LETTER TO THE EDITOR

An Underrated Epidemic: Highlighting the Outbreak of HMPV in China as a Public Health Concern in the Region

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Malaysian Journal of Medicine and Health Sciences (2025) 22(3): 1-2.doi:10.47836/mjmhs.v22i3.1595

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Human metapneumovirus (HMPV), is recognised as a leading cause of respiratory tract infection in children, adults, elderly, and immunocompromised patients, often mimicking other respiratory illnesses. Recently, while various epidemiological investigations after the first case in China in 2003 demonstrated the prevalence of 0.97-15.88%, human metapneumovirus accounts for 6.2% of respiratory illnesses and 5.4% of hospitalization in December 2024 [1]. In a systematic review, in 2018, HMPV was linked to an estimated 14.2 million acute lower respiratory tract infection cases in children under five, including about 643,000 hospitalizations and 16,100 deaths, globally [2]. Of these, HMPV specifically caused 11.1 million cases, 502,000 hospitalization, and 11,300 deaths. Other than China, HMPV is a significant contributor to respiratory infection in Malaysia, experienced 45% increase in HMPV cases from 225 in 2023 to 327 in 2024 [3,4]. HMPV has also been reported in other countries including 7 cases in India and 30 in Kazakhstan [4]. This recent outbreak of human metapneumovirus in China has raised significant public health concerns and need for awareness due to its rapid spread and overlapping clinical presentation with other respiratory illnesses.

HMPV especially affects children under fourteen years and immunocompromised individuals who are particularly vulnerable. HMPV can present as runny nose, nasal obstruction, cough, sore throat, dyspnea, fever, and hypoxia. In some cases, it may progress to chronic obstructive pulmonary diseases, pneumonia or asthma. Similar to COVID-19 virus, HMPV is transmitted through droplets from coughing, sneezing or close contact [1]. However, HMPV normally circulates in late winters and early springs, particularly in temperate regions of globe. Hence, it hasn't declared an emergency yet [1].

Since the COVID-19 pandemic, the pattern of various respiratory diseases has changed as a result of post-pandemic changes in vaccination coverage, environmental factors like climate change, and public health interventions that stopped the transmission. Moreover, no treatment and vaccine are available for HMPV. Supportive treatment is the mainstay of treatment including antipyretics, oral or intravenous hydration therapy, and supplemental oxygen. However, preventive measures are recommended to mitigate the spread of HMPV such as washing hands with soap for at least 20 seconds, avoiding touching face with dirty hands, and stay away from sick people. People who have cold-like symptoms should cover their mouth and nose while coughing or sneezing, avoid sharing eating utensils, and stay home. Additionally, cleaning frequently used surfaces such as door knobs may potentially help to reduce the spread of HMPV. Healthcare professionals should consider HMPV testing specially during the winter season and patients with flu-like symptoms should be placed on droplet precautions [5].

The ease of transmission of HMPV through droplets makes it challenging to prevent [5]. Owing to current circumstances, preventive measures are crucial to follow to prevent outbreaks, protect our communities, and strengthen global preparedness against respiratory viruses like HMPV. This underscores the need for heightened surveillance, timely identification, management of HMPV, and strict following of preventive measures. Collaborative efforts among public health authorities, healthcare professionals, researchers, and the general population are essential to better understand the epidemiology, transmission dynamics, and potential long-term sequelae of HMPV to mitigate the impact of this emerging illness.

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