



ANALYSIS FACTORS THAT INFLUENCE FOR MEDICAL WORKERS COPING IN FACING COVID-19 STIGMA

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ABSTRACT	Keywords
Coping strategy used for medical workers in facing of covid-19 stigma in community variatively.some factors are individual gender chaeateristic,marriage status,job,education,length of work and others.the purpose of this research is to know some factors which influenced for medical workers in choosing of coping strategy.the design of this research is sectional cross. The population are medical workers who work in Indonesia health service totally 530 samples by incidental sampling. The instrument research Brief Cope Inventory consisting of 28 question items within 14 subscales. Analysis data using univariat,bivariat and multivariat. Determination coefficient,obtained is 0.125, it means that dependent variable variability can be explained by independent variability is 12,5% or about 87,5% its remain described by anyoher factor out of model that can't be explained by model is physic and psychology health.	Individu characteristic, coping strategy,medical personnels

BACKGROUND

Covid-19 pandemic crisis changed significantly for work environment (example, high work pressure ,unprosper physic, and interaction emotionally). Medical workers in giving treatment emotionnaly found diffulties because of stress,uncertainty, stigma are being dominant theme health service workers. They often own complex feeling and thinking and contradicting each other in how to balance their part as parent and and being health care service either that requiring professional responsibility. Being frightened in time treating covid-19 patients and appearing guilty feeling cause of having been exposed the infection potentially to

their family during covid-19 pandemic (Ramaci et al., 2020; Horner, 2020).

This condition issued various of attidues, prejudice, stereotip and stigma. Emotion takes the important rule with planned choice distortion or based on the fact. Appearing of contradiction between the duty must be executed by doctors, nurses and other medical workersin the time giving treatment with underlying attitude caused of being anxious tobe infected. In some other cases, it can appear of prejudice to whom as “ spreader virus”. The main fear is being infected and contact managing to those who was infected or the fear of waiting for diagnostic result test (Ramaci et al., 2020; Tandon Rajiv, 2020).

Stigma social in health context is negative relation concerned to the people or group who had similar specific illness. Stigma as the condition for being missed status condition and discrimination in social environment contextually (Hatzenbuehler et al., 2013). In stigma pandemic situation can be concluded that the people given label, stereotip and discrimination because of being assumed to have big opportunities to infect some others (Ramaci et al., 2020). The research result of Belice et al., (2020) to 136 health officer participants showing that 28 participants (20,6%) being observed haven't stigma whereas 108 rest participants (79,4%) found stigma on the limit pathology level.

Stigma can influence someone health by worsening, destroying or delaying some process, including social relation, the availability of resource, stress, psychology respon, and behavior that increase for bad health (Stangl et al, 2019). Stigma and discrimination tend to endure in long-term even after being quarantined over and when the pandemic is under control (Ramaci et al, 2020).

The result of research described feeling arise related to stigma (example, in family and friend environment), being infected or dirty, increasing sad and anxious feeling, and reluctant to ask for help or getting treatment (example, self-agreement for being isolated) (Zolnikov & Furio, 2020)

This condition needs dynamic coping strategy activated in situation in which full of pressure including flexibility to manage negative emotion and to balance accommodation and assimilation (Man-ging et al, 2018). Lazarus and Folkman (1984) stated that coping as cognitive effort and behavior keep on change, influenced by external stimulus and or certain internal rated over of

the people resource (Saleh Baqutayan, 2015).

The three coping strategies mostly used by medical personnel when handling covid-19 plague adopted positive behavior for self motivation (98,3%), read about covid-19 and preventive and its infectious (98,3%) and follow the action of self protection correctly (mask, gown) (98,3%). Family support is the most important thing to motivate medical workers for handling covid-19 plague (98,7%) (Windarwati, 2020). Balasubramanian research et al (2020) concluded that coping strategy used variatively beginning of psychology source detaily reading (36,3%), accessing psychology recommendation digitally (50,4%) participating in therapeutic motivation (17,5%). An individual who run into severe psychology disruption tend not to access psychology matter and mental health guidance.

Adopted type of coping strategy depend on how an individual assesses stress incident, negative and positive effect, personality distinguish and society factors which are able to increase or reduce psychology (Rahman et al, 2017). Individual ability to adapt effectively with stimulation depends on someone level adaption, situational demands, and life process before. Life process conceptualised as integrated, compensation and compromised. Being integrated is adaption level that is structural and function of processing all earninging to fulfil human needs (Jennings, 2018).

Someone's coping strategy influenced by some factors such as; social support and self efficacy. The other factors also influence characteristic individual such as gender, marriage status, job, education and others (Kumar, 2020; Tahara et al, 2021). Research (Rustandi et al, 2018) about factors

analysis relating with coping strategy for hemodialysis patient mentioned that gender, education and self efficacy influenced coping with p-value < 0,05.

Based on the description researcher interested to expose the phenomenon as topic of this research there is not any researcher observed some factors influencing coping strategy for medical workers in facing of stigma due to covid-19 so far.

METHODOLOGY

This design research is cross-sectional to know some factors which impacted for coping strategy of medical workers in facing to stigma resulted covid-19. The population is medical workers who work in Indonesia health service. Sampling technique used is incidental sampling caused of this research population spread in various regions it might gain a suitable sampling with data source are 500 samples. The used research instrument is Brief Cope Inventory evolved by Carver (1989). Based on Lazarus and Folkman theory (1984), consist of 28 questions and 14 subscale items. Data processing collection by google form. Permission form by researcher is online consent information as first step should be approved by respondents at time they agreed for being respondent to fill researchers' questions. Analysis data used univariate, bivariate and multivariate. Data of gender, work-shift, analysed by t-paired test. Education level, salary, marriage status, job position, residence status using Anova. Age and length of work using Spearman rho. Multivariate analysis in this research involving the using of multinomial logistic regression analysis test.

RESULTS

Univariate

Table 1. Respondents distribution based on characteristic individual (N=530)

Variable	Mean	Median	SD	Min-Max	95% CI Lower - Upper
Age	33.33	31.00	8.16	20.00 - 60.00	32.63 - 34.02
Work length	9.65	7.00	7.83	1.00 - 36.00	8.99 - 10.32
Variable			n	%	
Gender	Man			165	31.1
	Women			365	68.9
Marriage status	Single			115	21.7
	Married			408	77.0
	Widower/Widow			7	1.3
Education level	High School			2	0.4
	Diploma			239	45.1
	Bachelor			234	44.2
	Magister			32	6.0
	Specialist			21	4.0
	Doctoral			2	0.4
Profession	Nurse			417	78.7
	Doctor			34	6.4
	Nutritionists			12	2.3
	Pharmacist			10	1.9
	Analyst/laboratory assistant			3	0.6
	Midwife			51	9.6
	Others			3	0.6
Work shift	Yes			360	67.9
	No			170	32.1
Salary	Under Regional Minimum Wage			179	33.8
	Appropriate Regional Minimum Wage			219	41.3
	Above Regional Minimum Wage			132	24.9
Live with	Alone			20	3.8
	With Friend			28	5.3
	With Family			482	90.9

The analysis result based on table 1, shown that median age is 31 years old and the youngest is 20 years, the oldest is 60 years. Median of work length respondents is 7 years and minimal work length is 4 years for maximal is 36 years. Few respondents of female are 365 (68.9%). Proportion of married status are 408 (77.0%). Diploma are

239 respondents (45.1%), Nurse are 417 (78.7%), work-shift are 360 (67.9%), match of wage regional salary are 219 (41%), living status with family are 482 respondents (90.9%)

Bivariate Analyze

Table 2 Age and work length analysis relation with medical workers coping strategy (N=530)

Variable	n	Mean	SD	p-value	
Age	Emotion-Focused	114	35.27	7.92	0.008*
	Problem-Focused	333	33.03	8.26	
	Dysfunctional	83	31.84	7.67	
Work length	Emotion-Focused	114	11.10	7.79	0.039*
	Problem-Focused	333	9.50	8.00	
	Dysfunctional	83	8.30	6.91	

*Significant at p value <0.05

The analysis result based table 2, shown that the rate age of correspondents with emotion-focused coping strategy is 35.27 years with deviation standart 7.92 years, for problem-focused coping strategy is 33.03 years with deviation standart 8.26 years and dysfunctional is 31.84 with deviation standart 7.67 years. The statistic test resulting that there is not significant relation between age and coping strategy (p value=0.08; a <0.05)

Table 3. Characteristic individual medical workers analysis with coping strategy (N=530)

Variable	Coping Strategies						Total	P-value		
	Emotion-Focused		Problem-Focused		Dysfunctional					
	n	%	n	%	n	%				
Gender	Male	4	8.5	9	5.7	2	1.3	1	3.6	0.031*
	Female	7	4.8	4	8.8	6	1.4	3	6.8	
Marriage Status	Single	17	14.8	7	6.2	17	11.2	1	3.9	0.397
	Married	95	23.25	61	15.4	67	15.4	7	17.7	

Education Level	Widower/Widow	28	6	57	1	14	7	1	3	0.051
	High School	0	0.02	100	0	0.02	0	0.4	.0	
	Diploma	44	18.6	67	3	13	23	45	9	
Profession	Bachelor	51	21.13	58	4	19	23	44	0	0.120
	Magister	11	34.18	56	3	9	43	26	6	
	Specialist	8	38.13	61	0	0	0	21	3	
Work Shift	Doctoral	0	0.01	50	1	50	2	0	4	0.30
	Nurse	96	23.25	61	6	15	41	78	7	
	Doctor	9	26.23	67	2	5	83	46	4	
Salary (Regional Wage)	Nutritionist	0	0.08	66	4	33	12	2	3	0.167
	Pharmacist	1	10.5	50	4	40	10	1	9	
	Analyst/laboratory assistant	0	0.03	100	0	0.03	0	0.5	.0	
Live with	Midwife	8	15.36	70	7	13	51	9	6	0.167
	Others	0	0.03	100	0	0.03	0	0.6	.0	
	Yes	42	24.10	62	2	12	17	32	0	
Marriage Status	No	72	20.22	63	6	16	36	67	4	0.167
	Lower wage	28	15.12	67	3	17	17	33	8	
	Appropriate	46	21.13	62	3	16	21	41	0	
Live with	Minimum wage	0	7	5	6	4	9	3	8*	0.167
	Upper wage	40	30.76	57	1	12	13	24	9	
	Alone	6	30.11	55	3	15	20	3	8	
Live with	Live with Friend	1	3.62	75	6	21	28	5	3	0.167
	Live with Family	10	22.30	62	7	15	48	9	0	
	Family	7	2	1	4	4	3	2	9	

*Significant at p value <0.05

According to table 3, shown that few parts of men respondents have problem-focused coping strategy are 95 respondents (57.58%) and statistic test resulting that there significant relation between gender and coping strategy. Some of proportions unmarried status having problem-focused coping strategy are 78 respondents (67,8%) and the statistic test resulted that there is not relation between married status and coping strategy. Few parts of proportion education

for high school throughed in problem-focused coping strategy are 2 respondents (100%), bachelor are 137 (58,5%) and statistic test resulted that there is connection between education level with coping strategy. Few parts of nurse had problem-focused coping strategy are 255 respondents (61.1%) and the statistic test resulted that there is not relation between profession and coping strategy. Rate of work-length respondents with emotion-focused coping strategy are 11.10 years with 7.79 variation standart, for problem-focused work-length rate is 9.50 years with 8 years deviation standart , and work-length rate with dysfunction coping strategy is 8.30 years with 6.91 years deviation standart. The statistic test resulted that there is significant relation between the work-length with coping strategy. Appropriate wage workers are 137 (62.5%) and the statistic test based table 9 resulted that there is relation between salary and coping strategy. Some of proportion respondents who live with friends are 21 respondents (75%) and the statistic test resulted that there is not significant relation between resedence status with coping strategy.

Multivariate analyze

Multivariate analyze using multinominal logistic regression analysis as following: Table 3 Overall test the factors that influenced medical workers coping strategy (N=530)

Goodness-of-Fit	
	<i>p value</i>
Pearson	0.564**
Deviance	0.961**

**Significant at *p value* >0.05

The analysis result based on 12 shown that *Sig Variable Pearson* value is 0.564, it means that *fit* model (worthy used) (*p value* =0.564;a >0,05).

Significant Model Test

Table 4. Significant model test factors that influenced medical workers coping strategy (N = 530)

Model Fitting Information	
Model	<i>p value</i>
Intercept Only Final	0.064

*Significant at *p value* <0.05

The analysis result based table 13 shown that there is no one of independent respondent influenced to variable dependent significantly (*p value* = 0,064; a > 0,05)

Partial Test

Table 5 Partial test of factors affecting coping strategies for medical workers (N=530)

Variabel	<i>p value</i>
Age	0.675
Gender	0.773
Marital status	0.198
Education level	0.983
Profession	0.184
Sift	0.122
Salary	0.739
Length worker	0.817
Live with	0.285

*Significant at *p value* >0.05

Coefficient of Determination (R2)

The analysis result based on table 5, shown that all variables have value *p* >0.05, it means that there is none variable independent influenced to variable dependent significantly.

Table 6. Determination Factors which influence to medical workers coping strategy (N=530)

<i>Pseudo R-Square</i>	
Koefisien Detreminasi	0.125

The result analysis based on table 6, shown that determination coefficient (R²) is 0.125, it means that dependent variable variability that can be explained by independent variability is 12,5% or about 87,5% and the rest explained by other factor out of model, means it can not be explained by model.

DISCUSSION

The result analysis shown that there is none independent variable which influenced significantly to dependent variable (p value= 0,064%, $\alpha > 0,05$), determination coefficient (R²) is 0.125, it means that the dependent variable variability which can be explained by dependent variable is 12,5% or about 87,5%, its remain explained by out of model factor that can not be explained by model

Coping is a dynamic process that activated in full pressure situation right now and including flexibility to manage or control negative emotion and balance assimilation and accommodation either. (Manning et al, 2018). The choice of coping strategy in solving some problems influenced by some factors, such as; physical health, social support, personality, confidence, positive thinking and the right ability in solving the problem.

Physical health is the most essential element in order capable of deploying lots of energy for facing of stressor. Good health condition is needed in order that someone is able to cope well so that some various problems can be handled well

Social support considered as one of sub-type overcoming focused on problem and emotion. It can be related with the result of physical health by inducted effect emotionally to neuroendocrine or body immunity system or by influence of behavior related to health, such as ; smoking, consuming alcohol or looking for

medical aid. The increasing social support will be resulted the enhancement of well-being apart from the support level (Saleh Baqutayan, 2015). social support is functional strategy in which the people committed to look for social support professional motivation and emotional (friends, family, and colleagues) and can help to handle an unneeded stress effect by expressing of responses that suitable with situation. Positive social support related for decreasing anxiety and depression. Social support can be obtained by close people around individual, alike; parent, family, close friends (Riberio et al, 2015).

The different personality characteristic also takes effect in choosing coping strategy. Personality characteristic includes introvert-extrovert, emotion stability, steadfast or hardiness, locus of control, immunity and endurance. Individual with introvert personality tends to possess of less good adaptation to the outside world, and less sympathetic of other people. Introvert individual tends to show pessimist attitude, problem more in focus, tends to use avoidance coping or denial in facing problem. Whereas extrovert personality tends to welcome, interactable and relation to others easily. Extrovert individual is an individual who possess optimist feeling (Feist, 2010). The optimist individual will be more enthusiastic to seek the solving problem because they feel sure that every single problem has the way to overcome provided that willing to think and effort to try. The result of Mariana Kiaseler's research (2011), explained that the five big personality dimension (Neuroticism, Extraversion, Agreeableness, Conscientiousness, and openness to Experience) influenced in choosing of coping strategy by evaluation (intensity, control) of the chosen self stressor, coping, and coping felt effectively.

The further factor is faith or positive view is an important psychology resource, such as, belief of fate (External focus of control) that guided an individual for the value of helplessness which able to decrease the ability in using for coping strategy. Faith to god is the thing owned by every individual, for individual who has the deep faith and belief to god prefer to coping strategy of the way to worship or getting closer to god will relate that every problem is god gift. Positive thinking caused someone seeing the problem from another view, focused on the facing problem and not being in dissolved pressing or unhappy feeling. That case made someone feel more calm when they face the problem.

The skill in facing every single problem is also the ability to seek the information, analyze situation, identify the problem purposing to result of alternative action, then to balance the alternative relating to the result desired to be reached and finally, execute the plan by doing the right action. The skill to solve the problem can be related with emotional intelligence. The emotional intelligence can influence significantly for choosing of coping strategy, such as; problem solving, seeking social support, cognitive evaluation, somatic hindrance, and emotional hindrance (Moradiet al, 2011). The result research of Davis, Sarah K & Humprey (2012) shown that intelligence emotional skill influenced for mental health by choosing of flexible coping strategy. Intelligence emotional character modified effectiveness coping. The high level of emotional intelligence strengthen the positive effect of an active coping and to minimize the effect of avoid coping to reduce the symptom.

CONCLUSIONS

The choice of coping strategy influenced by another factor out of model

means, it can not be explained by by the model through of determination coefficient analysis, that is physics and psychology health.

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