



## How Does The Quality of Work Life Affect The Commitment of Health Workers?

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### Abstract

Human resources has become the most important thing during the COVID-19 pandemic because COVID-19 affects the health worker not only physically but also mentally. Thus, it is important to continuously improve the Quality of Work Life (QWL) to maintain the health worker wellbeing during this tough time. This study aimed to examine the QWL of health workers who work at the Puskesmas and to find the association between QWL and work commitment. This research was a quantitative type of research using an observational analytic. The population of this research was all health center personnel in East Java with a minimum number of 267 respondents. The independent variable in this study is QWL and the dependent variable is the commitment of health workers. Data collection was done by distributing an online questionnaire. The results of this study indicated that the health workers of Puskesmas in East Java had a high commitment in handling COVID-19 and their QWL was sufficient. The ordinal regression test showed that QWL affected the commitment of Puskesmas health workers. The higher the perception of the quality of work life of health workers at Puskesmas in East Java, the higher the commitment they have to handle COVID-19.

### INTRODUCTION

Corona Virus Disease 2019 (COVID-2019) was declared as a pandemic by World Health Organization (WHO) on March, 9th 2020 (WHO, 2020). The COVID-19 virus is easily transmitted through droplets. Thus, it compelled governments all around the world to maintain their health de-

gree through regulation including Indonesia. The Indonesian Government, according to the published Presidential Decree Number 12 Year 2020 on Determination of Non-Natural Disasters and the spread of COVID-19, was officially declared as a national disaster on March, 2nd 2020. Since the declaration, positive COVID-19 cases in In-

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Indonesia arose. One of the provinces in Indonesia, East Java, was become the highest province with positive COVID-19 cases.

The readiness of health services become one of the factors that influenced the transmission and alteration of COVID-19 cases. Public Health Center is one of the health facilities that need to be prepared because Public Health Center becomes the primary health facility in Indonesia. Public Health Center's actions to face the COVID-19 pandemic were through the implementation of health promotion to promote behavior changes, monitoring of people that traveled from local transmission areas or red zones, daily monitoring of suspects, and tracing of confirmed COVID-19 cases. In carrying out these roles and tasks, health worker has become highly risked of being exposed to COVID-19. Moreover, they also become more vulnerable to experiencing psychological stress, fatigue, mental exhaustion, or public stigma (World Health Organization Western Pasific Region, 2020). Previous research by MKK FKUI found that 83% of health workers in Indonesia experienced mild and severe degree burnout syndrome (Herizinana and Rosalina, 2022). Another study also found that excessive work pressure or stress will lead to an increase in work efficiency (Muda et al., 2014).

Human resources, for instance, especially Public Health Centers become the spearhead or the most important thing to deal with the COVID-19 pandemic. The succession of organization management will be determined by the organization's success in handling human resource commitment (Busro, 2018). A preliminary study in Malang District's Public Health Center on health worker readiness and willingness to implement COVID-19-related tasks in June 2020 showed that 51.72% of health workers did not agree and felt burdened to leave their families when they needed to do COVID-19-related tasks. Moreover, 22.14% of respondents also did not agree to give extra work during the COVID-19 pandemic. To face this problem, one of the actions that can be done is by improving the Quality of Work Life among the health worker. Quality of Work Life is defined as a workplace environment that is profitable, supportive and promotes satisfaction in employees. Quality of Work Life serves as a comprehensive model to ensure the quality of work life among their employees (Swathi, 2017) has undergone a revolutionary change. The traditional management (like scientific management. This study aimed to observe the quality of work life among health workers

during the COVID-19 pandemic and analyze the association between quality of work life and health workers' commitment.

## **METHOD**

### **Participant Characteristics and Research**

#### **Design**

This was an analytic-observational study using a cross-sectional study design. The population of respondents in this study was all health workers in Public Health Centers in East Java provinces distributed in 29 districts/cities and 142 public health centers. The inclusion criteria were healthcare workers that worked in Public Health Centers located in East Java provinces and were willing to be participants in this study.

#### **Sampling Procedures and Sample Size**

The sampling proportion was counted using the proportion estimation formula. The minimum sample needed in this study was 267 respondents. The percentage of the sample approached that participated in this study was 110%. Data was collected using an online questionnaire. This study has been ethically reviewed and approved by the Universitas Airlangga Faculty of Dental Medicine Health Research Ethical Clearance Commission with registration number: 471/HRECC.FODM/X/2020.

#### **Measures, Covariates and Data Analysis**

The dependent variable in this study was Quality of Work Life which consists of adequate and fair compensation, a safe and healthy environment, development of human capacities, opportunities for continued growth and security, social integration, constitutionalism, the total life space, and social relevance. The independent variable was health worker commitment which consists of several components, namely affective commitment, continuance commitment, and normative commitment. The data was collected by distributing an online questionnaire to health workers in East Java's Public Health Center using an online questionnaire as the study instrument. The questionnaire has gone through validity and reliability test. The validity test used was Pearson's correlation test which was proved to be valid. The reliability test used was the Cronbach Alpha test where the Cronbach alpha value was found to be bigger than the  $r$  table. Thus, the questionnaire used in this study proved to be reliable. The collected data was analyzed using ordinal logistic regression.

## **RESULT AND DISCUSSION**

There were 294 respondents in this study.

Table 1. Characteristics of Public Health Center Health Worker in East Java

Variables	n	%	
<b>Age</b>	17-25	71	24.15
	26-35	101	34.35
	36-45	68	23.13
	46-55	49	16.67
	56-65	5	1.70
<b>Sex</b>	Male	52	17.69
	Female	242	82.31
<b>Profession</b>	General Practitioner	22	7.48
	Dentist	16	5.44
	Nurse	79	26.87
	Midwives	105	35.71
	Public Health Staff	39	13.27
	Environment Health Staff	9	3.06
	Lab Tech	6	2.04
	Nutritionist	13	4.42
	Pharmacy	5	1.70
<b>Work Duration (Year)</b>	1-5	132	44.90
	6-10	45	15.31
	11-15	37	12.59
	16-20	23	7.82
	21-25	17	5.78
	26-30	28	9.52
	31-35	10	3.40
	36-40	2	0.68

A number of 52 respondents were men and 242 were women. The majority of respondents in our study were 26—35 years old. The profession of respondents in our study were 7.48% general practitioners, 5.44% dentists, 26.87% nurses, 35.71% midwives, 13.27% public health workers, 4.42% nutritionists, and 2.04% lab tech.

Based on Table 2, the highest percentage was in the high commitment category among respondents in 36-45 years with number 89.71%. The highest percentage in the low commitment category was in respondents with an age interval of 17-25 years of 4.23%. Then the highest percentage was in the very low commitment category of respondents with an age interval of 56-65 years of 40%. It could be interpreted that high commitment was in late adulthood respondents. Interestingly, the women in this study were having higher commitment compared to men. The highest commitment among all profession was found in nutritionists (92.3%).

In this study, we also conducted test to find

the association between the indicators of quality of work life with the health worker's commitment. Adequate and fair compensation, a safe and healthy environment, development of human capacities, and constitutionalism were found to be associated with the worker's commitment (Table 3). From the result, the estimate result in the adequate and fair compensation, development of human capacities, and constitutionalism variables were positive. Thus, every increase in these variables' score could increase the health worker commitment.

Table 4 showed the result of the Wald Test between characteristics and commitment in health workers. The statistical test showed that the respondent characteristics did not associate with the commitment of health workers.

The results showed that respondents aged 36 to 45 years had a high commitment. At this age, they were entering late adulthood. Thus, the health workers in late adulthood had a strong belief in values, goals in working, and

Table 2. Crosstab between Commitment and Characteristics of Public Health Center Health Worker in East Java

Variable	Indicators	Health Worker Commitment							
		Very Low		Low		Average		High	
		n	%	n	%	n	%	n	%
<b>Age</b>	17-25	1	1.41	3	4.23	13	18.31	54	76.06
	26-35	0	0	2	1.98	13	12.87	86	85.15
	36-45	0	0	3	4.41	4	5.88	61	89.71
	46-55	1	2.04	0	0	11	22.45	37	75.51
	56-65	2	40.00	0	0	0	0	3	60.00
<b>Sex</b>	Men	2	3.85	1	1.92	8	15.38	41	78.85
	Women	2	0.83	7	2.89	33	13.64	200	82.64
<b>Profession</b>	General Practitioner	0	0	1	4.55	3	13.64	18	81.82
	Dentist	1	6.25	0	0	2	12.50	13	81.25
	Nurse	2	2.53	4	5.06	11	13.92	62	78.48
	Midwives	1	0.95	2	1.90	13	12.38	89	84.76
	Public Health staff	0	0	1	2.56	6	15.38	32	82.05
	Environment Health staff	0	0	0	0	2	22.22	7	77.78
	Laborist	0	0	0	0	2	33.33	4	66.67
	Nutritionist	0	0	0	0	1	7.69	12	92.30
<b>Work Tenure (Year)</b>	Pharmacy	0	0	0	0	1	20.00	4	80.00
	1-5	1	0.76	5	3.79	19	14.40	107	81.70
	6-10	0	0	1	2.22	7	15.56	37	82.22
	11-15	0	0	1	2.70	2	5.41	34	91.89
	16-20	0	0	0	0	4	17.39	19	82.61
	21-25	1	5.88	0	0	0	0	16	94.11
	26-30	0	0	1	3.57	7	25.00	20	71.42
	31-35	2	20.00	0	0	2	20.00	6	60.00
36-40	0	0	0	0	0	0	2	100	

Table 3. Ordinal Regression Test Result between Quality Work of Life Toward Health Worker Commitment

Variable	Indicator	Estimate	Standard Error	df	p-value
Quality of Life	Adequate and fair compensation	0,299	0,084	1	0,000
	A safe and healthy environment	-0,068	0,034	1	0,043
	Development of human capacities	0,250	0,108	1	0,020
	Opportunities for continued growth and security	0,100	0,131	1	0,447
	Social Integration	0,053	0,099	1	0,590
	Constitutionalism	0,350	0,162	1	0,031
	The total life space	-0,007	0,100	1	0,946
	Social Relevance	-0,102	0,159	1	0,521

Table 4. Wald Test Result between Respondent's Characteristics Toward Health Worker Commitment

<b>Independent Variable</b>	<b>Wald</b>	<b>Sig</b>
Age	0,020	0,887
Work Tenure	0,135	0,713
Sex	0,004	0,951
Pharmacist	0,011	0,915
Laborant	0,218	0,641
Midwife	0,236	0,627
Dentist	0,007	0,933
General Practitioner	0,028	0,868
Nutritionist	0,733	0,392
Public Health Staff	0,051	0,821
Nurses	0,001	0,973

a greater sense of willingness to use their efforts in earnest than those at a younger age. Among adult age of workers, job satisfaction will increase continuously (Ariga, 2020). Previous research was also consistent with this research, where commitment at a younger or older age tends to be lower. This is because, at a young age, a person still has a higher sense of idealism in the effort to improve a career, whereas someone at an old age tends to feel bored with his work (Hayat et al., 2020). However, when referring to the results of the Wald test, the result of this study was inconsistent with the previous study. Referring to the Wald test result, age did not influence the commitment of health workers. Similar findings were also found in previous research that age did not significantly influence the worker's commitment (Chen et al., 2012). In this study, the majority of respondents were female. Based on the results of the cross-tabulation table, female health workers tend to have a high commitment compared to male health workers. On the other side, the results of the Wald test, gender did not associate with the commitment of health workers. Thus, the commitment of health workers when contributing to COVID-19 handling in East Java was not influenced by gender. Similar findings were found in a previous study where female workers were more dominant in having a high commitment, but there was no effect of gender on individual worker commitment (Tandon et al., 2020).

This study found that nutritionists were a profession with higher commitment compared to other professions. However, the results of the Wald test showed that the profession did not associate with the commitment of the health worker. Each health worker has different functions and duties in performing their service in Public

Health Care. In curative efforts, the dominant profession is carried out by nurses and doctors, so these professions are more at risk due to direct contact with patients. In this study, nurses and doctors had low commitment than other health professional professionals. This is consistent with a previous study where workers who work in the operational section had the lowest commitment (Kónya et al., 2016).

The highest commitment was owned by health workers who had worked for 36-40 years. This finding was consistent with a previous study where health workers who had a longer working period had high loyalty at work (Wardana et al., 2020). Referring to the Wald test, work tenure did not affect the health worker's commitment. In previous research, it was also found that the years of service did not significantly associate with worker commitment (Chen et al., 2012).

The Quality Work Life of health workers in this study showed that most of the health workers at the Public Health Centers in East Java were at a moderate level during the pandemic. Thus, most Puskesmas health workers were still able to adapt to the level of workload during the pandemic and their work environment was still sufficient to meet their level of well-being. Meanwhile, health workers who had a high level of Quality Work Life were as much as 36%. These results indicated that approximately, 1 out of 3 respondents were satisfied with their work environment during the COVID-19 pandemic. A good level of quality of work will assist workers in meeting organizational goals effectively. Workers with high-Quality Work-Life are workers who tend to have high work involvement (Ilmid Davik et al., 2017). In this study, health workers with low and very low work quality were 15% and 0.7%, respectively. This implied that there were

health workers who felt that they were not secure or their needs in carrying out their duties during the COVID-19 pandemic were being fulfilled. The quality of work life that is not in line with the worker's expectations could lead to a reduction in the worker's motivation and performance which could influence the expected output (Hasmalawati and Restya, 2017). Therefore, in the effort to deal with the COVID-19 pandemic, the quality of the work life of health center health workers is very important.

There was an influence of the Quality of Work Life variable on the commitment variable of health workers in the Public Health Centers in East Java. This could be interpreted that the higher the perception of the Quality of Work Life, the higher the commitment of health workers in East Java in dealing with the COVID-19 pandemic. The same findings were also found in another study where Quality of Work Life influenced the commitment of health workers in primary health care.

This research yielded findings related to eight QWL indicators on the commitment to handle COVID-19 in health workers at the Health Center in East Java. Some indicators mutually influence each other, while others do not. These indicators include Adequate and fair compensation, Safe and healthy working conditions, Development of human capacity, and Constitutionalism in the work organization. Adequate and fair compensation, based on research results, this indicator influenced the level of commitment. Thus, perceptions regarding compensation, facilities, or awards will influence the willingness and confidence of health workers to work during the COVID-19 pandemic. Compensation that can meet the worker's needs can increase the commitment of health workers (Purnami, 2017). Indicator of safe and healthy working conditions (safe and healthy working conditions and environment) influences the level of commitment. Therefore, the conditions of the work environment can influence the willingness and confidence of health workers to work during the COVID-19 pandemic. In previous research, it was also found that occupational safety and health influence employee commitment (Diah et al., 2020). The result of this study found that the indicator of development of human capacity (opportunity to develop self-capacity) influenced the level of commitment. Therefore, the opportunity to develop self-capacity in the work environment will influence the willingness and confidence of health workers to work during the COVID-19 pandemic. Previous studies

had found that activities that increase workers' capacity can increase workers' commitment (Dewi, 2020). Capacity building program is one of the forms of human development and was found to be indispensable tools to improve the worker's commitment (Richard, 2021). Besides that, the indicator of constitutionalism in the work organization, influences the level of commitment. Thus, the fulfillment of individual rights needs influences the willingness and confidence of health workers to work during the COVID-19 pandemic. In a previous study, the existence of communication satisfaction, one of which was freedom of opinion, affected worker commitment (Bastaman, 2010). A previous study showed a consistent result where communication in the workplace had effects on organizational commitment (Narlan Sap et al., 2022; Syahab et al., 2022).

The results of this research also show that several QWL indicators do not influence the commitment of health workers in dealing with COVID-19 at the Health Center in East Jawa. These indicators consist of opportunities for continued growth and security, social integration, the total life space and social relevance. The indicator of opportunities for continued growth and security (opportunities to increase career paths) did not influence the level of commitment. Thus, the opportunity to increase career paths in the workplace did not influence the willingness and confidence of health workers to work during the COVID-19 pandemic. This was not consistent with the finding in the previous study where career growth was associated with worker commitment and significantly associated with employee engagement (Jia-jun and Hua-ming, 2022; Weng et al., 2010). Career growth was found to be the most important and beneficial tool to shape employees' career outcomes when they were facing great COVID-19 anxiety (Huo, 2021). The indicator of social integration, based on research results did not influence the level of commitment. The cooperative relationship in the scope of work did not influence the willingness and confidence of health workers in working during the COVID-19 pandemic. A previous study found that social integration was associated with workers' affective commitment (Yusoff et al., 2006). Having a good relationship with colleagues will create comfort at work (Ariani, 2015). However, this could not be assumed that the existing relationship will directly influence the commitment of workers. Indicator of the total life space (influence of work on life), based on the research results did not influence the level

of commitment. Therefore, the perceptions of health workers regarding the influence of their work on their personal lives did not influence the willingness and confidence of health workers to work during the COVID-19 pandemic. Based on the research results, Indicator of social relevance did not influence the level of commitment. In a different setting, people who work in corporate social responsibility showed higher commitment than those who work for customers and government, employees, and those social / non-social stakeholders (Nejati and Ghasemi, 2013). Perhaps, this was caused by greater anxiety, stress, and depression experienced by the health worker during the COVID-19 pandemic (Alnazly et al., 2021; Febriani et al., 2021; Reliani, 2020). Thus, organizational social responsibility did not influence the willingness and confidence of health workers to work during the COVID-19 pandemic.

This study was a province-scale study using the population of health worker in East Java province. Thus, the result of this study could be generalized to this population. In this study, we were analyzing each indicators that build the Quality of Work Life variable. However, there was also limitation in this study. Since this study was using an online questionnaire, thus the respondents might have misunderstood the questions or bias. Further study in different setting or in another health facility could be done in the future.

## CONCLUSION

The commitment of the Public Health Center's health workers in East Java was in the high category. Therefore, health workers in East Java had a high willingness to work in handling COVID-19. The characteristics of the respondents (age, gender, years of service, and profession) did not influence their commitment in dealing with COVID-19 in East Java. The Quality of the Worklife variable influence the commitment variable. This study found that the higher the worker's quality of work life, the higher the commitment. Whereas the Quality of Work Life indicators that influence commitment include adequate and fair compensation, a safe and healthy environment, development of human capacities, and constitutionalism.

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