The Analysis of Personal Protective Equipment Covid-19 in The Hospital Sallewangan, Maros Regency 2020

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Abstract

Purpose: to analyze of the use of Covid-19 Personal Protective Equipment on health workers at Salewangang Hospital, Maros Regency.

Methods: The type of research used is the analytical survey method of research conducted without intervention to the research subject. Data collection regarding free and dependent variables was carried out online using Google Form and the results of Google Form data collection

Results: Availability of personal protective equipment has a significant effect on the behavior of using personal protective equipment Covid-19, Knowledge of health workers has a significant effect on behavior of using personal protective equipment Covid-19, Attitudes of health workers have a significant effect on behavior of using personal protective equipment Covid-19 in health workers at the Salewangang Hospital, Maros Regency with a sig. 0.000

Conclusion: there is a relation between personal equipment on helath workers at the sallewangan hospital at maros regency

Keywords: *covid-19, Actitute, Behavior*

Introduction

Based on data from the International Labor Organization (ILO) in 2013 it is known that every year 2.34 million people die from work-related illnesses and accidents and around 2.02 million cases die due to work-related diseases. In Indonesia, the current picture of occupational diseases, such as the "Peak of the Iceberg" phenomenon, occupational diseases that are known and reported are still very limited and partial based on research results so that they do not describe the magnitude of occupational safety and health problems in Indonesia. This is because human resources capable of diagnosing occupational diseases are still lacking so that services for occupational diseases are not optimal.[1]

Corona Virus Disease 2019 (COVID-19) due to work as an occupational disease that is specific to a particular job is a Corona Virus Disease 2019 (COVID-19) disease that is suffered or causes death to a worker whose duties/work processes are directly related to exposure The SARS-COV-2 coronavirus is quite high. In an outbreak condition and the establishment of a Public Health Emergency, health services and efforts to handle COVID-19 areHealth workers can protect themselves when caring for

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patients by adhering to infection prevention and control practices, which include administrative, environmental and engineering controls as well as the proper use of Personal Protective Equipment (PPE) (i.e. proper selection of the appropriate type of PPE, how to use it, how to remove it and how to remove it). method of disposal or washing of PPE). Health workers need to be reminded that the use of PPE is only one aspect of infection prevention and control measures. In treating COVID-19 patients, health workers are very vulnerable to infection, so the PPE used is standard PPE based on a risk assessment [2,3].

Personal protective equipment (PPE) is a device that is designed as a barrier against the penetration of substances, solid particles, liquids, or air to protect the wearer from injury or the spread of infection or disease. When used properly, PPE acts as a barrier between infectious materials (e.g. viruses and bacteria) and the skin, mouth, nose, or eyes (mucous membranes) of healthcare workers and patients[4,5]. The barrier has the potential to block transmission of contaminants from blood, body fluids, or respiratory secretions. In addition, other infection control practices such as washing hands, using alcohol-based hand sanitizer, and covering the nose and mouth when coughing and sneezing with the inside of the upper arm or a tissue, can minimize the spread of infection from one person to another. The effective use of PPE includes the proper transfer and/or disposal of contaminated PPE to prevent exposure of the wearer and others to infectious materials [6,7,8]

Materials and Methods

The method used in this research is an analytic survey, namely research conducted without intervention on the research subject. Based on the approach, this study uses a Cross Sectional approach because the cause and effect variables that occur in the object of research are measured or collected at the same time and carried out at the same situation.

To collect data in this study using an online questionnaire (Google Form). Before answering/ filling out the Google Form, respondents will be asked to read and sign the Informed Consent electronically (by clicking on the option "Yes, I agree, I agree". Next, provide some information in the form of age, gender, education level, length of work (in years), the type of health worker (for example, doctors, nurses, pharmacists, etc.), the location of health services, and the length of work in a day (in hours), then answer/ fill in an online questionnaire about the analysis of determinants of the use of COVID-19 PPE for health workers Salewangang Hospital, Maros Regency.

Result

Validity and Reliability Test Results

Validation and reliability tests were carried out by testing the results of the google form. The 30 initial respondents in the google form contained 12 questions that were tested using the SPSS program. The 20 tests were needed to ensure that the google form used in the study was able to measure research variables properly and the results of the validity and reliability tests were carried out. can be seen in the attachment. Based on the validity and reliability test results in the appendix, it can be seen that all questions are valid where all Corrected Item-Total Correlation values of each question have a value above the r table value of 0.361. While the results of the reliability test of each question are very good with Cronbach's Alpha value greater than 0.60.

Table 1: CharacteristicsRespondentfor Health Workers in The Hospital

The Characteristic	n	%
≥ 30Years	45	22
31– 40Years	98	49
≤ 41Years	56	28
sex Man	61	30
Women	138	69
Education SMP/SMA	38	19
Diploma/S1	156	78
S2/S3	5	2

Based on the table. 1 characteristic of respondents, it is known that from 199 respondents, most were 31-40 years old (49.%). 138 people (69%) and the least male 61 people (30%). The educational level with the most diploma / S1 is 156 people (78%) and at least 5 people are S2 / S3 (2.5%). The maximum length of work is 6-10 years with 126 people (63%) and at least 10 years (7.5%).

Table 2 Characteristics of Type of Work Profession In the hospital

Location of work	n	%
Poliklinik	2	1
IGD	10	5
Laboratorium	10	5
Nutrition	10	5
asoka's treatment room	21	11
Teratai A treatment room	13	6.5
Obygn/KB	21	11
Isolation Covid	8	4
Operation theather/OK	5	2.5
ICU	10	5
Administraton	17	8.5
Pharmacy	15	7.5
Radiology	8	4
Fisioterapy	8	4
BPJSregistration	10	5
IPRS	25	13
Ambulance	6	3

Table 3: Research Variable Bivariate Test Results

Research variable	Personal Protective Equipment				Sign
	Good		Little		
	n	%	N	%	
personal protective equipment					
Good	174	92	15	8	0,000
little	10	100	0	0	
Knowledge					
Good	180	92	15	8	0,000
Litlee	4	100	0	0	
Actitude					
Good	166	94	10	6	0,000
Little	`18	78	5	22	

Based on Table 3, it shows that respondents who have sufficient knowledge of good behavior in using PPE Covid-19 are 180 (92%) and less behavior in using PPE Covid-19 are 15 (8%). Respondents who had sufficiently good attitudes in the use of Covid-19 PPE were 166 (94.3%) and 10 (6%) had less behavior.

Discussion

First-level health workers such as doctors, nurses, pharmacists who provide health services are recommended to wear work clothes, gloves and a three-layer surgical mask. Second-level health workers are doctors, nurses, and analysts who work in treatment rooms, sampling, or virus testing laboratories. Health workers in this category must wear PPE in the form of gowns (surgical gowns), head coverings, disposable rubber gloves, three-layer surgical masks, and goggles or eye protection. Third-level health workers are those at high risk, namely doctors and nurses who have direct contact with patients suspected of or confirmed positive for Covid-19. Third-level health workers are required to wear hazmat clothing or coveralls that cover all parts of the body, headgear, sterile surgical gloves, N95 masks, boots and face shields[9].

Availability of PPE Covid-19 in the form of surgical masks (surgical/facemask), N95 masks, face shields (face shields), eye protection (goggles), gowns/gowns (disposable dresses and reusable gowns), aprons (apron), Gloves, protective headgear and protective shoes according to health care settings.

The increasing socio-economic level, knowledge and awareness of the community about their rights as the use of health services and progress in the field

of hospitalization, spur hospitals to further improve services. Quality of service that meets standards is an absolute must. For this reason, the Salewangang Hospital continued to change itself and at the end of 2017 again participated in the accreditation assessment survey process which was assessed by the Hospital Accreditation Committee on 06 - 09 December 2017. The improvement efforts that had been carried out finally produced results that did not disappoint Salewangang Hospital was declared accredited with the title plenary session[4,6].

Attitude is a form of evaluation or reaction of feelings, a person's attitude towards an object is a feeling of support or partiality (favorable) or feelings of being unsupportive or unfavorable to the object. Among the various factors that influence the formation of attitudes are personal experience, culture, other people who are considered important, mass media, educational institutions and religious institutions, as well as emotional factors within the individual[10.] At SalewangangMaros Hospital, in providing services, providing facilities needed by suspected and confirmed Covid-19 patients, always carrying out various health protocols when treating Covid-19 patients by protecting themselves as much as possible with PPE according to standards, having sufficient knowledge to handle Covid-19 patients. , following strict requirements to take off official clothes, leave the hospital or meet with family/community, treat with sincerity, even fight for life to treat Covid-19 patients[11].

Conclution

1. The availability of personal protective equipment has a significant effect on the behavior of using Covid-19 personal protective equipment on health workers at the Salewangang Hospital, Maros Regency with a sig. 0.000 0.05 and the OR (Odds Ratio) value is 11.6. This shows that the availability of PPE has an 11.6-fold effect on the behavior of using personal protective equipment Covid 19

2. The knowledge of health workers has a significant effect on the behavior of using Covid-19 personal protective equipment at the Salewangang Hospital, Maros Regency with a sig. 0.000 0.05 and the OR (Odds Ratio) value is 12. This shows that knowledge has a 12-fold effect on the behavior of using personal protective equipment Covid 19.

3. The attitude of health workers has a significant effect on the behavior of using Covid-19 personal protective equipment on health workers at the Salewangang Hospital, Maros Regency with a sig. 0.000 0.05 and the value of OR

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Ethical Clearance- taken from Comitee ethical Universitas Muslim of Indonesia Makassar

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