PENELITIAN DANA INTERNAL FK UMM

(Block Grant Fakultas)

ANALISIS FAKTOR KEPATUHAN PENGGUNAAN ALAT PELINDUNG DIRI (APD) SELAMA PANDEMI COVID-19 PADA PETUGAS DI PUSKESMAS

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FAKULTAS KEDOKTERAN

UNIVERSITAS MUHAMMADIYAH MALANG

2021

HALAMAN PENGESAHAN
PROGRAM PENELITIAN DANA BLOCK GRANT

Judul: Analisis Faktor Kepatuhan Penggunaan Alat Pelindung Diri (APD) Selama Pandemi Covid-19 Pada Petugas di Puskesmas

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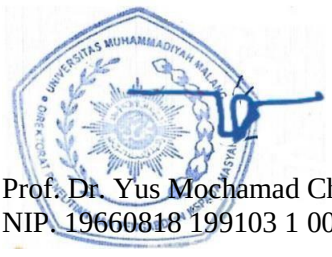

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SURAT PERJANJIAN PELAKSANAAN PEKERJAAN (KONTRAK)

NOMOR : e.6.h/382.a/FKUMM/VIII/2021
TANGGAL : 2 Agustus 2021

PELAKSANAAN KEGIATAN BLOCK GRANT PENELITIAN
FAKULTAS KEDOKTERAN
TAHUN 2021/2022

Pada hari ini SENIN, tanggal 2 Bulan AGUSTUS tahun 2021, kami yang bertandatangan dibawah ini :

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Dalam hal ini bertindak untuk dan atas nama Fakultas Kedokteran Universitas Muhammadiyah Malang, yang selanjutnya dalam Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) disebut sebagai **PIHAK PERTAMA.**

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Dalam hal ini bertindak untuk dan atas nama sendiri, yang selanjutnya dalam Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) disebut sebagai **PIHAK KEDUA.**

Kedua belah pihak telah sepakat untuk mengadakan perjanjian bagi pelaksanaan Block Grant Penelitian di Fakultas Kedokteran Universitas Muhammadiyah Malang, yang mengikat sesuai dengan ketentuan dan syarat-syarat sebagaimana tercantum dalam bunyi pasal-pasal sebagai berikut :

Pasal 1
TUGAS PEKERJAAN

PIHAK PERTAMA memberikan tugas kepada **PIHAK KEDUA** dan **PIHAK KEDUA** menerima baik tugas tersebut sesuai dengan kehendak **PIHAK PERTAMA**, untuk melaksanakan pekerjaan Block Grant Fakultas Kedokteran Universitas Muhammadiyah Malang dengan judul **Analisis Faktor Kepatuhan Penggunaan Alat Pelindung Diri (Apd) Selama Pandemi Covid-19 Pada Petugas Di Puskesmas,** yang dibiayai dari dana block grant Fakultas kKedokteran Universitas Muhammadiyah

Malang yang telah disetujui dalam Rancangan Anggaran Belanja Fakultas Kedokteran yang telah disetujui oleh Universitas.

Pasal 2
DASAR PELAKSANAAN

Pekerjaan tersebut dalam pasal 1 di atas harus dilaksanakan oleh **PIHAK KEDUA** atas dasar rujukan tugas yang merupakan bagian yang tidak terpisahkan dan mempunyai kekuatan hukum yang sama dengan Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini. Rujukan tersebut adalahRancangan Anggaran belanja fakultas yang telah disetujui oleh universitas.

Pasal 3
SASARAN / HASIL YANG AKAN DICAPAI

Pekerjaan/kegiatan sebagaimana tersebut dalam pasal 1 Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini harus dilaksanakan sesuai dengan dasar pelaksanaan pekerjaan yang merupakan rujukan tugas yang tidak dapat dipisahkan dari Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini.

Pasal 4
JUMLAH BIAYA/NILAI KONTRAK PEKERJAAN

Jumlah biaya/nilai kontrak pekerjaan tersebut dalam pasal 1 Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini sebesar : Rp. 15.000.000,-(LimaBelasJuta Rupiah). Dana Block Grant penelitian yang dimaksud meliputi biaya persiapandanpenyusunan proposal penelitian, pelaksanaanpenelitian, biaya seminar, biaya publikasi, biaya pengadaan/penjilidan, dan pembuatan peragaatau poster untuk publikasi.

Pasal 5
PEMBAYARAN KONTRAK PEKERJAAN

Pembayaran kontrak pekerjaan tersebut dalam pasal 1 dan 4 Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini dilakukan secara bertahap.

a. Pembayaran tahap I dibayarkan sebesar 50% (lima puluh persen) dari jumlah biaya/nilai Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini yaitu sebesar Rp. 7.500.000,- (TujuhJuta Lima RatusRibu rupiah), dan dibayarkan setelahpengajuan proposalpenelitian Block Grant.
b. Pembayaran Tahap II dibayarkan sebesar 50% (lima puluh persen) dari jumlah biaya/nilai Surat Perjanjian Pelaksanaan Pekerjaan (Kontrak) ini yaitu sebesar Rp. 7.500.000,- (TujuhJuta Lima RatusRibu rupiah), dan dibayarkan setelahmengumpulkan draft publikasidanLaporan Akhir Penelitian Block Grant.

Pasal 6
PERTANGGUNGJAWABAN KEUANGAN

PIHAK KEDUA wajib memberikan laporan pertanggungjawaban kepada **PIHAK PERTAMA** tentang penggunaan bantuan keuangan yang diterima sesuai ketentuan yang berlaku, pada setiap tahap pencairan dana hibah penelitian.

Pasal 7
LAPORAN KEGIATAN BLOCK GRANT PENELITIAN

PIHAK KEDUA wajib :

a. Memberi laporan lengkap dari seminar hibah penelitian (Laporan Akhir Hibah penelitian) sesuai dengan format yang ditentukan .
b. Disamping menyerahkan laporan akhir hasil Block Grant penelitian, **PIHAK KEDUA** juga diwajibkan mempublikasikan dalam journal atau proceding.

Pasal 8
FORMAT LAPORAN AKHIR BLOCK GRANT

Laporan akhir yang tersebut pada pasal 7 a & b harus memenuhi ketentuan sesuai petunjuk penulisan laporan akhir Block Grant.

Pasal 9
MONITORING

Setiap saat **PIHAK PERTAMA** atau pejabat yang ditunjuk atau Tim Monitoring dari untuk memonitor pelaksanaan Block Grant yang sedang berjalan atau yang belum selesai untuk memperoleh keterangan-keterangan yang diperlukan serta penggunaan keuangannya.

Pasal 10
S A N K S I

Apabila **PIHAK KEDUA** tidak dapat menyelesaikan Block Grant tepat waktu, dapat dikenakan denda yaknitidakdapatmengajukankembalipenerimaanBlock Grant di tahunberikutnya.

Pasal 11

Hal-hal ini yang belum diatur dalam perjanjian pelaksanakan Block Grant ini, akan di**tentuka**n oleh kedua belah pihak secara musyawarah.

Pasal 12

Perjanjian pelaksanaan Block Grant ini berlaku sejak tanggal penandatanganan bersama oleh **PIHAK PERTAMA** dengan **PIHAK KEDUA**.

PIHAK KEDUA, PELAKSANA	PIHAK PERTAMA, DEKAN FK UMM
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FACTORS ANALYSIS OF PUBLIC HEALTH WORKERS COMPLIANCE IN THE USE OF PERSONAL PROTECTION EQUIPMENT (PPE)

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ABSTRACT

COVID-19 declared a global pandemic on March 11, 2020 by WHO. Health workers play an important role in handling the pandemic, because health workers will deal directly with COVID-19 patients. The use of Personal Protective Equipment (PPE) is an effort to create occupational safety and health. The purpose of this study was to analyze the relationship between demographics, years experience, attitudes and knowledge of Personal Protective Equipment related with public health workers compliance in using Personal Protective Equipment during a pandemic. This study used cross sectional design and held at Public Health Center in East Java. 55 publich health workers involved in this study. Data were collected using questionnaires and distributed directly to publich health workers. Bivariate data analysis using Fisher Test showed that attitude has significant correlation with public health workers compliance in the use of PPE ($p<0,005$).

Keywords: COVID-19, Personal Protective Equipment, Public Health Workers

INTRODUCTION

COVID-19 became a global pandemic on March 11, 2020 according to WHO. Health workers play an important role during the pandemic, who will be dealing directly with Covid-19 patients (1). This cannot be ignored because they are professionals who are handling world health emergencies (2)

The best way to minimize the risk of contracting infection is to with adequate protection (3). The use of PPE includes efforts to create occupational safety and health for the medical team. Gloves, masks, goggles are alternatives to protect yourself from the risk of transmission while interacting with patients (4). Transmission is caused by inappropriate use of PPE and contact with patients (5). Proving proper PPE can prevent infection among health workers. It is important to build a system that provides a stable supply of PPE for health workers to perform their duties (5–7).

Use of proper PPE is a key preventive measure to avoid contracting covid19 (5). Health workers must have good knowledge and positive attitude in serving patients. Knowledge and attitude encourage health workers to use Personal Protective Equipment completely and correctly when on duty (8–10).

METHODS

We use observational analytic with cross sectional design which was carried out at the Public Health Center K City in 2021. This study aims to analyze the relationship of demographic, length of work, attitudes and knowledge of Personal Protective Equipment with Public Health workers compliance in using Personal Protective Equipment during the COVID 19 pandemic. This study involved 55 Public Health Center workers in K City. The compliance of the Public Health Center workers in using PPE during the pandemic measured by questionaires consist of 15 questions. The attitudes evaluated by 8 questions of questionaires meanwhile the knowledge about PPE measured by 10 questions of questionaires. Data analysis used Chi-square test, Fisher test, and Kruskal Walis test through the SPSS computer program.

RESULT

Tabel 1.Distribution Of Respondent

No	Distribution	Characteristics	Frequency	Percentage (%)
1.	Age	15-30	19	34.5%
		31-45	27	49.1%
		46-60	9	16.45
2.	Gender	Man	15	29.1%
		Girl	39	70.9%
3.	Years of experience	<5 years	17	30.9%
		5-10 years	15	27.3%
		>10 years	23	41.9%
4.	Knowledge	Good	49	89.1%
		Bad	6	10.9%
5.	Attitude	Positive	53	96.4%
		negative	2	3.6%
6.	Obedience	Obey	50	90.9%
		Not obey	5	9.1%

The results of the bivariate analysis showed that the attitude of significant value ($p < 0.05$). From these results it can be presented that the results of data analysis obtained a relationship between attitudes towards compliance in using PPE at the Public Health Center Workers K City.

Table 2. Bivariate analysis

Variable	Compliance with the use of PPE		P-value
	Obey	Not obey	
Age			
15-30	18 (94.7%)	1 (5.3%)	.322

31-45	25	92.6%	2	7.4%	
46-60	7	77.8%	2	22.2%	
Gender					
Man	13	81.3%	3	18.3%	.141
girl	37	94.9%	2	5.1%	
Level of education					
Diploma	28	90.3%	3	9.7%	.276
bachelor	20	95.2%	1	4.8%	
other(hish school)	2	66.7%	1	33.3%	
Length of working					
<5 year	16	94.1%	1	5.9%	.168
5-10 year	15	100%	0	0%	
>10 year	19	82.6%	4	17.4%	
Knowledge					
Bad	5	83,3%	1	8,2%	.452
Good	45	91,8%	4	16,7%	
Attitude					
Positif	50	94,3%	3	5.7%	.007
Negative	0	0%	2	100%	

DISCUSSION

Result of chi square test, variable age have a significant value p = 0.3322 (p> 0.05) which indicates that age does not have a significant correlation with the compliance of public health workers in the use of PPE. Zhang et al., (2020) where the study states that the distribution of age 16-29 years with the level of compliance (13.76±3.41); age 30-59 years with the level of compliance (14.23±3.09) and age 60 years with the level of compliance (7.00±0.00) with the results P =0.054(p>0.05), thus indicating no correlation of age with level of adherence to prevent transmission of Covid-19 among health workers in Chitwan, Nepal (11). Saqlain et al, 2020 stated age <30 years, age 31-39 years, 40-49 years and 50 years respectively. Overall, there is no significant correlation with compliance in the use of PPE with a P value of 0.957. There is no significant relationship between gender and PPE compliance (12,13). In research (Limbu et al., (2020) which states that the age distribution with compliance (28.38±6.10) with a P value of 0.64 (1). In Gladys' research, (2016) it is known that respondents aged >35 years are more well behaved in the use of PPE than those who behave less. Respondents aged 35 years were more well behaved in the use of PPE than those who behaved less. It can be seen that there is a very significant relationship between age and the behavior of using PPE in workers. The older a person is, the more mature they are in thinking and acting so that it will also affect a person's mindset and behavior so the more responsible and experienced he will be (14–16).

P value in the relationship between sex and compliance in using PPE resulted in P>0.141 indicating that there was no correlation between sex and the level of compliance with the compliance of public health workers in using Personal Protective Equipment (table 2). Mario et al., (2020) stated that there was no relationship between gender and compliance with the use of PPE with a p value of 0.029 (17). In line with Hossain et al., (2021) there is no significant relationship between gender related to compliance with using PPE in Bangladeshi health workers, which states that respondents who are female (76.1%) are obedient regarding the use of PPE (4). Similarly, more male respondents (78.8%) are obedient in the use of PPE. So there is no gender correlation related to compliance with the use of PPE by workers. This is because whatever gender does not affect using or not using PPE. Male or female sex has the same opportunity to use or not to use PPE (17). Honarbakhs et al.,, (2018) concluded in the analysis of the resulting data that the gender of women and men in his study was not significant, which means that gender was not related to compliance with the use of PPE which was obtained p = 0.439 (18). Abdel Wahed et al., (2020) found that there was no correlation between gender and knowledge related to compliance (p = 0.727 ; p = 0.557) (19). This is similar to the research of Hossain et al., (2021) conducted in Bangladesh at the hospital stated the mean age of the 393 workers was 28.9±5.2 years with a male-female ratio of one. There are 51.7% (n=203) have good practice about PPE (4). In research by Xu et al, 2021 and Haile et al, 2017 that the male sex has a low level of adherence compared to women, this is explained because the average The average level of knowledge of women is higher than that of men (9,20).

Results of the data analysis related to the education level of compliance with PPE have significant value of p> 0.05. In a study conducted on health workers by Olum et al., (2020) mentioned eighty-four (62%) were doctors and 125 (92%) had at least a bachelor's degree Overall, 69% (n = 94) had sufficient knowledge and 74% (n = 101) had good practice on the use of PPE for the prevention of covid-19 (21).

In Honarbakhsh's research, (2018), it is stated that non-college education has a higher level of compliance and practice compared to higher education. This may be because less educated health workers are more exposed to high risk respiratory hazards due to their job responsibilities. In addition, these health workers may be more inclined to comply with health and safety regulations due to low job security. The average score of knowledge, perception and practice of health workers in using PPE is 66.50% ± 11.93%, 80.32% ± 10.05% and 70.12% ± 20.51%(18).

Zhang et al., (2020) stated that the distribution of respondent's length of work < 5 years, the level of compliance (13.53 ± 3.32), the length of work 5-10 years and the level of compliance (14.73 ± 5.32), and the length of work > 10 years were obtained with the level of compliance. (13.88 ± 3.09). From the research above, it was found that the P value was 0.013. It is found that P> 0.000, so there is no correlation between length of work related to the level of compliance of workers working in the health sector in Chitwan, Nepal (11).

The result of P value on the relationship of knowledge related to compliance in using PPE is 0.452, where the result is P > 0.05. This is in line with Haile et al., (2017) which states that the level of good knowledge has a higher compliance rate in wearing PPE, namely 12.15% compared to poor knowledge, which is 9.03%. In their research, health workers who are trained in standard prevention guidelines tend to always comply with the use of PPE compared to health workers who are not trained (9).

Piché et al., (2021) in their study a total of 86 respondents. (50%) identified the correct sequence for wearing PPE, and 60 (35%) identified the correct doffing. In addition, 113 respondents (70%) identified the need to perform hand hygiene before removing their face masks and/or eye

protection. Those who reported receiving related previous training in the past 2 years (either general PPE training, hand washing training or COVID-19 specific PPE training) had significantly higher PPE doffing scores than those who did not report training (22).

Mario et al., (2020) stated that gender had no relationship with adherence to the use of PPE which in his research resulted in a p value = 0.029 (17). Research conducted by Hossain et al., (2021) which states that there is no significant relationship between gender and adherence to using PPE on staff at a Bangladesh Hospital which states that female respondents (76.1%) are obedient in the use of PPE (4). Similarly, more male respondents (78.8%) are obedient in the use of PPE. So that it can be seen that there is no significant relationship between gender and compliance with using PPE on workers. This is because whatever gender does not affect using or not using PPE. Male or female sex has the same opportunity to use or not to use PPE (17,23).

Akagbo et al., (2017) explained that the main factors that influence adherence to the use of PPE are not limited to the lack of understanding and knowledge of health workers, but also lack of time to exercise vigilance, limited resources, lack of proper training, uncomfortable equipment, skin irritation, forgetfulness. , distance from the required facilities, and inadequate support from management in creating a facilitating work environment (24,25).

Analysis of related data attitudes related to compliance with using PPE have a significant value of $p>0.05$ ($p=0.007$). Research by Garg et al., (2020) revealed that when analyzing attitudes about wearing and removing PPE, 98.7% of health care professionals had a positive attitude regarding PPE (26). Most health workers think that putting on and taking off PPE is a critical process that must be taken seriously and 83.2% of health workers strictly follow the method of putting on and taking off PPE. Health workers have a more positive attitude than the general public in dealing with the COVID-19 pandemic in terms of using PPE to prevent transmission. According to research by Mario et al., (2020), there is a significant difference $P=0.002$ ($p<0.05$) regarding attitudes regarding personal protective equipment to prevent transmission of COVID-19 from health workers compared to the general public (17).

In line with research conducted by Hossain et al., (2021) stated that 88.8% (n=349) research subjects had a positive attitude and 51.7% (n=203) subjects had good compliance in the use of PPE (4). Saqlain et al., (2020) there is a correlation between attitudes and adherence to using PPE ($p=0.004$ ($p<0.05$)) behavior is a function of attitudes that reflect that behavior (12). A negative attitude will go hand in hand with inappropriate behavior. This is in accordance with the attitude theory which states that attitude is the regularity of one's feelings, thoughts, and behavior in social interactions. With good knowledge, a positive attitude, and compliance with using PPE, it is very much needed to reduce the chance of transmission during the COVID-19 pandemic. Good compliance in using PPE for workers not only protects workers from COVID-19 but also creates vigilance and as an example for patients and the general public(4,12,27) .

A negative attitude will be in line with negative behavior. Ejeh et al., (2020) states the relationship of knowledge, attitude, and practice. There is a significant continuous positive correlation between knowledge and attitudes (28). Most of the health workers take preventive measures, one of which is the use of personal protective equipment (91.6%) and hand washing (96.0%) against SARS-CoV-2 infection (23,28). In the study Michel et al., (2021) only 55% of health workers adhere to a good attitude; 49.4% wore masks consistently and, surprisingly, only 54.9% used personal protective equipment (PPE) consistently at work and during patient contact . The level of knowledge is positively related to the use of mass media as the main source of information related to COVID-19 (29,30).

At 88.5% of participants were confident enough about their knowledge and practice the correct use of a face mask. The health workers studied had a positive attitude but moderate to poor level of knowledge and practice regarding the use of personal protective equipment such as masks (31). (Qadah, 2020)

CONCLUSION

Based on the description above, only the attitude variable has a significant correlation to compliance with using PPE at the Public Health Center K City during the Covid-19 Pandemic (p value= 0.007). For further research, further research can be carried out related to compliance with the use of Personal Protective Equipment, as well as possible influencing factors including environmental, occupational, social, cultural, economic, and religious factors. It is expected to involve a broad scope, so that the sample is larger for further research.

Abbreviation

COVID-19: Coronavirus Disease 2019; SARS-CoV-2: Severe acute respiratory; SPSS: Statistical Package for Social Sciences; UK: United Kingdom. PPE: Personal Protective Equipment

Competing Interests

The authors of this study state that the authors have no competing interests.

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