

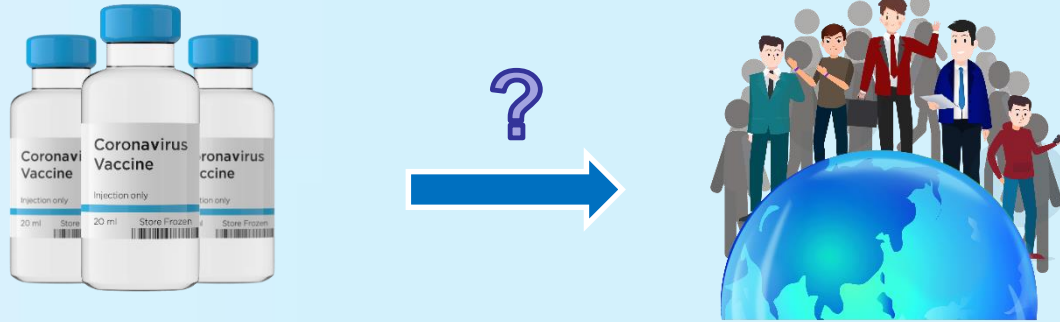
Hoon Shien Teh<sup>1</sup>, Chin Tho Leong<sup>1</sup>, June Fei Wen Lau<sup>1</sup>, Yuan Liang Woon<sup>1</sup>

<sup>1</sup>Centre for Clinical Epidemiology, Institute for Clinical Research  
Corresponding author: tehhsh@crc.gov.my

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## Introduction:

Vaccination for Covid-19 pandemic is highly anticipated. Initial vast demand for vaccines may cause limited supply, therefore prioritization of population groups could be needed to optimize public health impact. In order to develop effective evidence-based framework for vaccines allocation, exploration on general public's preferences are equally important. Hence, this study aims to collate Malaysian's perception on vaccines allocation.



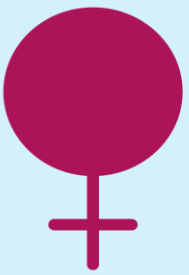

## Methodology:

Literature review was done to identify priority groups to receive vaccine during pandemic. A web-based self-administered survey was developed utilizing the Research Electronic Data Capture (REDCap) and disseminated to Malaysian adults. Cross sectional data was collected throughout July 2020. Besides sociodemographic information, respondents were asked to rate the importance of COVID-19 vaccine for different priority groups, using a 5-points Likert scale. For the assessment of willingness-to-pay, respondents were asked to give the maximum price that they were willing to pay in the scenarios of sufficient and limited vaccine supplies. An interim analysis was done to explore associations between sociodemographic factors and importance level for the priority groups by logistic regression.

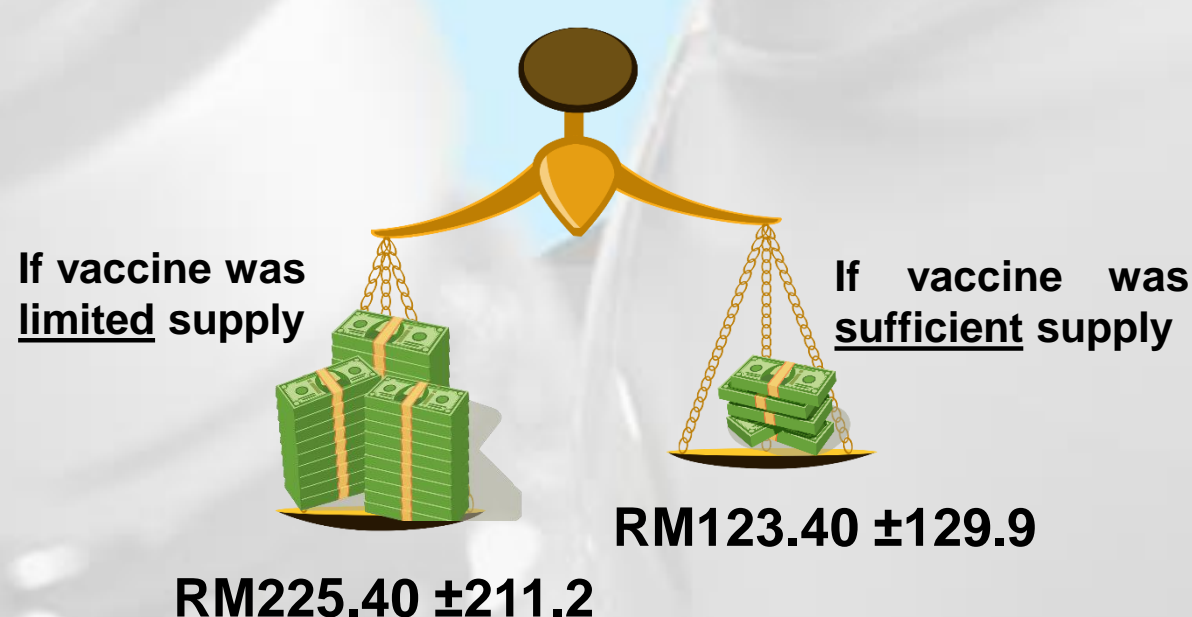
## Result:

A total of 2528 responses were analysed in this interim analysis. The mean age of the respondents was 38.95±11.00 years. The demographic profiles were summarised as below:

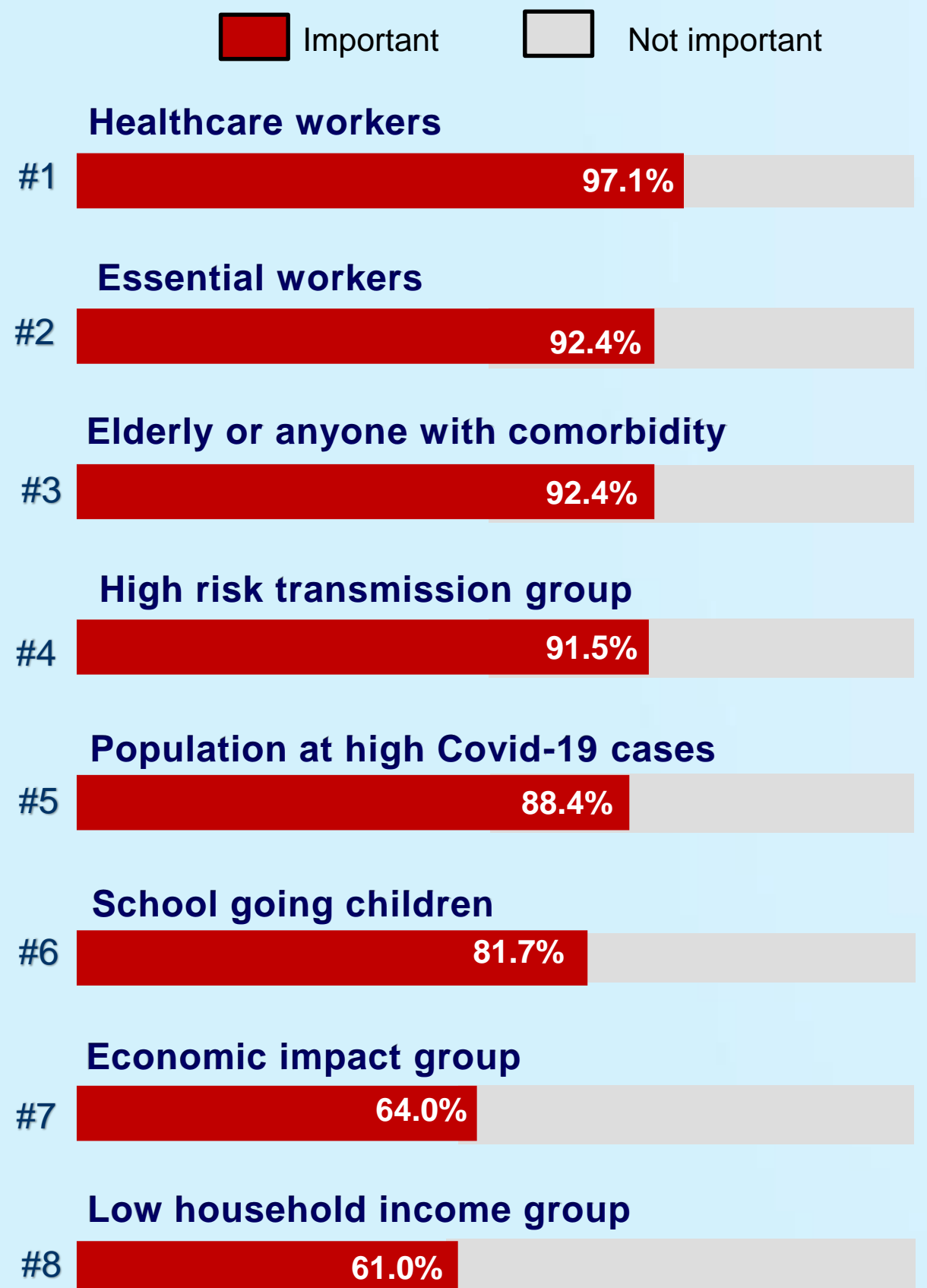
**Table 1: Respondents demographic (N = 2528)**

Female 71%		Male 29%	
Occupation	Healthcare	25.5%	
	Non healthcare	74.5%	
Race	Malay	49.5%	
	Chinese	37.1%	
	Indian	7.0%	
	Others	6.4%	
Household income level	Low (<RM 5000)	41.7%	
	High (≥RM 5000)	58.3%	
Education level	Up to secondary school	6.3%	
	Certificate/Diploma	18.6%	
	Tertiary	75.1%	

**Figure 1: Mean Maximum Price of Willingness-to-pay for vaccines**



**Figure 2: Malaysian's Preferences for COVID-19 Vaccines Allocation**



## Discussion/Conclusion:

The perception of importance level for each group did not differ by sociodemographic determinants, except for priority group with low household income. The top three prioritized groups were health care worker, essential workers, elderly or anyone with comorbidity. These main groups were in line with the priority population stated in the WHO global allocation framework for COVID-19 products<sup>1-2</sup>. Also, the same groups have been highlighted in National Preparedness Plans during pandemic influenza across worldwide<sup>3</sup>. The rationale for prioritisation of healthcare workers would be twofold: (1) they are at increased risk of acquiring infection and/or passing it to vulnerable patients, (2) they are required for quality medical care and good patient outcomes by treating those affected by the disease. During this Covid-19 pandemic, it was apparent that elderly and those with comorbidity were infected severely. Hence, this vulnerable group was expected to be prioritized, similar to previous pandemic plans.

From this study, the mean maximum price the respondents were willing to pay for COVID-19 vaccine was relatively low (below USD 60) compared to USD184.72 from a study in Chile<sup>4</sup>. This individual valuation assessment can be used as benchmark for vaccine introduction at our local setting.

As a conclusion, Malaysian public's perceptions on vaccines allocation were fairly consistent across groups. The findings from this study will be the basis to conduct patient-preference analysis using Discrete Choice Experiment to determine the main attributes for vaccines uptake in the future. Also, this will help our country in the development of vaccine management plan to ensure successful uptake by the majority.

## References:

- 1) WHO. Global survey on National Vaccine Deployment and Vaccination Plans. 2013;(May): 1–40.
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- 3) Uscher-Pines L, Omer SB, Barnett DJ, Burke TA, Balicer RD. Priority setting for pandemic influenza: An analysis of national preparedness plans. PLoS Med. 2006;3(10):1721–7.
- 4) García LY, Cerda AA. Contingent assessment of the COVID-19 vaccine. Vaccine. 2020;