

It's about the fit and filtration

A single medical mask worn correctly is good enough, but adding a cloth mask helps

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PETALING JAYA: While layering a fabric mask on top of a medical mask will improve protection against the coronavirus, Malaysian experts say it is more important to have a mask that fits snugly on the face.

Single masks – whether medical or fabric – are good enough for most situations as long as they are fitted well to the face.

“An improper fit of a face mask can result in a significant decrease in the filtration efficiency.

“This applies to both medical/surgical masks and cloth masks,” said Malaysian Health Coalition member Datuk Dr Amar Singh.

He cited the example of how surgical masks that have to be tied into place, thus offering a better fit, are almost twice as effective as those with elastic ear loops.

Having said that, pairing a medical and fabric mask together can offer better protection precisely because it improves the fit of the mask as well as filtration efficiency, said Dr Amar.

This increased fit and filtration can help in situations where social distancing is difficult.

“If we have to be in a confined space or crowded area for more than 15 minutes, like in a train during peak hours, then it is better if we can apply double face masks,” said Universiti Putra Malaysia medical epidemiologist Assoc Prof Dr Malina Osman.

“If we can ensure the condition is well ventilated and there is no close proximity with others, then a single face mask is adequate,” she added.

Dr Amar added that there is no data that shows that wearing two masks will result in suffocation or a reduction in oxygen levels.

On the issue of medical versus

fabric masks, the experts agreed that both are effective as long the fabric masks are made with multiple layers and have a hybrid construction that follows World Health Organisation (WHO) guidelines.

“Fabric masks could provide 70% to 90% filtration efficiency with a good fit and aluminium nose bridge.

“The time has come to provide standard guidelines on commercial cloth face mask manufacturing,” said Dr Amar.

WHO guidelines state that the outermost layer should be a hydrophobic material that repels droplets and moisture.

The middle layer of the mask

should be a filter made of polypropylene fabric.

The inner layer, which comes in direct contact with a person's face, should be made of a hydrophilic material which absorbs droplets from exhaled breath.

Health director-general Tan Sri Dr Noor Hisham Abdullah concurred, saying that the public can choose between three-ply medical masks or WHO-compliant three-layer fabric masks, but what is more important is how the masks are used.

However, to really protect oneself from the virus, he said: “The best is to stay at home.”