Stigma and Mental Health during COVID-19 New Normal Transition in Indonesia

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Abstract

Background: Social isolation and economic catastrophic became the main characters of the current pandemic. Historically, the strongest stigmas related to diseases were characterized as highly transmittable, potentially lethal, and without remedy. All represented COVID-19 during the early transition into the new normal. We aimed to analyzed stigma and economic stressors concerning mental health. **Method:** We conducted a cross-sectional online survey of 1375 participants in Java, Indonesia. Mental health status evaluated with DASS-21. The presence of social and self-stigma related to Covid-19 assessed with a questionnaire developed based on seven domains of public stigma. Demographics and other psychosocial stressors were assessed with an online questionnaire. Descriptive analyses and logistic regression had carried out. **Result:** A very high percentage of perceived and anticipated self-stigma and social stigma revealed. Controlling demographics factors, clear self-stigma increased the risk for depression (2.323 (1.241-4.346), $p<0.05$), anxiety (2.134 (1.205-3.777), $p<0.05$) and stress 3.931 (1.779-8.685), $P<0.001$). Clear social stigma increased the risk for anxiety (2.000 (1.066-3.756), $p<0.05$) but not on depression and stress.**Conclusion:** Ensuring basic needs fulfilment and eliminating stigma is critical for supporting mental health in the Covid-19 pandemic. Further research into the stigma-related risks is necessary because it represents an important need for intervention in public health.

Keywords: *stigma, mental health, COVID-19*

Introduction

Awareness, anxiety, and distress due to rapid changes and uncertainty, according to the World Health Organization (WHO) are natural psychological responses[1]. But beyond natural responses, COVID-19 stated as the perfect vector for psychological distress pandemic. Mitigation measures of COVID-19 forced people to isolate themselves from one another when social support and togetherness were most needed[2,3]. Rising concern on the importance of understanding mental health problems during the COVID-19 pandemic proved by extended researches on the general population and/or health workers' mental health condition during the COVID-19 pandemic[4]. Every phase of a pandemic had its characteristics, therefore understanding mental health dynamics in each unique phase is important.

WHO declared the crisis of COVID-19 global outbreak as a pandemic on 11th March 2020[5]. Indonesia announces first and second patients with positive COVID-19 virus on 1st March 2020[6]. To contain COVID-19 transmission, mass social and physical distancing was declared.If it is essential to go outside their home, face masks wearing, avoid gathering, and maintain physical distance is emphasized[7]. After almost three months of mass social distancing, on 1st June 2020, the Indonesian government declared the new phase of "transition into new normal" which later changed the term into "new habit adaptation"[8]. New normal phase marked by gradually lifting stay-at-home measures and

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reviving the economic activities[9]. Indonesia enters the new normal phase in the still steep rising confirmatory person contracting COVID-19 situation[10], and the effective medicine and vaccine to inhibit COVID-19 infection had not been available[11]. It leads to a heightened risk of infection and possibly psychological distress.

Historically and nowadays, the strongest stigmas related to diseases are characterized as highly transmittable, potentially lethal, and without an acknowledged remedy[12], all could find in COVID-19 during the transition into the new normal.Studies relating to stigma and mental health in COVID-19 mostly came in a conceptual study[3,13] or qualitative research[13,14]. There still limited study relating mental health to stigma COVID-19 in quantitative research with a representative sample, and no scientific manuscript found in an Indonesian context. Research on Vietnamese health workers and the Canadian general population found stigma worsen mental health condition[15,16]. To fill the gap, this research aimed to assess health workers and general population stigma and mental health during the transition into the new normal. Finding from this research could potentially support policymakers in formulating comprehensive interventions.

Material and Methods

Participants

We adopted a cross-sectional survey design by using an online questionnaire. A snowball sampling strategy focused on recruiting the general population and health workers living in 5 provinces of Java Island (Central Java, East Java, West Java, Special Capital Region of Jakarta, Special Region of Yogyakarta, and Banten), Indonesia was utilized. Participants were recruited by sending the survey through various social network channels. The final sample obtained with the snowball method was 1,385 people. Inclusion criteria were a participant aged 15-64 years to ensure the understanding of questions based on their knowledge and attitudes.

Variables and Instruments

Stigma about COVID-19 was measured using seven-domain public stigma from Pescosolido and Martin. Stigma domains measured including social distance, traditional prejudice, exclusionary sentiments, negative affect, dangerousness perceptions, also carryover in treatment and disclosure[17]. A social and self-stigma scale was developed for this research. Social stigma included peoples' beliefs and negative behavior related to COVID-19. Self-stigma covered perceived and anticipated stigma, covering personal concerns about negative judgment and behavior when diagnosed as COVID-19 positive, and actual and anticipated stigma in participants with the experience of COVID-19 positive diagnosed. The stigma scale uses a 4-point Likert scale (1: strongly agree; 2: agree; 3: disagree; 4: strongly disagree) to measure agreement with statements about each domain. The score was calculated by adding responses from items and dividing by the total number of items in the domain. A mean score above the midpoint (2.0) indicated a stigmatizing attitude, with higher scores indicating more severe stigma[17]. In this research the score further divided into: 0-2 non stigma; >2 - <3: suggestive for stigma; >3 clear stigma. The reliability of social and self-stigma was 0.795 and 0.800 (Alpha Cronbach). Social and self-stigma had 14 and 10 items. The self and social-stigma items are carefully structured with several tryouts to ensure the balancing concern of COVID-19 precautionary measures with stigma mitigation[18].

Mental health status was measured using the Depression, Anxiety, and Stress Scale (DASS-21). The DASS-21 is a self-reported tool containing 21 items (7 per scale) that assess three constructs: depression, anxiety, and stress. Participants read statements about the constructs and picked their answers using a 4-point Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much or most of the time). Items comprising the scales are summed and doubled to be equivalent to the longer DASS-42 version. The cut-off was using normative DASS-42 data, divided into normal, mild, moderate, severe, and very severe.

Several studies of DASS-21 showed good psychometric results[19].

Demographic data had collected on age, gender, education level, employment status, monthly income, and marital status.

Statistical Analysis

Descriptive statistics had used for continuous and categorical variables. Logistic regression analysis had done to determine the relationship between stigma and mental health status. All the analyzes had conducted using IBM SPSS Statistics v.21. The level of significance had set at 5%.

The study has approval from The National Institute of Health Research and Development Ethics Committee, Indonesia (LB.02.01/2/KE.386/2020). Research information is given in the first section of the online questionnaire. Respondents stated informed consent before starting to fill the data.

Result

Tabel 1. Distribution of depression, anxiety and stress across sociodemographic variables

N=1385	Depression		Anxiety		Stress	
	% cases	OR (95% CI)	% cases	OR (95% CI)	% cases	OR (95% CI)
Gender						
Male (N=360)	21.9	0.988 (0.740-1.321)	28.6	0.837 (0.643-1.089)	10.0	1.039 (0.695-1.553)
Female (N=1025) (ref)	22.1		32.4		9.7	
Age (years)						
< 25 (N=234)	33.3	2.426 (1.601-3.674)***	50.0	3.661 (2.490-5.383)***	20.1	3.814 (2.123-6.852)***
26 – 45 (N=876)	20.7	1.263 (0.896-1.800)	29.6	1.537 (1.113-2.121)*	8.1	1.339 (0.774-2.314)
≥ 46 (N=275) (ref)	17.1		21.5		6.2	
Highest education						
High school (N=191)	32.5	1.871 (1.340-2.613)***	46.1	2.085 (1.528-2.845)***	18.3	2.454 (1.613-3.736)***
Higher education(N=1194) (ref)	20.4		29.1		8.4	
Marital status						
Non Married (N=408)	31.4	2.052 (1.575-2.674)***	43.9	2.201 (1.728-2.804)***	16.2	2.540 (1.772-3.639)***
Married (N=977) (ref)	18.2		26.2		7.1	
Occupation						
General population(N=911)	23.6	1.300 (0.988-1.712)	33.8	1.396 (1.092-1.784)*	10.9	1.483 (0.996-2.210)
Health workers (N=474) (ref)	19.2		26.8		7.6	

* $p < 0.05$

Participant characteristics are described in Table 1. The sample (N = 1385) were mostly women (74%), with university studies (86.2%), married status (70.5%), and non-health workers (65.8%). The average age was 36.8, reflecting a majority of persons aged between 26-45 years old (63.2%). Being younger (OR 2.426 95% CI 1.601-3.674, p<0.000; OR 3.661 95% CI 2.490-5.383, p<0.000; OR 3.814 95% CI 2.123-6.852, p<0.000), lower education (OR 1.871 95% CI 1.340-2.613, p<0.000; OR 2.085 95% CI 1.528-2.845, p<0.000; OR 2.454 95 % CI 1.613-3.736, p<0.000), and no married status (OR 2.052 95% CI 1.575-2.674, p<0.000; OR 2.201 95% CI 1.728-2.804, p<0.000; OR 2.540 95% CI 1.772-3.639, p<0.000) correlated with higher risk of depression, anxiety, and stress. Being health workers lower the risks for anxiety (OR 1.396 95% CI 1.092-1.784, p < 0.05).

Table 2. Bivariate and multivariate logistic regression estimates for association of self and social stigma with mental health

Variables (N=1.385)	Depression			Anxiety			Stress		
	% cases	OR (95% CI)	OR (95% CI) adjusted	% cases	OR (95% CI)	OR (95% CI) adjusted	% cases	OR (95% CI)	OR (95% CI) adjusted
Stigma									
Self-stigma									
Clear (N=88)	34.1	3.187 (1.781-5.701)**	2.323 (1.241-4.346)*	48.9	3.124 (1.856-5.258)**	2.134 (1.205-3.777)*	25.0	4.952 (2.398-10.226)**	4.578 (2.170-9.661)**
Suggestive (N=1075)	22.8	1.819 (1.213-2.728)*	1.077 (0.600-1.931)*	31.6	1.512 (1.081-2.117)*	1.265 (0.882-1.815)	9.2	1.507 (0.844-2.690)	1.503 (0.831-2.718)
Non (222) (reff)	14.0			23.4			6.3		
Social stigma									
Clear (N=147)	32.0	2.321 (1.224-4.398)*	1.618 (0.820-3.193)	43.5	2.717 (1.515-4.873)**	2.000 (1.066-3.756)*	14.3	1.812 (0.768-4.279)	1.558 (0.648-3.748)
Suggestive (N=1143)	21.3	1.333 (0.765-2.324)	1.077 (0.600-1.931)	30.6	1.555 (0.943-2.566)	1.351 (0.793-2.302)	9.3	1.112 (0.524-2.356)	1.022 (0.476-2.194)
Non (95) (reff)	16.8			22.1			8.4		

* p<0.0

Self-stigma (perceived and anticipated stigma) and social stigma were reported by 84.1% and 93.4 % of the participants. Clear self-stigma (score > 3) increased the risk for depression (2.323 (1.241-4.346), p<0.05), anxiety (2.134 (1.205-3.777), P<0.05)and stress (OR 3.931 95% CI 1.779-8.685, p<0.001). Higher mental health problems reported among participants who had a clear social stigma (32.0% vs 16.8% in depression, 43.5% vs 22.1% in anxiety, 14.3% vs 8.4% in stress). Participants suggestive for social stigma could lead to

statistically significant results on anxiety (OR 2.000 95% CI 1.066-3.756, p<0.05), but not on depression (OR 1.618 95% CI 0.820-3.193, p>0.05) and stress (OR 1.052 95% CI 0.417-2.655, p>0.05).

Discussion

Our research revealed that 22% of respondents depressive, 31,3% anxiety, and 9,6% stress symptoms, 14,2%, 18,8%, and 4,4% of the respondents revealed moderate to severe degrees of depression, anxiety, and stress. Compared to the general population with the same measure of DASS-21 in the earlier phase of the pandemic[20,21], our result shows a lower prevalence of depression, anxiety, and stress. Even lower when compared to research in a specific population of psychiatric patients[22], doctors[23], and health workers in Indonesia in the earlier phase of pandemic[24]. The general population had a higher risk of anxiety compared to health workers in transition into the new normal. It contradicts research in Saudi Arabia and China that showed medical field workers had higher scores on sleep deprivation, stress, and depression[21,25]. Better access to medical and health facilities of health workers also may serve as protecting factors.

While there is a tendency towards a lower prevalence of psychosocial distress in the general population and health workers in this research compare to the previous phase, avery high prevalence of stigma was found. Stigma towards self and others both increased the risk of depression, anxiety, and stress. This study, encompassing health workers and the general population, strengthen several previous research on COVID-19 related stigma in a more specific group. Internalized stigma, shame, and guilty feeling in hospitalized COVID-19 patients triggered by the fear of virus infections, and worry about community acceptance[26]. Research on health care providers in Lebanon had found symptoms of stress, frustration, fear to contract the virus, and stigma of being infected[13]. Historically and nowadays, the strongest stigmas related to diseases are characterized as highly transmittable, potentially lethal, and no acknowledged remedy[12], all could find in COVID-19 during the transition into the new normal. It could explain the very high percentage of participants considered having self and social stigma. Accurate discernment is necessary between optimizing the effort to contain the risk of infection and reducing the fear, stigma, and blaming others[27]. Educating the public about COVID-19, reasons for isolation, and providing adequate health information can contribute to reducing stigmatization in the community. It serves as early identification and treatment to reduce the development of mental health problems[28]. Training is needed for health workers and professionals to improve the mental health and knowledge of COVID-19 of the community[29]. The role of the government and community leaders in COVID-19 education to the public can contribute to increase health literacy at the community level to prevent stigma related to COVID-19.

The current study presents several limitations. Firstly, we used online convenience sampling that may not represent the Javanese population. The use of online tools has limitations and challenges. The digital divide (people who do not access the internet, such as the lower education are lower in scope compared to participants with high education, with these groups being underrepresented) and validity concern (for example whether the participant is as they say). Our protocol strives to carry out rigorous validity checks to reduce some of these inherent problems.

Conclusion

The very high prevalence of stigma during early transition into new normal in Indonesia became important note. Once a pandemic with unknown cure could cause widespread stigma. Clear self and social stigma related to worsening mental health condition in early transition into new normal. Several demographic characters as young people (<25 years old), having non-marital status, and lower education related to worsening mental health condition. Healthcare workers had better mental health status than the general population.This research provides several directions for future research. Eliminating stigma is critical for supporting mental health in the Covid-19

pandemic. The anxiety towards higher risk of infection due to new normal transition conceivably manifested in stigma towards self and others. Intervention to enhance mental health conditions should also be considered a vulnerable group identified like young people and lower education group.

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