RESILIENCE AND PSYCHOLOGICAL WELL-BEING AMONG MEDICAL DOCTORS DURING COVID-19 PANDEMIC

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Abstract. The COVID-19 pandemic has had some personal repercussions for doctors. They reported increased stress and anxiety, especially health-related anxiety, which in turn contributed to their mental health and psychological well-being. To maintain their health, doctors must be more resilient. Therefore, this study aims to measure the relationship between resilience and the psychological well-being of doctors during the COVID-19 pandemic. The study was conducted in Aceh Province and there were 338 doctors who participated. Sampling of snowballs was used to obtain participants. Data resilience was measured using the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), while well-being was measured using the Ryff Psychological Well-Being Scale (Ryff, 1989). Cronbach's alpha for the 25-item CD-RISC and 42-item Ryff Psychological Well-being Scale were 0.93 and 0.89, respectively. To test the hypothesis, the Pearson Correlation Test was carried out. From this study it can be said that resilience has a significant impact on the psychological well-being of doctors, therefore there must be proper support for all health practitioners because they are frontline professionals who directly treat patients during this COVID-19 pandemic.

Keywords: *resilience, psychological well-being, doctor, and covid-19*

Abstrak. Pandemi COVID-19 memberikan beberapa dampak pribadi bagi para dokter. Mereka melaporkan peningkatan stres dan kecemasan, terutama kecemasan yang berkaitan dengan kesehatan, yang kemudian berkontribusi pada kesehatan mental dan kesejahteraan psikologis mereka. Untuk menjaga kesehatan mereka, dokter harus lebih tangguh. Oleh karena itu, penelitian ini bertujuan untuk mengukur hubungan antara resiliensi dengan kesejahteraan psikologis para dokter di masa pandemi COVID-19. Penelitian dilakukan di Provinsi Aceh dan ada 338 dokter yang berpartisipasi. Pengambilan sampel bola salju digunakan untuk mendapatkan peserta. Data resiliensi dilakukan melalui Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), sedangkan kesejahteraan psikologis diukur melalui Ryff's Psychological Well-Being Scale (Ryff, 1989). Alpha Cronbach untuk 25 item CD-RISC dan 42 item Skala Kesejahteraan Psikologis Ryff masing-masing adalah 0,93 dan 0,89. Untuk menguji hipotesis dilakukan Uji Korelasi Pearson. Dari penelitian ini dapat disimpulkan bahwa resiliensi memiliki dampak yang signifikan terhadap kesejahteraan psikologis dokter, oleh karena itu harus ada dukungan yang tepat untuk semua praktisi kesehatan (tidak hanya dokter) karena mereka adalah profesional garis depan yang langsung menangani dengan pasien selama pandemi COVID-19 ini.

Kata kunci: resiliensi, kesejahteraan psikologis, dokter, dan covid-19

BACKGROUND

During the COVID-19 pandemic, medical practitioners especially doctors experienced a high prevalence of anxiety. Their presence at the forefront in dealing with patients exposed to the coronavirus, makes the vigilance of doctors at critical alarm. It is undeniable that this condition affects their psychological well-being, if it does not get serious attention it will affect their capacity to treat patients (Asmundson & Taylor, 2020). Moreover, the Mitigation Team for the Indonesian Doctors Association noted that there were 640 doctors who died after being exposed to Covid-19 during the pandemic in Indonesia (Sari, 2021).

In order to maintain their psychological well-being, doctors have to be more resilient in facing their high pressure environments (McKinley et al., 2019). According to Zautra, Hall, and Murray (2010), resilience is best defined as successful adaptation to adverse circumstances. Personal characteristics would determine resilience processes if those characteristics lead to healthy outcomes after the stressful situations (Zautra et al., 2010). Therefore, based on those explanations above, this current study aimed to measure the association between resilience and psychological well-being among medical doctors during COVID-19 pandemic.

METHODS

This research utilized a quantitative research design. The number of participants recruited through snowball sampling techniques was 338 medical doctors in Aceh Province. In order to measure resilience and psychological well-being, the Connor-Davidson Resilience Scale (CD-RISC) and Ryff's Psychological Well-Being Scale were used. CD-RISC was developed by Connor and Davidson (2003) with 25 items and has been tested with a high reliability of 0.930, while Ryff's Psychological Well-Being Scale which was developed by Ryff (1989) has 42 items, this scale also showed a good reliability result with Cronbach Alpha of 0.890. The data was collected through Google Form, then it was tabulated and analysed with Pearson Correlation. SPSS version 20.0 for Windows was operated to simplify all the statistical calculation processes within this study.

RESULTS

1. Categorization of Participants

a. Resilience

The table 1 below will show the resilience data of participants based on hypothetical and empirical results.

Table 1.

Data Description on Resilience

Hypothetical Data				**Empirical Data**			
Max	**Min**	**M**	**SD**	**Max**	**Min**	**M**	**SD**
125	25	75	16.7	125	46	97	13.4

Based on descriptive analysis, hypothetical data showed that CD-RISC which consists of

25 items had minimum score (S-min) of 25, maximum score (S-max) of 125, mean (M) of 75, and standard deviation (SD) of 16.7. Furthermore, empirically the results of descriptive analysis obtained that CD-RISC had S-min of 46, S-max of 125, M of 97, and SD of 13.4. Based on this analysis, the following are the categories for resilience.

Table 2.

Resilience Categorization

Category	Interval	Frequency (n)	Percentage (%)
Low	X < 97	173	51.18
High	X ≥ 97	165	48.82

From the table above, it can be seen that as many as 51.18% (n=173) had low resilience and 48.82% (n=165) had high resilience.

b. Psychological Well-Being

The table below will show the resilience data of participants based on hypothetical and empirical results.

Table 3.

Data Description on Psychological Well-Being

Hypothetical Data				Empirical Data			
Max	Min	M	SD	Max	Min	M	SD
252	42	147	35	241	112	171	21.6

Based on descriptive analysis, hypothetical data showed that Ryff's Psychological Well-Being Scale which consists of 42 items had minimum score (S-min) of 42, maximum score (S-max) of 252, mean (M) of 147, and standard deviation (SD) of 35. Furthermore, empirically the results of descriptive analysis obtained that Ryff's Psychological Well-Being Scale had S-min of 112, S-max of 242, M of 171, and SD of 21.6. Based on this analysis, the following are the categories for psychological well-being.

Table 4.

Psychological Well-Being Categorization

Category	Interval	Frequency (n)	Percentage (%)
Low	X < 171	181	53.55
High	X ≥ 171	157	46.45

From the table above, it can be seen that as many as 53.55% (n=181) had low psychological well-being and 46.45% (n=157) had high psychological well-being.

2. Prerequisite Testing

Before analyzing the data through Pearson Correlation, the initial analysis that is required to fulfill is prerequisite testing (Priyatno, 2011). The prerequisite testing conducted in this study were normality testing and linearity testing.

a. Normality Testing

The results of normality testing were described in table 5 below.

Table 5.

Normality Test Results

No.	Variable	K-S Z Coefficient	*p*
1.	Resilience	1.293	0.071
2.	Psychological Well-Being	1.289	0.072

Based on table 5 above, it was found that data for resilience was normally distributed with K-S Z coefficient of 1.293 (p=0.071; p>0.05). While data distribution on psychological well-being was also normally distributed with K-S Z coefficient of 1.289 (p=0.072; p>0.05). As both variables were normally distributed, the results of this study could be generalized into the whole population.

b. Linearity Testing

The results of linearity testing were described in table 6 below.

Table 6.

L*inearity Testing Results*

Variable	*Linearity*	*p*
Resilience and Psychological Well-Being	245.1	0.00

Table 6 above presented linearity of the two variables was 245.1 (p=0.00; p<0.05), thus, it can be concluded that there was a linear relationship between resilience and psychological well-being among medical doctors in Aceh Province.

3. Hypothesis Testing

The hypothesis testing was completed by using Pearson Correlation, this analysis could be performed because both variables were normally distributed and linear (as clearly described above). Pearson Correlation was employed to analyze the relationship between resilience and psychological well-being among medical doctors in Aceh Province. The results of hypothesis analysis can be checked on table 7 below.

Table 7.

Hypothesis Testing Results

Variable	*Pearson Correlation*	*p*
Resilience and Psychological Well-Being	0.630	0.000

Table 7 above showed that the correlation coefficient was 0.630 which was a positive correlation. This presented that there was a positive relationship between resilience and psychological well-being. This positive correlation also revealed that the higher the resilience, the better the psychological well-being among medical doctors in Aceh Province, and vice versa. Moreover, the results from the analysis displayed a significance value of 0.000 (p<0.05). This indicated that the hypothesis was accepted –there was a very significant relationship between resilience and psychological well-being among medical doctors in Aceh Province.

DISCUSSIONS

The results showed that the majority of medical doctors in Aceh Province had a low resilience category. Other findings also mentioned that most of them were categorized as having lower psychological well-being. In addition, based on the Pearson Correlation result, it was obtained that there was a positive and significant relationship between resilience and psychological well-being. This implied, the less resilience ability, the lower the psychological well-being, and vice versa. This finding confirms that resilience may impact psychological well-being which then affects someone's mental health.

Medical doctors are at a higher risk of anxiety and depression when compared with the wider population (Shanafelt et al., 2012; Mason, O'Keeffe, Carter, & Stride, 2016). The nature of their profession often results in exposure to elevated levels of stress, high pressure environments, and feelings of uncertainty. Working closely with patients and the complexity of the doctor-patient relationship introduces a number of both positive and negative emotions. Long working hours and sleep deprivation have a detrimental effect on both physical and mental well-being (Costa, Accattoli, Garbarino, Magnavita, & Roscelli, 2016; Garbarino, Lanteri, Durando, Magnavita, & Sannita, 2016). Especially during this COVID-19 outbreak, their presence at the forefront in dealing with patients exposed to the coronavirus, makes the vigilance of doctors at critical alarm (Asmundson & Taylor, 2020).

Although this research contributed to some advantages, it also had some limitations. First, the subjective measures used were only the Connor-Davidson Resilience Scale and Ryff's Psychological Well-Being Scale, thus, other psychological aspects affected from resilience could not be traced. Besides, as the participants were only medical doctors, so the results could not be generalized into other health practitioners, including nurses. Not only that, as the correlation was only utilized to measure the association, the findings were less comprehensive.

CONCLUSIONS

From this study, it was found that the majority of medical doctors in Aceh Province were less resilient. Moreover, most of the medical doctors in Aceh Province also had low psychological well-being. Based on the correlation analysis result, it was found that there was a positive relationship between resilience and psychological well-being. These results inferred that the hypothesis was accepted, which meant the higher the resilience, the higher the psychological well-being, and vice versa.

RECOMMENDATIONS

The findings from this study give significant contribution to the importance of resilience and psychological well-being. However, based on the limitations mentioned above, there are

some points highlighted as the recommendations for further research. First, in order to enrich the results and analyses, the addition of other variables needs to be considered, such as optimism and coping strategy. In addition, future research might also increase the number of respondents, thus the validity and reliability of research results will be improved. Lastly, the use of statistical analysis can be expanded, so the results obtained will be more comprehensive.

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