

Perception on Risk of Being Infected with COVID-19 Among Malaysian

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Introduction

Community perceptions on the risk of COVID-19 infection are important in influencing their participation in its preventive measures. As the number of deaths from the disease rises around the world, it is becoming increasingly important to understand public risk perception. Accurate public risk perceptions are critical to managing public health risks effectively.

Objective

This study aims to identify the perception on risk of being infected with COVID-19 among Malaysians.

Methodology

- Study design** : A Cross-sectional online survey.
- Sampling Technique** : Snowball Technique
- Target Respondents** : Malaysians aged 13 years and above (Total respondents: 20,567)
- Data collection** : 28 December 2020 to 17 January 2021 (three weeks). (Questionnaire link was disseminated through social media platforms such as WhatsApp, Telegram and Facebook).
- Instrument** : The questionnaire included demographic information, health problems and Perception on Risk of Being Infected with COVID-19, Likert scale type.
- Analysis** : Descriptive analysis and Chi-square Test. Statistical significance was accepted at p-value <0.05.

Result

Table 1: Demographic profile (N 20,567)

| Gender | Age | Race | Marital Status | Job |
|---------------|--------------|---------------|----------------|-----------------------------|
| Male: 32.6% | 13-18: 4.1% | Malay: 74.9% | Married: 69.8% | Government employees: 43.6% |
| Female: 67.4% | 19-25: 8.6% | Chinese: 6.9% | Single: 26.3% | Private Workers: 26.5% |
| | 26-40: 48.5% | Indian: 1.4% | Divorce: 3.9% | Self-employed: 6.9% |
| | 41-50: 25.1% | Others: 16.8% | | Not working: 13.6% |
| | 51-59: 12.2% | | | Student: 9.4% |
| | >=60: 1.6% | | | |

Table 2: Level of Risk Perception of COVID-19 Infection

| Category | Score Breakdown | n | % | Min | Maximum |
|----------|-----------------|-------|------|-----|---------|
| Low | 0-6 | 8331 | 40.5 | 7.0 | |
| Moderate | 7-9 | 10071 | 49.0 | 4 | |
| High | 10-12 | 2165 | 10.5 | | 12 |

Table 3: Risk Perception of COVID-19 Infection

| No | Statement | Low | Moderate | High |
|----|--|--------------|-------------|-------------|
| | | n(%) | | |
| 1 | What do you think of your chances of getting COVID-19? | 9313 (45.3) | 8404 (40.9) | 2850 (13.9) |
| 2 | If you were to be infected with COVID-19, do you think your health will be seriously affected? | 6484 (31.5) | 9640 (46.9) | 4443 (21.6) |
| 3 | If I practice COVID-19 prevention measures as advised by the MOH, possibility of me getting infected with COVID-19 is... | 16842 (81.9) | 3176 (15.4) | 549 (2.7) |
| 4 | If you have COVID-19, do you think you would know if you were spreading COVID-19 to other people? | 4902 (23.8) | 6492 (31.6) | 9173 (44.6) |

- 49% of the respondents opine that their risk of being infected with COVID-19 is **MODERATE**.
- 45.3% of respondents are of the perception that their chances of being infected are **LOW** (*Perceived susceptibility*) while 46.9% think that their health will be severely affected if they are infected by COVID-19 a **MODERATE** level (*Perceived severity*).
- 81.9% believe that if they follow the standard operational procedure (SOP)s set by health authorities, their chances of being infected are low (*Perceived Benefit*) while 44.6% think they are at **HIGH RISK** of infecting other people if they are infected with COVID-19 (*Perceived susceptibility*).

Perception of Risk of COVID-19 Infection among Respondents with Respiratory-Related Diseases

- 9% of respondents revealed that they have respiratory related illness.
- Among respondents with respiratory tract related diseases, 56.4% of them believed that their risk of contracting COVID-19 was moderate, 19.6% believed that they have high risk while 23.9% believed that they have low risk of being infected.
- The chi-square test for contingency showed that there was a significant relationship between the perception of risk of being infected with COVID-19 among respondents with the respiratory-related diseases they faced. ($X^2(2) = 320.1, p < 0.001$).

Perception of Risk of COVID-19 Infection with Respondents with Diabetes

- 7.5% of the respondents who participated in this study were diabetics.
- Among the respondents with this disease, 48.8% believed that their risk of contracting COVID-19 was moderate, 32.2% believed that they have high risk while 19% believed that they have low risk of being infected.
- The chi-square test for contingency showed that there was a significant relationship between the perception of risk of COVID-19 infection among respondents with diabetes. ($X^2(2) = 143.6z, p < 0.001$).

CONCLUSIONS

Overall, respondents' perception on their risk of being infected with COVID-19 averages at moderate and low. This indicates that majority of respondents in this study considered their risk of being infected is small. This may be influenced by among others, the facts that the number of COVID-19 cases reported in the country at the time the research was carried out was still low compared to the current trend, the fact that Malaysia at that time was just about to implement Emergency in effort to curb COVID-19, and that the public were hopeful that the nation's vaccination programme would roll out on time and successfully create herd immunity within the community. Unfortunately, due to turns of event such as the harrowingly increasing number of COVID-19 cases reported to-date and the various new variant recently discovered, this disease is spreading rapidly throughout the country. Therefore, the public need to be aware that the risk of being infected with COVID-19 is high and the recommendation to stay at home, to wear masks and shield, to get vaccinated and to follow others SOPs set by the government must be **STRICTLY** followed.

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REFERENCES

- Shahin, M.A.H., Hussien, R.M. Risk perception regarding the COVID-19 outbreak among the general population: a comparative Middle East survey. *Middle East Curr Psychiatry* 27, 71 (2020). <https://doi.org/10.1186/s43045-020-00080>
- Van Bavel, J. J., P. Boggio, V. Capraro, A. Cichocka, M. Cikara, M. Crockett, ... N. Ellemers. 2020. "Using Social and Behavioural Science to Support COVID-19 Pandemic Response." *Nature Human Behaviour* [PubMed]. [Web of Science®]. [Google Scholar]
- Sarah Dryhurst, Claudia R. Schneider, John Kerr, Alexandra L. J. Freeman, Gabriel Recchia, Anne Marthe van der Bles, David Spiegelhalter & Sander van der Linden (2020) Risk perceptions of COVID-19 around the world, *Journal of Risk Research*, 23:7-8, 994-1006, DOI: [10.1080/13669877.2020.1758193](https://doi.org/10.1080/13669877.2020.1758193)

