hazlee told CodeBlue.

Dr Petrick Periasamy, a consultant infectious disease physician and head of the infectious disease unit at Hospital Universiti Kebangsaan Malaysia (HUKM), pointed out that those aged 65 years and older, as well as individuals with comorbidities are at increased risk of developing pneumococcal disease.^{6,8}

“As people get older, their immune system weakens naturally.”⁸

“There are chances for elderly people to end up with severe health effects including multiple organ failure, if they are contracted with pneumonia.”⁴

According to the Department of Statistics Malaysia (DOSM), the nation will reach ageing status by 2030, with an estimated 15 per cent of Malaysians over 60 years of age.⁹

A 2014 study found that multiple underlying medical conditions increased the risk of pneumococcal pneumonia in adults in the United States from 2007 to 2010.²

The risk of pneumococcal disease increases with increasing number of risk factors.²

According to another study published in the Journal of Infectious Diseases in 2005, pneumococcal pneumonia incidence in the US from 1999 to 2000 increased in adults aged 50 years and older with

chronic illnesses like diabetes, chronic heart disease, and chronic lung disease, compared to healthy adults in the same age group.¹⁰

“In fact, smoking adults develop risks of community-acquired pneumonia (CAP), including passive smokers,”¹¹ Dr Petrick added.

So, Dr Petrick suggested that elderly people take the pneumococcal vaccine, especially those above 65 years old, even if they are healthy because age is a risk factor for pneumococcal pneumonia.⁸

We have two types of pneumococcal pneumonia vaccination — the pneumococcal conjugate vaccine and pneumococcal polysaccharide vaccine (PPSV23).¹²

An online survey conducted by the Malaysian Thoracic Society revealed that 62 per cent of respondents are unaware that the pneumococcal disease could be prevented through vaccination.¹³

A national study in Singapore showed that the incidence of pneumococcal pneumonia was approximately 4.5 per 100,000 population among those aged 15 to 64 years, whereas Thailand reported 177 to 580 pneumonia cases per 100,000 population.¹⁴

At the same time, Dr Petrick noted that the conventional method of using blood and sputum culture rarely isolates the causal organism.¹⁵ *Streptococcus pneumoniae* is the leading cause of community-acquired pneumonia worldwide, including the US.^{16,17}

“Blood and sputum cultures have a low detection rate, compared to PCR tests and can be a reason for low detection rates of pneumonia.”¹⁸

“The burden of pneumococcal pneumonia could be underestimated,”¹⁹ Dr Petrick said.

Nevertheless, in Malaysia, the reported incidence of pneumococcal pneumonia is low, and this could be attributed to the lack of proper diagnostic tools.²⁰

“This may be why the reported cases of pneumococcal pneumonia are low in the country.”²⁰

Dr Petrick emphasised that the country should adapt to new technologies to improve the detection rate of pneumonia, a disease that can be prevented effectively through vaccines.³

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