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RESEARCH ARTICLE

Relationship between knowledge and attitude towards COVID-19 prevention behaviour among west jakarta residents

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Abstract

Background: Over time, cases of COVID-19 have increased significantly; as of June 19, 2020, the total number of patients positive for COVID-19 in Cengkareng District, Indonesia, was 163 as behavioural efforts to prevent COVID-19 have not been carried out optimally by Cengkareng District residents. **Objectives:** This study aimed to determine the relationship between the level of knowledge and attitude of the community towards COVID-19 prevention behaviour. **Methods:** This study was observational, prospective, with a cross-sectional design. The sample consisted of the residents of Cengkareng District (n=100) obtained by a purposive sampling technique. The data analysis was univariate and bivariate. Bivariate analysis used the Chi-square test. **Results:** The univariate analysis revealed that 62% of respondents had good knowledge of COVID-19 prevention, 55% had positive attitudes towards COVID-19 prevention, and 60% had good COVID-19 prevention behaviour. Bivariate analysis showed that men, women, and children were associated with a COVID-19 preventive behaviour ($p < 0.05$). In Cengkareng District, West Jakarta, there was an association between population knowledge and COVID-19 prevention behaviour. To prevent the spread of COVID-19, health workers should promote the importance of COVID-19 prevention behaviours.

Introduction

In early December 2019, some instances of pneumonia were reported in the city of Wuhan, Hubei Province, China (Mona, 2020). The reports originated from a fresh seafood market in Wuhan, China (Wolf *et al.*, 2020). Investigations revealed that the disease was induced by a new beta coronavirus marked by a 79% genome sequence of SARS-CoV, formerly highly prevalent in 2002–2003. As suggested by the Coronavirus Study Group (CSG) of the International Committee, this virus was classified based on the genome sequence and its activity. It was named SARS-CoV-2. It continues to increase its victims.

Promoting the knowledge, attitude, and behaviour of the community concerning different aspects of COVID-

19 can help take practical steps to develop correct healthy behaviours and increase public adherence to medical advice to prevent the spread of the disease.

The SARS-CoV-2 is a new type of virus that is now shocking to the world because it has infected thousands of millions of people globally in a short time. Anticipating the spread and increase in the number of patients, the community should implement health protocols, including wearing masks, applying social distancing or physical distancing, maintaining hand hygiene, and applying the ethics of coughing and sneezing during COVID-19. Therefore, this study aimed to determine the level of public awareness in using health protocols during the COVID-19 pandemic.

In Indonesia, the first COVID-19 cases reported on March 2, 2020, of a mother and her son infected after contact with a COVID-19 positive person from Japan were announced by the President of Indonesia Republic, Ir Joko Widodo, at the Presidential Palace (Ratcliffe, 2020). Jakarta is the province most exposed to COVID-19 in Indonesia, with about 6.789 positive cases on May 26, 2020 (Farisa *et al.*, 2020). Heads of neighbourhood units can assist the government in carrying out synergy with the community. This research is expected to be a source of reference for the government in planning the following policy to overcome the COVID-19 pandemic. This study aimed to evaluate the relationship between knowledge and attitude towards COVID-19 prevention behaviour among West Jakarta residents.

Methods

This cross-sectional, observational, prospective study was conducted online over two months (Aug 2020–Sept 2020) via a questionnaire on Google Forms, distributed on Instagram and Facebook. Informed consent was obtained from the respondents before completing the online questionnaire. The inclusion criteria were residents of Cengkareng, West Jakarta, Indonesia, aged above 12 years. Exclusion criteria were cancer, pregnancy, and systemic lupus erythema. The questionnaire included four sections: demographic

information, knowledge, attitude, and preventive behaviours concerning COVID-19. Demographic data included age, gender, occupation, education, place of residence, marital status, and history of chronic diseases. The attitude part included eight items rated on a Likert scale with favourable (positive) and unfavourable (negative) and Guttman Scale with fordable (positive) like agree, correct with score one, and damaging (negative) with score 0 (Masturoh & Temesvari, 2018). In rating knowledge, attitude, and practice, a score between 0%–50% was considered low, between 51–75% was interpreted as average, and above 75% was considered exemplary.

Results

In total, 100 participants participated in this study and filled out the questionnaires. They aged between 12 and 70 years. The highest frequencies belonged to the 15–24 years of age group. Of all participants, 57% were females, and 43% were males. Regarding education, the highest frequency was for senior high school (43.0%). Participants were students (39%), workers (24%), housewives (19%), entrepreneurs (13%), and others (5%). Table I shows the relationship between knowledge and behaviour of COVID-19, and Table II shows the relationship between attitude and behaviour of COVID-19.

Table I: Relationship between knowledge and Behaviour of COVID-19

Knowledge	Behaviour of Covid-19				Total	p-value
	Good		Currently			
	Male	%	Female	%		
a. Good	32	80.0	30	50.0	62	0.009
b. Currently	7	17.5	23	38.3	30	
c. Not enough	1	2.5	7	11.7	8	
Total	40		60			

Table II: Relationship between attitude and Behaviour of COVID-19

Attitude	Behaviour of Covid-19				Total	p-value
	Good		Good			
	Male	Male	Male	Male		
a. Positive	28	70.0	27	45.0	55	0.014
b. Negative	12	30.0	33	55.0	45	
Total	40		60			

Discussion

Healthy life knowledge and attitude are characteristics that should be present in every community. Having a positive attitude towards knowledge affects the ability related to science. This study reveals that healthy life knowledge and attitude range both from “sufficient” to “good”, or 70%-80%. This result indicates that the Cengkareng population, West Jakarta, possesses good health knowledge and a positive attitude towards preventive behaviour. In almost all indicators, participants scored “good”. Another study reported 93% good knowledge about COVID-19 among the general Indonesian population (Ramatillah *et al.*, 2021). Correlation analysis shows a significant positive correlation between healthy life knowledge, attitude, and preventive behaviour ($p < 0.05$); the increased healthy life knowledge resulted in a better perspective. The limitation of this study is that the area of study was only in Cengkareng, West Jakarta. Future studies need to compare the impact of knowledge on the outcome of COVID-19 among Indonesian people.

Conclusion

Based on the results of the study, both knowledge and attitude are relatively good, informed by the percentage of more than 50%, where the knowledge is 80%, and the positive attitude is 70%. The correlation between healthy life knowledge and the attitude of the

Cengkareng population, West Jakarta, Indonesia, is positive, which decreased by the grade.

References

- Farisa, F., Maharani, T., & Mashabi, S. (2020). *UPDATE 26 Mei: Tambah 415, Pasien Covid-19 di Indonesia Jadi 23.165 Orang*.
<https://nasional.kompas.com/read/2020/05/26/15584581/update-26-mei-tambah-415-pasien-covid-19-di-indonesia-jadi-23165-orang>
- Masturoh, & Temesvari. (2018). *Metode Penelitian Kesehatan* (1st ed.). Kementrian Kesehatan Republik Indonesia
- Mona, N. (2020). Konsep isolasi dalam jaringan sosial untuk meminimalisasi efek contagious (kasus penyebaran virus corona di indonesia). *Jurnal Sosial Humaniora Terapan*, *2*(2).
<https://doi.org/10.7454/jsht.v2i2.86>
- Ratcliffe, R. (2020, March). *First coronavirus cases confirmed in Indonesia amid fears nation is ill-prepared for outbreak | Indonesia | The Guardian*.
<https://www.theguardian.com/world/2020/mar/02/first-coronavirus-cases-confirmed-in-indonesia-amid-fears-nation-is-ill-prepared-for-outbreak>
- Ramatillah, DL, Alam, HF, Ipadeola, MH, Syed Sulaiman, SA, Lukas, S, Jusnita, N and Ramadhani, D. (2021). Public Knowledge about Covid 19 and Its Impact on the Psychic Condition of Indonesia Society. *Journal of Hunan University Natural Sciences*