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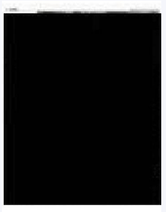

14 FEB, 2025

Developing pneumonia from fly

The Star, Malaysia

Developing pneumonia from flu

Wearing a face mask, especially in crowded environments like public transport hubs, is one way of preventing the transmission of infectious diseases. — AFP Filepic

Actress Barbie Hsu's death from influenza-related pneumonia has thrown the spotlight on this infectious disease complication.

THE recent sudden passing of Taiwanese actress and singer Barbie Hsu at the age of 48 left her fans around the world in shock.

Her untimely death has sparked widespread conversations about flu-related pneumonia, the reported cause of her demise.

Consultant internal medicine physician Dr Harpreet Kaur Harnam Singh sheds some light on this condition in this Q&A.

What is flu-related pneumonia and how does it develop from flu?

Flu-related pneumonia is a lung infection that develops as a result of complications from an influenza (flu) infection.

Influenza is a viral infection of the upper respiratory tract.

It can spread easily in the community through coughing and sneezing.

The influenza virus can weaken the immune system in certain individuals, making it harder for them to fight off the infection, resulting in the virus entering the lungs.

Once in the lungs, the virus can cause inflammation and accumulation of fluid in the air spaces, which can severely affect a person's breathing.

Additionally, with a weakened immune system, the damage caused by the virus in the lung makes it easier for bacteria to infect the lungs.

This is referred to as a secondary bacterial pneumonia.

Can influenza lead to sepsis, as mentioned in several newspaper articles about Hsu? If so, how does that happen?

Yes, influenza can lead to sepsis.

Sepsis occurs when the immune system has an exaggerated response to an infection.

The normal body response to a viral infection involves the activation of certain immune cells and the release of chemical substances known as cytokines to combat the virus.

In some cases, the release of this immune response is excessive, causing widespread inflammation throughout the body.

This can lead to tissue damage and organ failure.

Why are some individuals more vulnerable to these serious complications?

There are a number of factors that may contribute to a higher risk of complications, which are usually related to an impaired immune function.

Age is one factor.

Children and adolescents are susceptible to complications from the flu as their immune systems are not fully mature.

Meanwhile, the elderly are susceptible as ageing weakens the immune response.

Those with underlying medical illnesses, such as chronic lung disease, heart disease and diabetes, also have a weakened immune response.

Those with a suppressed immune system, such as those undergoing treatment for cancer, are also susceptible.

Pregnant women experience changes to their immune system as well that renders them susceptible to complications of the flu.

Both obesity and malnutrition can reduce the immune response and result in complications from the flu.

What factors might have contributed to the rapid spread of influenza in Japan and other countries?

The rapid spread of influenza is influenced by a number of factors:

> **Human behaviour**

Overcrowded environments, such as schools and public transportation, contribute to the spread of the virus.

With global travel, the virus can easily spread across borders, particularly during peak travel seasons when many people travel domestically and internationally.

Low vaccination rates can also lead to higher susceptibility within a community.

Lack of public awareness about the importance of flu vaccination, coupled with poor hygiene techniques, can have an effect on the spread of the virus.

> **Environmental conditions**

Influenza viruses typically peak during colder weather.

The winter season in temperate countries can create the optimal environment for rapid transmission of the virus, i.e. dry air and an increase in indoor crowding.

Changes in climate and weather patterns can also affect the timing and intensity of flu seasons, potentially leading to increased outbreaks.

> **Viral factors**

Influenza viruses mutate regularly.

This leads to new strains that can evade immunity from a previous infection or vaccination, making individuals more susceptible to developing the flu.

Different subtypes of the influenza virus (e.g. H1N1, H3N2) can vary in their severity and transmissibility, which impacts how quickly the virus can spread through populations.

> **Socioeconomic factors**

Urban areas with high population densities are susceptible to a much faster rate of transmission of the virus due to the higher number of close contacts.

Individuals who are in a lower socioeconomic group may have less access to healthcare and education, which makes them more vulnerable to developing severe influenza.

Large scale events such as football matches, concerts and festivals, are conditions where there are large groups that come together in a confined area.

This facilitates the spread of influenza.

How true is it that the Covid-19 pandemic weakened our immune systems and made us more susceptible to the flu?

The Covid-19 pandemic has had multiple effects on our immune system and may have indirectly contributed to the increase in susceptibility to influenza and other infections.

Additionally, the unfortunate disruption in our healthcare during the pandemic, as well as other factors such as the reduced exposure to pathogens, psychological stress, vaccine hesitancy amongst the community and lifestyle changes, all play significant roles in the increased transmission of infections.

There have been studies to indicate that some individuals may have weakened immune systems post-pandemic, which increases their susceptibility to the flu and other respiratory infections.

Some individuals experience residual symptoms after recovery from Covid-19, also known as long Covid.

There is some evidence to indicate that long Covid can lead to a persistently-weakened immune system, making individuals more susceptible to other infections.

There is also some evidence that the immune response to

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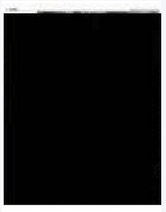

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the SARS-CoV-2 virus may affect how the immune system reacts to other viruses, such as influenza.

For example, there are studies to suggest that Covid-19 may change the balance of certain immune cells, potentially impairing the immune system response to other viruses or bacteria.

What are the key signs that someone should seek medical help if they have the flu?

They should see a doctor if they are experiencing short or laboured breathing, chest pains, or discomfort.

Also if they are experiencing non-respiratory symptoms such as abdominal pain, severe vomiting or diarrhoea, as this can lead to extreme dehydration and worsening of their condition.

A persistent high spiking fever with severe headache that is unrelieved by medication is also another indication to see a doctor.

If an individual with the flu suddenly becomes confused, disoriented or is unable to stay awake, this is indicative of a serious and possibly fatal problem, and medical help must be sought immediately.

The elderly, young children, those with compromised immune systems and those with underlying medical conditions, should seek medical attention sooner as they are at increased risk of complications from the flu.

How can we differentiate between regular flu symptoms and more serious complications like pneumonia?

Regular flu symptoms tend to be milder and improve over a short period of time.

They tend to be fever, body aches and a cough.

Pneumonia typically involves more severe symptoms, such as shortness of breath, chest discomfort and a productive cough.

The symptoms persist for longer and worsen over time, in spite of taking regular treatment for the flu.

What role does vaccination play in preventing severe flu-related complications?

Vaccination plays a very important part in the prevention of severe flu-related complications.

The flu vaccine helps the body develop immunity against the most common strains of the virus.

This significantly reduces the chances of developing complications from the flu.

Even if a person gets the flu after being vaccinated, the symptoms are relatively mild and the risk of complications or need for hospitalisation is lower compared to those who remain unvaccinated.

Vaccination of an entire community, i.e. herd immunity, slows down the spread of the flu virus.

This provides protection not only to those who are vaccinated, but also to those who are more susceptible to the infection, but are not able to get the vaccine.

Vaccination also reduces the risk of developing secondary bacterial infections, such as pneumonia.

The more people who are vaccinated, the fewer who will contract the flu and the fewer who will be at risk of developing complications.

The flu virus evolves every year and with each season, which is why the vaccine is regularly updated to include newer strains that are expected to circulate.

Annual flu vaccinations ensure continued protection against the newer dominant strains.

Are there any specific precautions Malaysians should take when travelling to countries with high flu activity like Japan?

It is important to get vaccinated before travelling.

The flu vaccine is recommended for anyone travelling to areas with a high number of flu cases, particularly during the flu season.

When travelling, it is important to pay close attention to your health, particularly while on long flights or train rides.

If you are feeling unwell, please seek medical attention promptly to prevent worsening of symptoms, as well as to reduce the spread of illness to others.

Crowded spaces are the breeding ground for bacteria and viruses.

Therefore, it is recommended to minimise your time in crowded areas such as public transport and tourist attractions.

Wearing a face mask is a good idea, especially in public places.

This can help prevent the spread of infection and protects you from inhaling airborne viruses in crowded areas.

It is also important to adhere to local guidelines and recommendations for physical distancing, wearing a mask and health monitoring while travelling, especially as different countries may have different guidelines.

What simple everyday habits can help protect us and our families from the flu?

Wash your hands frequently, especially after coughing, sneezing or touching public surfaces.

This will help protect you from germs.

If soap and water are not available, use alcohol-based hand sanitiser.

Cover your mouth when you cough or sneeze with a tissue, handkerchief or the crook of your elbow to prevent spreading germs to others.

Avoid touching your face unnecessarily as germs can enter the body through the nose and mouth.

Keep your environment clean.

Wipe down doorknobs, light switches, phones, keyboards and other items that are touched frequently regularly.

Take care of yourself.

Make sure you get enough sleep as rest helps the immune system fight against illnesses.

Ensure you eat a healthy diet and stay hydrated to boost your immune system.

Regular exercise is also important for immune function and general well-being.

If you are unwell, stay at home, rest and recover, and avoid spreading the germs to others.

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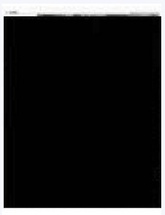

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SUMMARIES

THE recent sudden passing of Taiwanese actress and singer Barbie Hsu at the age of 48 left her fans around the world in shock. Her untimely death has sparked widespread conversations about flu-related pneumonia, the reported cause of her demise.Consultant internal medicine physician Dr Harpreet Kaur Harnam Singh sheds some light on this condition in this Q&A.