Letter to Editor

N-95 Face Mask for Prevention of Wuhan Novel Coronavirus: It is Actually Effective?

Dear Editor,

Wuhan novel coronavirus infection is a new disease that has become an important public health problem at present.^[1] This infection causes respiratory illness and can be transmitted from human to human. As a respiratory disease, a basic prevention by mask wearing is generally used. The special N95 face mask is suggested for prevention of the air borne transmission of virus. Here, the authors would like to discuss about the efficacy of N95 face mask for prevention of Wuhan novel coronavirus infection.

Based on the nanostructure concept proposed by Wiwanitkit,^[2] the pore size of the protective mask plays important role in allowance or prevention of the passage of viral pathogen. For novel coronavirus, its estimated size is about 50-120 nm. This size is considered very small and the particle might be able to penetrate the N95 face mask. In fact, the non-effectiveness of N95 face mask is the similar observation as the previous reports in cases of bird flu and MERS.^[2,3]

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Conflicts of interest

There are no conflicts of interest.

Won Sriwijitalai, Viroj Wiwanitkit¹

TWS Medical Center, Bangkok, Thailand, ¹Honorary Professor, Dr DY Patil University, Pune, India, Visiting Professor, Hainan Medical University, Haikou, China

> Address for correspondence: Dr. Won Sriwijitalai, TWS Medical Center, Bangkok, Thailand. E-mail: wonsriwi@gmail.com

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References

- 1. Hsia W. Emerging new coronavirus infection in Wuhan, China: Situation in early 2020. Case Study Case Rep 2020;10:8-9.
- Wiwanitkit V. N-95 face mask for prevention of bird flu virus: An appraisal of nanostructure and implication for infectious control. Lung 2006;184:373-4.
- Wiwanitkit V. MERS-CoV, surgical mask and N95 respirators. Singapore Med J 2014;55:507.

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