# STUDY OF KNOWLEDGE OBJECTIVE ANALYSIS HEALTH LABORATORY ASSEMBLY ABOUT THE BENEFITS OF SELF PROTECTIVE EQUIPMENT IN INTEGRATED LABORATORY OF FACULTY OF HEALTH SCIENCE RESPATI YOGYAKARTA UNIVERSITY

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#### Abstract

From preliminary studies conducted at the UNRIYO health laboratory, the data or information that we got was very problematic because of the 5 laboratory staff we interviewed, only 2 laboratory assistants routinely used APD in each lab activity in the laboratory. This study aimed at an objective analysis of the knowledge of health laboratory staff about the benefits of personal protective equipment at the University of Yogyakarta's Respati health laboratory. This study uses qualitative methods which means a research process and understanding based on methodologies that investigate social phenomena and human problems. Laboratory staff have a good knowledge of the benefits of using personal protective equipment in the laboratory, understand the function of APD and its benefits, the use of personal protective equipment has not been specifically contained in the standard APD according to applicable SOPs, compliance with officers laboratory reports about the benefits of using personal protective equipment in accordance with the applicable regulations in the laboratory, facilities and infrastructures related to the use of personal protective equipment are quite good. Laboratory staff have good knowledge of the benefits of using personal protective equipment in the laboratory

#### 1. INTRODUCTION

The laboratory environment can contain various negative impacts that can affect the degree of human health, especially work. In the era of globalization and free markets that will take effect in 2020, occupational health and safety is one of the prerequisites established in the economic relations of trade in goods and services between countries that must be met by all member countries, including the Indonesian nation. In Indonesia in 2017 the expected environment is conducive to the realization of a healthy state. How to control can be done to reduce hazards in the work environment where the best way is to eliminate the danger or close the source of the danger, if possible but often these hazards cannot be fully and controlled because it requires efforts to prevent them by using several personal protective equipment (Budiono, 2003: 16). Laboratory officers as workers of one unit with a high potential hazard also have the possibility to experience the risk of the hazard. Laboratory activities have risks that come from a variety of factors, namely physical, chemical, ergonomic and psychosocial. Variations, sizes, types and completeness of the laboratory also determine occupational health and safety. Along with the progress of science and technology (Science and Technology), especially advances in laboratory technology, the risks faced by laboratory personnel are increasing. Applying according to Occupational Safety and Health rules is needed on all jobs that are useful for avoiding undesirable things, such as workplace accidents. The workers consist of educated and trained people. One of the educated people in question is an

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officer of the public health laboratory at Respati University in Yogyakarta, because one of the fillers in the workforce is a university graduate, so the learning process in the laboratory must be a serious concern to get qualified workforce candidates, especially understanding about the implementation of Occupational Safety and Health (K3) especially the use of personal protective gloves so that there are no direct or indirect obstacles in the work, such as workplace accidents, equipment damage, cessation of work processes, environmental damage, and expenses for work accident costs.

#### 2. MATERIALS AND METHODS

This research uses qualitative methods, which means a research process and understanding based on methodologies that investigate social phenomena and human problems. In this approach, the researcher makes a complex picture, examines words, detailed reports from the respondent's viewpoint, and conducts studies on the situation experienced (Creswell, in Suprapto, 2010). Bogdan and Taylor (In Moleong, 2008), suggests that the methodology qualitative is a research procedure that produces descriptive data in the form of written or oral words from people and observed behavior. The qualitative approach was chosen with the aim of obtaining an in-depth understanding of an object of research. The initial theory is only limited to helping understanding problems in order to become more focused.

#### 3. RESULTS AND DISCUSSIONS

The location of this study was at the University of Yogyakarta's Respati health laboratory. The characteristics of the informants in this study can be seen in the table below.

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No	Name	Division	of Age	Education	Length of working
		work			
1	Nining Wahyuni	Laboran	48	S1	8 year
2	Ernita Herawati NK	LKM	30	S1	3 year
3	Tutik Martiwi	Skill Lab	30	S1	10 year
4	Cahyo Nugroho	Lab. Kes	30	S1	8 year
5	Wisnu Jaka P	UPT	40	S1	8 year
6	Afilia Ulfah	UPT	23	D-III	3 year
7	Rois Fatarudin	Laboran	23	D-IV	3 year
8	Anita Nidtarini	Laboran Gizi	29	D-III	3 year

**Table 1. Characteristics of Informants** 

Table 2. Age Distribution of Frequency Characteristics at Respati University Health Officer Yogyakarta

Age	F	N	%	
20-29	3	3	37,5	
30-39	3	3	37,5	
40-50	2	2	25	
Total	8	8	100	

Based on table 2. it can be seen that the age of the respondents consisted of 3 respondents aged between 20-29 years (37.5%), 3 respondents aged between 30-39 years (37.5%), and 2 respondents aged between 40-50 years (25%).

Table 3. Distribution of Frequency Characteristics Based on Education on Health Laboratory Officers at Respati University, Yogyakarta

Education	F	N	%	
D-III	2	2	25	
D-IV	1	1	12,5	
S1	5	5	62,5	
Total	8	8	100	,

Based on table 3. it can be seen that the respondent's education consists of 2 D-III graduates as many as 2 people (25%), 1 D-IV graduate as many as 1 person (12.5%), and 5 S1 graduates graduating as many as 5 people (62.5%)Distribusi Frekuensi Karakteristik Berdasarkan Lama Kerja.

Table 4. Frequency Distribution of Characteristics Based on the Duration of Work at the Health Laboratory Officer at Respati University, Yogyakarta

Length of working	F	N	%
< 1 year	3	3	37,5
> 1 year	5	5	62,5
Total	8	8	100

Based on table 4, it can be seen that based on the duration of work which consists of 3 respondents who worked less than 1 year as many as 3 respondents (37.5%) and 5 respondents who worked more than 1 year amounted to 5 respondents (62.5%).

### Characteristics of In-depth Interview Information

In-depth interviews were conducted on 1 Key Information, namely: Integrated Health Laboratory Coordinator of the Faculty of Health Sciences. The next interview was conducted to as many supporting informants and participation consisted of: 6 staff laboratory staff who worked in the Public Health Laboratory, Nutrition Laboratory, Biomedical Laboratory, Nursing laboratory, laboratory Midwifery, and 1 participant in the Physiotherapy laboratory at the Health Sciences Faculty at Respati University in Yogyakarta. From the results of interviews, observations and domunetation studies we tracked to get objective results related to the knowledge of health laboratory staff about the use of personal protective equipment at the health laboratory of the Respati Yogyakarta university.

### Conclusions from the results of Triangulation of interview data about the types of APD used in the laboratory found that:

"Key informants said that they did not understand APD that was used in all laboratories and how to use APD was adjusted to use during the practice in each laboratory. each laboratory ... "such as: masks and lab coats ... so that the knowledge of the types of APD used is not optimal in answering

# Conclusions from the interview results about the use of APD whether according to the SOP in the laboratory it was found that:

"In general, the results of interviews with key informants and supporting informants as well as participation informants answered that the use of practicum tools was in accordance with the SOP with the existence of a practice manual in each laboratory but for SPO the use of APD was not specific.

### The conclusion of the interview results about the Use of Compliance Using APD in the laboratory found that:

For obedience: key informants and supporting informants gave almost the same answers on average both the lecturer and student laboratory staff had complied with each existing practice, but sometimes there were also lecturers and students who forgot or were uncomfortable with the use of APD.

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# The conclusion of the interview results about the Use of Compliance Using APD in the laboratory found that:

For compliance: key informants and supporting informants gave almost the same answers on both the lecturer and student laboratory staff already adhering to the use of APD when practicing even though sometimes there were also good lecturers and students who forgot or were uncomfortable with the use of APD.

# The conclusion of the interview results about the Use of Compliance Using APD in the laboratory found that:

Means and prasara about APD that are used in the lab both laboratory and lecturers and assistants and students are available through submission in each semester.

Observation results about the study of Knowledge Objectives Health staff officers about the benefits of personal protective equipment in the integrated laboratory of the Faculty of Health Sciences, University of Yogyakarta. Observation results about the knowledge of the use of personal protective equipment used by integrated health laboratory staff at the UNRIYO FIKes From the results of the observations carried out by the researchers, it was found that laboratory staff were 9 people. It was found that the officers when they were observed were not in the condition of using APD because at the time the researchers were observing the laboratory there were no student practices.

Observation Results About the Functions of APD / Benefits of APD to integrated health laboratory staff at the UNRIYO FIKes. From the results of observations made by researchers it was found that the average laboratory staff understood the function of using personal protective equipment in the laboratory by showing what APD was used in their respective laboratories when the researchers conducted direct observations in addition to conducting interviews directly, in addition, the results of the observations also addressed a number of general rules of conduct while doing paractics, both in the public health laboratory, biomedical laboratories, nursing and midwifery laboratories.

## Results of Research Observation About the use of APD whether it is in accordance with the SOP in the laboratory.

From the results of observations conducted by researchers whether the APD used is in accordance with its use when laboratory staff, lecturers, teaching assistants and students at the time of implementing the practice are in accordance with the SOP or not, laboratory staff said it was in accordance with the SOP installed in the laboratory order, but indeed they acknowledge that the use of APD does not yet have SOP specifically related to the use of APD: such as the SOP on the use of clothing, masks and handcuffs.

### Compliance Observation Results using APD integrated health laboratory staff.

From the results of observations conducted by researchers both laboratory staff, lecturers and students have used APD when practicing in the laboratory but sometimes officers, asdos and students feel uncomfortable in using or certain moments when the practice has finished the APD is released.

#### The prasana facility about APD that is used in the laboratory

From the results of direct observation, the researchers looked at painting and documenting the facilities and facilities of APD that existed in the laboratory room on the principle of fulfillment because every semester a proposal was submitted to the institution for the purchase of APD that was used when practicing in the laboratory according to the schedule that had been made.

### **Document and Discussion Study Results**

study of the results of literacy analysis of documents about knowledge about the benefits of APD Laboran officers. According to the Researcher: the knowledge of laboratory staff is good enough as evidenced when the researchers conducted their interviews directly responsive to APD that was often used in the laboratory during the time but did not yet mention in detail and in detail only limited to APD that is often used in their respective laboratories.

# Study of the results of the literacy analysis of document studies regarding the functions / benefits of APD laboratory staff.

According to the Researcher: In general, almost all laboratory staff understand about the functions and benefits of APD well, but only laboratory assistants use APD according to their functions based on the prevailing rules and guidelines based on manuals on laboratory instructions.

# Study of the results of study analysis documents regarding the use of APD whether in accordance with the applicable SOP in the laboratory.

According to the Researcher: The use of APD in accordance with the applicable rules of the laboratory is good, but specifically there is no policy and study regarding the use of APD in accordance with the SOP because there is no standardized use in the laboratory environment.

### Study of the results of the study of document studies regarding compliance Using APD laboratory assistants in each laboratory practice.

According to the Researcher: based on the study of the docomen in the field of compliance, the laboratory officer has complied with the prevailing rules and regulations in the laboratory, but there are no specific regulations regarding the compliance with the use of self-protection tools and detailed policies regarding the commitment and compliance of laboratory staff. , lecturers and students

# Study of the results of analysis of study documents regarding the infrastructure facilities of APD laboratory assistants in each laboratory practice.

Documentation Study concerning Study of facilities of personal protective equipment in laboratory there has been a record of both entry and expenditure of APD usage based on submission from laboratory officer to institution to be used as APD during practicum.

#### 4. CONCLUSIONS

Laboratory staff have good knowledge of the benefits of using personal protective equipment in the laboratory. Overall laboratory staff understand the function of PPE and its benefits. The use of personal protective equipment has not been specifically contained in the standards for the use of PPE according to the applicable SOP. Compliance Laboratory staff about the benefits of using personal protective equipment are in accordance with the prevailing rules and regulations in the laboratory. Facilities and infrastructures related to the use of personal protective equipment are quite good.

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