

# PSYCHOSOCIAL IMPACTS OF THE COVID-19 MISBELIEFS TOWARDS THE PUBLIC OF NON-MEDICAL FIELD IN MALAYSIA

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## **ABSTRACT:**

The World Health Organization has named the pandemic causing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) officially as the Coronavirus disease 2019 (COVID-19). The outbreak originated from the city of Wuhan, Hubei Province of central China and was declared as a global health emergency by WHO at the end of January 2020. In Malaysia, the first 3 cases reported on 25<sup>th</sup> January involved 3 women in Johor Bahru which contacted the virus from infected Singaporeans. Later localized clusters and gatherings lead to the outbreak in March 2020.

Studies has shown that the public generally obtain information from social media instead of Health authorities, leading to myths and misbeliefs. Therefore it is seen that myths of the COVID-19 has an impact to the general population as it is usually inaccurate and dangerous, leading to measures such as the WHO providing myth busters and also using social media to counter misbeliefs.

Among the few misbeliefs of the COVID-19 are drinking alcohol can provide protection against the virus, which lead to tragedies in countries such as Iran as nearly 300 deaths and more than 1000 sickened by ingesting methanol. Other misbeliefs and myths such as the use of garlic to ward off the infection, the recent hype on 5G networks that can suppress the immune system and make one susceptible to the virus. Therefore this research is conducted to find out the possible psychosocial impacts of these misbeliefs of COVID-19 can have towards the public lifestyle.

This research will be presented in the form of a video documentary with reports of the highlights of survey findings and input from medical field experts on their views of the myths of COVID-19, as well as public respondents on how the misbeliefs has affected them psychosocially.

## **LITERATURE REVIEW**

### Introduction

There is an ongoing outbreak of lower respiratory tract disease threatening the world which is named Coronavirus disease 2019 (COVID-19) by the World Health Organization. The COVID-19 is caused by a highly infectious virus called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), formerly known as 2019 novel coronavirus (2019-nCoV) (Singhai, 2020). Based on Yuen, Ye, Fung, Chan, & Jin (2020), the origin of this outbreak is in the city of Wuhan in Hubei Province of central China and was declared as a global health emergency by WHO at the end of January 2020. A study conducted by a group of clinicians from University of Hong Kong provided the first concrete evidence for human-to-human transmission of SARS-CoV-2. (Chan et al., 2020). The first three cases were reported in Malaysia on 25<sup>th</sup> of January where the three infected women were known to have close contact with infected Singaporean ("3 coronavirus cases confirmed in Johor Baru", 2020). However, the cases remained relatively low in Malaysia and localized clusters began to come up in (Malaysia coronavirus cases rise after mosque event as imams around world urge online services, 2020).

## **Knowledge towards COVID-19**

To control the rapid spread of this pandemic, unprecedented measures such as closing of public spaces, suspension of public transportation, social distancing and isolation of infection people and suspected cases have been adopted by many countries. According to Zhong, B.L. et al., (2020), to guarantee the success, the compliance of the public to the various control measures are essential, which is largely affected by their knowledge and attitude towards the COVID-19. In a

study conducted by Johnson & Hariharan (2017), it was revealed that all epidemics and pandemics have their unique characteristics in terms of causality, progression and control measures. Zhong, B.L. et al. suggested that there is an urgent need to understand the public's awareness of COVID-19 at this critical moment to facilitate the outbreak management. Their study in China also showed that the Chinese, especially the women, have good knowledge towards COVID-19 (Zhong, B.L. et al., 2020). Another study done by Giao, H. et al. among healthcare workers in Ho Chih Minh concluded that the respondents generally have good knowledge towards COVID-19, but the level of their knowledge is lower than expected for their position level. The study also showed a minority of the respondents still believe that antibiotics are used as the first-line therapy. Besides, most of the people got the information through social media compared to the Health authorities (Giao, H., et al.). Thus, it is vital to provide health education as well as awareness during such situation. The knowledge regarding COVID-19 investigated may assist health sector authorities in developing strategies can campaigns of health education.

#### **Attitudes towards misbelief of COVID-19**

As research into COVID-19 is ongoing, it is expected that facts keep on changing and many myths are also prevalent in the general population regarding the prevention and management. According to Roy, D. et al, (2020), myths along with fake news spreading fast through social media can be disturbing to certain individuals, hence, several sites including WHO are providing myth busters and real information. Based on a study by (BEng, 2018), it was shown that much of the health information shared on social media are inaccurate and potentially dangerous. However, many social media users tend to avoid sources of information that challenge their views, sticking to communities in which their beliefs are confirmed (Roy et al., 2020). For this reason, public health

organizations are encouraged to improve their social media presence to help internet users find accurate information of COVID-19.

## Psychosocial impact of those beliefs to their lifestyle

First of all, there is a belief such that drinking alcohol can protect one against Covid-19. According to WHO Europe (2020), consuming any alcohol possess health risks, but consuming high strength ethyl alcohol, particularly if it has been adulterated with methanol, it can result in severe health consequences, including death. In Iran, media reported nearly 300 deaths and more than 1000 sickened so far by ingesting methanol across the Islamic Republic, where drinking alcohol is banned and where those who do rely on bootleggers (Weiss & Reynolds, 2020). Although other Muslim nation that do not drink also recorded cases of methanol poisoning, Iran appears to be the only country to disclaim drinking alcohol as a cure. Cambodian police stated they have seized 4.2 litres of methanol from a man who was planning to make toxic hand sanitiser (South China Morning Post, 2020).

Secondly, there is also a belief that garlic can prevent infection with Covid-19. It is said so as garlic is known to be often used to help ward off flu, whose symptoms can be similar to those of COVID-19 (The New Arab, 2020). From The New Arab (2020), the price of garlic had shot up in Tunisia as consumers have rushed to stockpile the flavoursome bulbs in the hope it will protect against COVID-19. According to Russian state statistics agency Rosstat, it is reported the price for garlic which are mostly from China, have increased by 11 percent in February (Free Malaysia Today, 2020).

COVID-19 disease gave rise racial attacks towards the Chinese community not just in Malaysia but internationally as this virus arises from Wuhan, China. In many places, the Chinese were blamed for the disease, leading to racial issue in several places. In US, the FBI reported that Chinese and Asian Americans are now experiencing increased hate crimes due to Covid-19 global outbreak (Liu, 2020). According to Jeff Yang, a co-host of a podcast about being Asian in American and frequent contributor to CNN Opinion, said that he experienced racist aggression which there was an occasion when a woman shouted profanities at him and coughed in his direction while shopping in Los Angeles (Yam, 2020).

Moreover, the belief of Covid-19 dealt a significant impact to animals. There were people who feared of getting infected by animals as a result of recent misinformation and misunderstandings, thus led to pets being unjustly left to fend for themselves in shelters or on the streets (Wong, 2020). Social media messages had been circulating claiming that animals can carry Covid-19, leading to irresponsible people dumping their pets in fear of infection. This hysteria is nonsensical and is causing undeserved suffering for many innocent animals (Barry, 2020; Wong, 2020). Pelin Sayilgan, a representative from Ankara Animal Rights Federation, Haytap claimed that there is a 20 percent increase in number of calls to ask whether pet should be given to animal shelter or to the federation as well as increase in number of pets abandoned outside of their offices. (Soylu, 2020)

Furthermore, there is a myth that 5G networks can suppress the immune system and make one more susceptible to COVID-19 based on WHO (2020). According to (Waterson & Hern, 2020), at least 20 mobile phone masts across United Kingdom are believed to have been vandalised since 3 April 2020, according to government and industry sources. On 13<sup>th</sup> April evening, two telecom towers that were not outfitted with 5G equipment were targeted by arsonists in an Amsterdam

Suburb in what seems to be a case of mistaken tower identity, according to the Dutch official. (Prothero, 2020)

Lastly, it is seen that the rumours and beliefs can cause significant impact on public lifestyle. There can be more rumours and impacts than the above shown ones. Therefore, it is necessary to know about the myth and belief regarding the respective disease and find out the possible impact to the public.

## **PROBLEM STATEMENT**

COVID-19 per se has caused public panic. Meanwhile, various misinformation and misbeliefs are also widespread in the media without proper justification of experts and professionals. These misbeliefs have caused public confusion and affected the public psychosocially in their daily life. We would like to identify the extent of public being misinformed, in terms of the properties of the virus and disease, self-diagnosis and treatment practices, hygiene practices etc. We are also interested on how contradicting information results in alteration of their lifestyle in order to conform to their beliefs of the current pandemic.

## **STUDY OBJECTIVES**

- To determine the knowledge and attitudes of the pubic (non-medical) towards the misbeliefs of COVID-19.
- 2. To identify the psychosocial impacts of those beliefs towards daily lifestyle.

#### **MATERIALS AND METHODS**

This research is in the form of a video documentary, comprising reporting of outcomes concerning the knowledge of our study population towards misbeliefs of COVID-19, as a purposive sampling of individuals via video conference interviews to assess the psychosocial impacts of those beliefs to their daily lifestyles.

This study will take four weeks to be completed. The research consists of four phases which are proposal preparation, distribution of questionnaires and interviews, data collection and research report video preparation.

We will be using Google Forms to generate survey forms, which the links will be propagated to the public, which we will record responses dating from 1 to 14 May. The survey questionnaire is first prepared in English language and translated to Bahasa Malaysia. The questionnaire consists of two parts: socio-demographic background and knowledge of myths & facts about COVID-19. Our target population includes non-medical individuals in Malaysia. The inclusion criteria includes respondents between 18-60 years old and those who have access to the internet. Exclusion criterion is if the respondent works in the medical field (healthcare workers, scientists, laboratory technicians). Pilot test will be started once the questionnaire set up has been done. 10 random respondents will be included in the pilot test to test the questionnaire whether it can be understood, to check for errors and to acquire feedback. Besides, team members will rehearse interviews with webcams to detect any difficulties during interviewing.

First part of the questionnaire will determine whether the respondent is eligible for the survey. If a respondent's first answer is that he/she is an individual who works in the medical field, the questionnaire will automatically end. If they do not understand the questionnaire items, research team will explain to them in local language. An eligible individual only can answer the

questionnaire once to avoid any inaccuracy of data analysis. The outcomes will be analysed and presented statistically as the first part of the documentary.

The second part of the documentary is an online video interview. Team members will interview two groups of respondents: medical experts on their views of the myths, and public respondents on how the misbeliefs has affected them psychosocially.

Information from complete questionnaires will be kept confidentially. Name and identification card number are not required. Therefore, the ethical issue is most likely prevented.

We hope the data collected will provide as baseline data which can be used in future studies targeting the improvement of knowledge and attitudes of the public towards the misbeliefs of COVID-19 and also understanding the psychosocial impacts of those beliefs to their daily lifestyles. We hope that our study will provide beneficial data for any further studies or projects related to the newly announced agenda of the Ministry of Health of Malaysia.

## **REFERENCES**

- Barry, J. (2020). Pet owners urged not to abandon animals. Retrieved April 18, 2020, from https://www.thestar.com.my/news/nation/2020/04/15/pet-owners-urged-not-to-abandon-animals
- BEng, R. C. (2018). Containing health myths in the age of viral misinformation, 190(19), 180543. Retrieved from https://doi.org/10.1503/cmaj.180543
- [Breaking] 3 coronavirus cases confirmed in Johor Baru. (2020). Retrieved 16 April 2020, from https://www.nst.com.my/news/nation/2020/01/559563/breaking-3-coronavirus-cases-confirmed-johor-baru
- Chan, J. F. K., Yuan, S., Kok, K. H., To, K. K. W., Chu, H. & Yang, J. (2020). A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. 395(10223), 514-523. Retrieved from https://doi.org/10.1016/S0140-6736(20)30154-9
- Free Malaysia Today. (2020). Covid-19: Russians are panic buying buckwheat, condoms. Retrieved April 18, 2020, from https://www.freemalaysiatoday.com/category/leisure/2020/03/28/covid-19-russians-are-panic-buying-buckwheat-condoms/
- Giao, H., Thi, N. N. H., Tran, V. K., Vo, K. N., & Pham, L. A. (2020). Knowledge and attitude towards COVID-19 among healthcare workers at District 2 Hospital, Ho Chi Minh City. *Asian Pacific Journal of Tropical Medicine*. doi: 10.4103/1995-7645.280396.
- Johnson, E. J., & Hariharan, S. (2017). Public health awareness: knowledge, attitude and behaviour of the general public on health risks during the H1N1 influenza pandemic. *Journal of Public Health*, 25(3), 333–337.
- Liu, E. (2020). Covid-19 has inflamed racism against Asian-Americans. Here's how to fight back (opinion). Retrieved April 18, 2020, from https://edition.cnn.com/2020/04/10/opinions/how-to-fight-bias-against-asian-americans-covid-19-liu/index.html
- Malaysia coronavirus cases rise after mosque event as imams around the world urge online services (2020). Retrieved 16 April 2020, from https://www.independent.co.uk/news/world/asia/coronavirus-malaysia-cases-southeast-asia-mosque-islam-a9403816.html
- Prothero, M. (2020). 5G coronavirus conspiracy theory that led to arson attacks on cell towers is being pushed by Russia, security officials fear. Retrieved April 18, 2020, from https://www.businessinsider.my/5g-coronavirus-arson-cellphone-towers-russia-iran-bots-2020-4?r=US&IR=T
- Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020, June). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry*. Retrieved from https://doi.org/10.1016/j.ajp.2020.102083

- Singhal, T. A Review of Coronavirus Disease-2019 (COVID-19). *Indian J Pediatr*, 87, 281-286.
- South China Morning Post. (2020). Coronavirus: In Iran, the false belief that toxic methanol fights Covid-19 kills hundreds. Retrieved April 18, 2020, from https://www.scmp.com/news/world/middle-east/article/3077284/coronavirus-iran-false-belief-toxic-methanol-fights-covid-19
- Soylu, R. (2020). Coronavirus in Turkey: Pets abandoned amid fears of contagion. Retrieved April 18, 2020, from https://www.middleeasteye.net/news/coronavirus-update-turkey-abandon-pets-fear-covid-19
- The New Arab. (2020). Forget toilet paper: Tunisians panic-buy garlic as rumours spread. Retrieved April 18, 2020, from https://english.alaraby.co.uk/english/news/2020/3/13/tunisians-panic-buy-garlic-following-rumours-it-slays-coronavirus
- Waterson, J., & Hern, A. (2020). At least 20 UK phone masts vandalised over false 5G coronavirus claims. Retrieved April 18, 2020, from https://www.theguardian.com/technology/2020/apr/06/at-least-20-uk-phone-masts-vandalised-over-false-5g-coronavirus-claims
- Weiss, S., & Reynolds, M. (2020). Does alcohol kill coronavirus? The biggest myths, busted. Retrieved April 18, 2020, from https://www.wired.co.uk/article/alcohol-kills-coronavirus-myth-busting
- WHO Europe. (2020). Alcohol use Alcohol does not protect against COVID-19; access should be restricted during lockdown. Retrieved April 18, 2020, from http://www.euro.who.int/en/health-topics/disease-prevention/alcohol-use/news/2020/04/alcohol-does-not-protect-against-covid-19-access-should-be-restricted-during-lockdown
- Wong, N. (2020). Animal activists plead with owners not to abandon their pets. Retrieved April 18, 2020, from https://www.freemalaysiatoday.com/category/leisure/2020/04/08/animal-activists-fear-covid-19-misunderstanding-will-lead-to-pet-abandonment/
- Yam, S.-Y. S. (2020). Coronavirus: Masks reveal racism, cultural differences and gov't incompetence. Retrieved April 18, 2020, from https://hongkongfp.com/2020/04/18/coronavirus-masks-reveal-racism-cultural-differences-and-govt-incompetence/
- Yuen, K. S., Ye, Z. W., Fung, S. Y., Chan, C. P., & Jin, D. Y. (2020). RESEARCH HIGHLIGHT SARS CoV 2 and COVID 19: The most important research questions. *Cell & Bioscience*, 1–5. https://doi.org/10.1186/s13578-020-00404-4
- Zhong, B.L., Luo, W., Li, H. M., Zhang, Q. Q., Liu, X. G., Li, W. T. & Li, Y. (2020). Knowledge, attitudes and practises towards COVID-19 among Chinese residents during the rapid ris eperiod of the COVID-19 outbreak: A quick online corss-sectional survey. *Int J Biol Sci*; 16(10): 1745-1752.