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COVID-19 Stigma: Are There Differences by Socio-demographics Status?

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ABSTRACT

Background: COVID-19 cases are still relatively high in Indonesia. In the early days of the pandemic, the novelty of the virus, the related social restrictions, and the surge of information often caused misperception amongst communities, including on stigma. **Objective**: This study assessed the stigma and discriminatory behaviours against anyone perceived to have been in contact with the virus, particularly health-care workers. **Methods**: An online survey among health-care workers were conducted. We collected data from 305 respondents regarding stigma of COVID-19. Stigma scores were obtained by summation of 7 questions regarding stigma (range 0-7). Descriptive analyses were conducted to assess differences in level of stigma by different socio-demographic characteristics. **Results**: There were 32.9% of respondents with stigma score >= 6, mean stigma scores were 4.4 (s.d. 0.1). These includes questions on whether confirmed cases are those ignoring prevention protocol, perceived to hide their status, and needs to be isolated away from communities. There were differences by age, with older respondents had higher stigma score. Significant differences were also observed by education and educational background, with respondent of lower or non-health educational background or had higher stigma score. **Conclusions**: Prevalence of stigma were relatively high (more than 30%), with differences by socio-demographics background. Elderly, and people of low or non-health education had higher stigma scores. Hence, health education to reduce stigma is particularly important for this subpopulation.

Keywords: *stigma, healthcare workers, socio-demographics*

1. INTRODUCTION

On January 7, 2020, a new coronavirus was isolated and named as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the International Committee for Taxonomy of Viruses (ICTV) after an outbreak of pneumonia of unknown cause in the city of Wuhan, China (1). Coronavirus Disease 2019 (COVID-19) by the World Health Organization on February 11, 2020 (2).

COVID-19 cases are still relatively high in Indonesia. As of September 28, 2021, the government of the Republic of Indonesia has reported 4,211,460 people who have been confirmed positive for COVID19. 141,709 deaths from COVID-19 have been reported and 4,031,099 patients have recovered from the disease (3). In 2021, in line with the improvement in RR and CFR at the end of 2020, the national RR and CFR numbers will increase, with RR at 80% and CFR at 3% (4).

The COVID-19 pandemic has had a huge impact on the world. In the early days of the pandemic, the novelty of the virus, the social restrictions implied, misinformation, and information overload often led to misjudgment in communities, including on stigma (5). The transmission of this virus is very fast, causing a negative stigma in society as well. Several agencies, including the WHO, have called for the development of interventions that reduce the spread of misinformation about COVID-19. The first step in developing such an intervention is to understand why people share unverified COVID19-related information on social media (6).

This has social impacts such as discrimination against patients and their families. Discrimination due to

COVID-19 is indirectly related to anxiety, depression and insomnia (7). Stigma can lead to stereotypes and assumptions. This stereotype can broaden fears and demean someone who has been exposed to the corona virus. At a more severe level, stigma can make a person avoid help, examination, testing, or quarantine (8). This study assessed the stigma and discriminatory behaviors against anyone perceived to have been in contact with the virus, particularly health-care workers.

2. METHODS

An online survey among health-care workers were conducted to assess the stigma and discriminatory behaviors against anyone perceived to have been in contact with the virus, particularly health-care workers. Participants who are not directly exposed to the risk of COVID-19 but merely had a perceived linkage with the COVID19 case can take this survey. We collected data from 305 respondents regarding stigma of COVID-19 from November-December 2020. Stigma scores were obtained by summation of 7 questions regarding stigma (range 0-7). Descriptive analyses were conducted to assess differences in level of stigma by different socio-demographic characteristics.

3. RESULTS

The description of the sociodemographic characteristics of the respondents who participated in the online survey of COVID-19 stigma is shown in Table 1.

Tabel 1
Demographic Characteristic of Respondents

Characteristic (n,%)	**n**	**%**
Age (years)		
<30	103	33.9
31-41	169	55.7
>45	33	12.5
Sex		
Male	51	16.2
Female	264	83.8
Education		
Highschool	17	5.7
College	56	18.2
Post-graduate	232	76.1
Education Background		
Health	23	7.7
Non-health	282	92.3

A total of 315 respondents took the online survey. The age of respondents was dominated by 31-41 years old group (55.7%). This group is a group that mostly can access gadgets and questionnaires easily. The majority of respondents are female (83.8%). The last education of the respondents was dominated by post-graduate, 232 people (76.1%). This can happen because at this level of education, most of them already have gadgets and have access to questionnaires. The majority of respondents have an educational background in the non-health sector (92.3%).

The results of stigma survey can be seen from Table 2 regarding COVID-19 which is quite high, both to patients and health workers. The prevalence of stigma is around 30%, with the characteristics that confirmed cases are cases that ignore prevention protocols, are considered to hide their status, and need to be isolated from the community.

Tabel 2
Stigma of Respondents

Items	Highschool	University	Postgrad	Total
COVID-19 patients were infected because they were not discipline in following health protocol	**55.56**	**82.46**	**83.26**	**81.53**
Feeling worried if COVID-19 patients are nearby	**77.78**	**64.91**	**80.75**	**77.71**
Avoid contact with COVID-19 patients	88.89	80.70	88.66	87.22
People who died due to COVID-19 needs to be buried in different location from other	**66.67**	**33.33**	**47.70**	**46.18**
COVID-19 patients need to be isolated away from neighborhood	66.67	50.88	47.70	49.36
COVID-19 patients identity should be announced	66.67	50.88	63.29	61.22

I don't want people with COVID-19 living nearby	**72.22**	**31.58**	**41.42**	**41.40**

Tabel 3
Stigma of Respondents

	Stigma Score	Mean Stigma Score
Total	**32.90 (0.2)**	**4.4 (0.1)**
Age (years)		
<30	31.13 (0.3)	4.18 (0.2)
31-41	30.95 (0.2)	4.50 (0.1)
>45	41.03 (0.3)	4.82 (0.3)
Sex		
Male	31.37 (0.4)	4.48 (0.2)
Female	32.58 (0.2)	4.43 (0.2)
Education		
Highschool	50.00 (0.6)	4.94 (0.5)
College	19.30 (0.3)	3.94 (0.2)
Post-graduate	33.89 (0.3)	4.52 (0.1)
Educational Background		
Health	41.67 (0.5)	4.30 (0.4)
Non-health	32.17 (0.2)	4.46 (0.1)

There were 32.9% of respondents with stigma score >= 6, mean stigma scores were 4.4 (s.d. 0.1). These

includes questions on whether confirmed cases are those ignoring prevention protocol, perceived to hide their status, and needs to be isolated away from communities. There were differences by age, with older respondents had higher stigma score. Significant differences were also observed by education and educational background, with respondent of lower or non-health educational background or had higher stigma score

4. DISCUSSION

Our result showed, there were no significant differences in the baseline score between the trainees attending online and offline. nor were there differences by sex or level of education. But offline training still more effective in improving knowledge of participants. The activeness of the participants will have a good influence on the number of achievement targets, if participants are more active to be able to attend and take part in a series of training activities, it will help increase the achievement targets in training activities (9).

In addition, online training hinders the activeness of participants because there is no direct interaction, so it is less effective to carry out. The training carried out online causes changes and adjustments in its implementation, resulting in several obstacles. Information and technology play an important role in implementing work or learning from home. The problem of facilities and infrastructure is still an obstacle in the distribution of internet access in Indonesia (10).

5. CONCLUSION

Prevalence of stigma were relatively high (more than 30%), with differences by socio-demographics background. Elderly, and people of low or non-health education had higher stigma scores. Hence, health education to reduce stigma is particularly important for this subpopulation.

AUTHORS' CONTRIBUTIONS

AP, VW, RF compiled research concepts and designs. drafted a manuscript. EP, S, SM, VS, LP made a study design and finalization. All authors reviewed the final manuscript.

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