**Respondents Overview**

Distribution of respondents by gender

This research was conducted using a simple random sampling technique. The number of samples in this study was 110 respondents, consisting of male and female sexes. Characteristics of respondents by gender are presented in Table 4.1.

Table 1 Distribution of respondents by gender

|  |  |  |
| --- | --- | --- |
| **Gender** | **amount** | **Percentage (%)** |
| Man | 25 | 23.4 |
| Women | 85 | 76.7 |
| Total | 110 | 100.0 |

Source: Processed primary data, 2019

Table 1 shows that most of the respondents in this study were female, with 76.7% of 110 respondents. Conversely, the percentage of respondents with male gender in this study was 23.4% of all respondents.

Distribution of respondents by age range

This study was conducted on respondents with variations in age. Therefore, the age range in this study was divided into 2, namely the age of 20-25 years and 26-30 years. Characteristics of respondents based on age range are presented in Table 2.

Table 2 Distribution of respondents by age range

|  |  |  |
| --- | --- | --- |
| **Age Range (Years)** | **amount** | **Percentage (%)** |
| 20-25 | 81 | 73.9 |
| 26-30 | 29 | 26.1 |
| Total | 110 | 100 |

Source: Processed primary data, 2019

Table 2 shows that the respondents in this study were dominated by respondents in the age range of 20-25 years, with 73.9%. At the same time, respondents with an age range of 26-30 years amounted to 26.1% of the total respondents.

Distribution of Respondents Based on Years of Service

This research was conducted on respondents with variations in the working period. Therefore, the working period of the respondents in this study was divided into five working periods. Characteristics of respondents based on age range are presented in Table 3.

Table 3 Distribution of Respondents by Range of Working Periods

|  |  |  |
| --- | --- | --- |
| **Timespan** **(Month)**  | **amount** | **Percentage (%)** |
| < 6 | 19 | 17.1 |
| 6 - 12 | 12 | 10.8 |
| 12 - 18 | 33 | 29.7 |
| 18 - 24 | 10 | 9.0 |
| 24 - 30 | 36 | 33.3 |
|  Total  | 110  | 100.0  |

Source: Processed primary data, 2019

Table 3 shows that most of the respondents in this study have a working period of 24-30 months with a percentage of 33.3%, and the least are respondents with a working period of 18-24 months with a percentage of 9% of all respondents.

# Research Instrument Test

The research instrument used in this study was a questionnaire and tested for validity and reliability to test the validity and consistency of the questionnaire. The validity test in this study used the Pearson correlation with a significance value of 0.05. Based on the formula df = n-2, the value of the r table is 0.374. The reliability test in this study used the Cronbach's Alpha method. The research instrument is declared reliable if r count> r table. The value of the r table for respondents is 110, which is 0.1848. The results of the validity and reliability tests are presented in Table 4.

Table 4 Validity and Reliability Test Results

|  |  |  |
| --- | --- | --- |
| **Variable** | **Number of Items****Valid** | **Cronbach's Alpha** |
| Knowledge | 13 | 0.297 |
| Attitude | 13 | 0.552 |
| Facility Availability | 10 | 0.687 |
| Training | 7 | 0.586 |
| Supervision | 7 | 0.610 |

Source: Processed primary data, 2019

Table 4 shows that all the question items in each variable have an r value higher than 0.374. This shows that all the questions asked in this study are valid. In addition, the results of the reliability test in this study showed that the alpha value for all variables was more significant than the r table 0.1848. This shows that all questions on each variable are declared reliable.

# Univariate Analysis

Univariate analysis in this study describes the description of each variable in this study. The results of the descriptive statistics of this study are presented in Table 4.5.

Table 5 Summary of univariate analysis results

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Category (%)** |  |
| **Variable** | **Very low** | **Low** | **Medium** | **High** | **Very high** |
| Knowledge | 0 | 0 | 10.8 | 67.6 | 21.6 |
| Attitude | - | 0 | 0 | 100 | - |
| AvailabilityAmenities | - | 0 | 3.6 | 96.4 | - |
| Training | - | 0 | 7.2 | 92.8 | - |
| Supervision | - | 0 | 13.5 | 86.5 | - |
| Obedience PPE  | 0 | 0 | 1.8 | 73.9 | 24.3 |

Source: Processed Primary Data, 2019

The average results of respondents' answers in this study were divided into three classifications, namely low, medium, and high. The division of the classification range in this study is determined by using index numbers to describe how respondents respond to the variables studied. The index number is calculated based on the respondent's answer score. The scoring technique in this study is the smallest score of 1 and the largest 5. From these scores, the index calculation is according to the following formula:

interval = Upper limit – Lower limit

Class

= 5 – 1

3

= 1.3

The number or score of respondents' answers starts from numbers 1 to 5; using three criteria, a range of 1.3 is obtained, which are used as the basis for interpreting the index value, namely:

Low = 1 – 2,3

Medium = 2.31 – 3.6

High = 3.61 – 5

From the results of univariate analysis, it can be seen that 10.8% of respondents' knowledge is in the medium category, 67.6% have high knowledge, and 21.6% of respondents have very high knowledge. In the attitude variable, all respondents are categorized as having a high attitude with 100%. The availability of facilities is also categorized as medium with a percentage of 3.6% and high at 96.4%. The training variable is 7.2% of respondents categorized as a medium, and 92.8% are categorized as high. The control variable has a medium category of 13.5% and a high category of 86.5%. While there are 1.8% of respondents who have moderate compliance on the compliance variable, 73.9% have high compliance, and 24.3% have very high compliance.

# Bivariate Analysis

Bivariate analysis in this study used Somers'd correlation analysis to determine the relationship between independent variables, namely age, years of service, knowledge, attitudes, availability of facilities, training, and supervision of the dependent variable, namely compliance with the use of personal protective equipment. The results of the correlation analysis are presented in Table 4.6.

Table 6. Results of Correlation Analysis between Factors Related to Compliance

|  |  |  |
| --- | --- | --- |
| **No** | **Parameter** |  **Correlation**  |
| **R** | **P** |
| 1. | Age | -0.248 | 0.002 |
| 2. | Years of service | - 0.140 | 0.75 |
| 3. | Knowledge | 0.201 | 0.009 |
| 4. | Attitude | 0.207 | 0.002 |
| 5. | AvailabilityAmenities | 0.267 | 0.000 |
| 6. | Training | 0.267 | 0.004 |
| 7. | Supervision | 0.288 | 0.002 |

Source: Processed Primary Data, 2019

Table 6 shows the correlation analysis of the variables of age, knowledge, attitude, availability of facilities, training, and supervision related to compliance with the use of personal protective equipment with a p-value <0.05. In addition, the results of the correlation analysis showed that the variable period of service was not related to compliance with the use of personal protective equipment with a p-value > 0.05.

The correlation coefficient on the variables of attitude, availability of facilities, training, and supervision is positive, indicating that the higher the value of these variables, the higher the value of compliance with the use of personal protective equipment. On the other hand, the negative coefficient on the variables of age and tenure indicates that the higher the age and tenure, the lower the compliance with the use of personal protective equipment