The Influence Of Safety Talk Of Knowledge And Attitude Use A Personal Protective Equipment On Employees Production Section

Fathinah Ranggauni Hardy, Lukluk Nurhasanah

Abstract: The high number of accidents work caused by the lack of awareness of employee to use a personal protective equipment to avoid accident. To increase awareness and knowledge employees about personal protective equipment can be done by giving safety talk before starting the job. The research aims to know the influence of safety talk of knowledge and attitude use of personal protective equipment on employees production for plating section in PT Mitsuba Indonesia. This research was Quasi Experimental used One Group Pretest-Posttest approach by using 57 employees production for plating section as sample of research. The sampling technique used Purposive Sampling. The data collected by measuring the score of personal protective equipment knowledge and attitude using questionnaire. This research’s analysis used non-parametric Wilcoxon because the data is not normally distributed. The result of the Wilcoxon statistic test that there are increased knowledge about personal protective equipment on employees between before and after safety talk with p-value = 0.000 and there are increased positive attitude use of personal protective equipment on employees between before and after safety talk with p-value = 0.000, so it can be concluded that there an influence of safety talk of knowledge and attitude use of personal protective equipment on employees production for plating section in PT Mitsuba Indonesia.

Index Terms: Safety Talk, Personal Protective Equipment, Knowledge, Attitude

1 BACKGROUND

All lines of activities must have a scope of Occupational Safety and Health both in the formal and non-formal sectors, because wherever the potential danger of accidents and occupational health will always be threatening (Maharanı & Wahyuni, 2016). Occupational accidents that occur will certainly be a big problem for the company. Not only material loss, but more than that the number of casualties is not small. One of the prevention program efforts in K3 is to implement a talk safety program. Safety talk is designated as workplace training, designed to convey safety messages to improve security and prevent work-related incidents. If done well, safety talk can improve worker communication, empower workers, reduce injuries and improve safety (Kaskutas et al., 2016). One of the materials in safety talk is about PPE, a tool that can be used by workers to protect their bodies against the possibility of potential hazards or work accidents. PPE is used as a last resort in an effort to protect workers if it is an engineering and administrative business. PPE is very necessary for companies to minimize accidents. The company has provided excellent PPE. However, the low level of awareness of workers in using PPE is a problem faced by management. Low worker awareness of the use of PPE due to discomfort in using PPE during work, feels that the work done is harmless and has no effect on health (Ramadan, 2008 in Utomo, 2015). Based on data from the International Labor Organization (ILO) in 2013, one worker in the world dies every 15 seconds due to workplace accidents and 160 workers experience work-related illness. According to the ILO, there are 99,000 work accident cases in Indonesia on average per year. Of the total number, about 70% are fatal, namely death and disability for life (Liambo & Yasnani, 2017). Employment Guarantee Agency (BPJS) noted that in 2013 there were 129,911 people participating in workplace accidents. Of these 146,219 (75.8%) were male and 46,692 were female. Most of these accidents or around 69.59% occur in companies when they work. While those outside the company are 10.26% and the rest or around 20.15% are traffic accidents experienced by workers (Jamsostek, 2013). Work accident rates in Indonesia are among the highest in the ASEAN region. In 2010, the Ministry of Manpower and Transmigration noted that there were 86,693 work accident cases in Indonesia, of which 31.9% occurred in the construction sector, 31.6% in the manufacturing sector, 9.3% in the transportation sector, 3.6% in the forestry sector, 2.6% in the mining sector, and 20% in other sectors (Jamsostek, 2013). PT Mitsuba Indonesia has a high risk of danger in the production process. Because it is a company that provides spare parts for the Indonesian automotive industry whose raw materials are iron. Safety talk programed at PT Mitsuba Indonesia was conducted once, in 2017 in April and May, for this reason the researchers conducted safety talk in 2018 and saw differences in knowledge and attitudes between before talk safety and after talk safety. The number of occupational accidents occurring at PT Mitsuba Indonesia throughout 2017 is as many as 40 incidents, this shows that there is still a lack of accident prevention programs that have been carried out which have caused accidents. Based on the description above, the authors conducted a study on whether there is an effect of safety talk on increasing the knowledge and attitude of using PPE on the plating production staff at PT Mitsuba Indonesia in 2018. This research is a Pre Experimental research with One Group Pretest-Posttest Non Control Randomized approach. Data collection is done by measuring the score of knowledge and attitude using a questionnaire. The researcher gave the pretest to the employee the day before doing the talk safety about PPE, then after the safety talk the researcher gave the posttest to the group of employees. The data analysis process is divided into two, namely univariate analysis to describe the characteristics of the respondents in the study and bivariate analysis to determine whether there is a difference in knowledge and attitudes between before and after given safety talk about PPE using non-parametric tests (Wilcoxon Test) with alpha (α) 0.05. This research is an intervention study conducted with safety talk about personal protective equipment and then carried out a pretest and posttest to determine the effect of

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Safety Talk about Personal Protective Equipment on Knowledge and Attitude of Use of PPE in Plating Parts Production Employees at PT Mitsuba Indonesia. The time of the study lasted for one month, from April 16 to May 21 in 2018. The sample of this study was 57 employees who produced plating 1 shift and shift 2.

### TABLE 1
KNOWLEDGE FREQUENCY DISTRIBUTION BEFORE AND AFTER SAFETY TALK

<table>
<thead>
<tr>
<th>Knowledge of personal protective equipment</th>
<th>Well</th>
<th>Enough</th>
<th>Less</th>
<th>Min - Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Before</td>
<td>22</td>
<td>38.6</td>
<td>35</td>
<td>61.4</td>
</tr>
<tr>
<td>After</td>
<td>57</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2 RESULTS

Respondent characteristics that have been collected and carried out frequency distribution tests in this study include gender, age, education level, and work period. The results of the data collection of respondents' characteristics were only done once, namely before the intervention (pretest) was given, because testing after the intervention (posttest) was carried out on the same respondent.

### TABLE 2
FREQUENCY DISTRIBUTION OF ATTITUDES BEFORE AND AFTER SAFETY TALK

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
<th>Total</th>
<th>Min - Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Before</td>
<td>22</td>
<td>38.6</td>
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</tr>
<tr>
<td>After</td>
<td>57</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

The above table shows that the frequency of knowledge before safety talk is good criteria as many as 22 people (38.6%), enough knowledge as 33 people (57.8%) and knowledge less than 2 people (3.6%), while knowledge frequency after safety talk with good criteria as many as 53 people (93%) and there are still respondents who have enough criteria as 4 people (7%) and no respondent who have less criteria (0%). This indicates that there is a difference or increased knowledge between before and after safety talk. The lowest value of personal protective equipment before safety talk is 5 and the highest value is 10, while the highest value of knowledge about personal protective equipment after safety talk is 7 and the highest value is 10.

The Simanjuntak Research (2016) also shows the average knowledge of workers before the extension 6.08 and afterwards 9.00 which means there is an increase in average knowledge before and after counseling about the use of personal protective equipment on CV workers. Plastic ranges with p-value of 0.002. From the table above, it can be seen that the attitude frequency before safety talk with positive criteria is 22 people (38.6%), and the attitude with negative criteria is 35 people (61.4%), while attitude frequency after talk safety all respondents have a positive criterion of 57 people (100%). This shows that there is a difference or increase in attitude between before and after talk safety. The lowest value of the use of personal protective equipment before the safety talk is 40 and the highest value is 43, while the highest value of the attitude of using personal protective equipment after talk safety is 49 and the highest value is 56. This is in line with the Septivulani study (2013) which shows that there is a difference between attitudes before and after the treatment safety talk (p-value 0,000) in screen printing industry workers. Bivariate analysis was used to determine whether there was a significant effect between before talk safety and after safety talk with the level of knowledge and attitudes of using PPE in the plating production staff at PT Mitsuba Indonesia. This study uses a non-parametric test, the Wilcoxon test because the data is abnormally distributed after being tested for normality. Non parametric test (Wilcoxon Test) effect of safety talk on knowledge of personal protective equipment can be seen from the table above that, as many as 57 respondents showed no decline in knowledge from before and after safety talk, then as many as 49 respondents showed after being given talk safety knowledge became better, and as many as 8 respondents after being given safety talk showed the same as before given talk safety. The results of the Non Parametric test (Wilcoxon test) the effect of safety talk on the knowledge of personal protective equipment before and after talk safety obtained the value of Asymp. Sig. (2- tailed) of 0.000. From this value it means that there is an influence of safety talk on the knowledge of the use of personal protective equipment in the production employees of the plating section at PT Mitsuba Indonesia. The increase in knowledge of PPE between before and after the safety talk was caused by a lack of knowledge of employees because most employees in the plating section were new employees whose average work period was only one year so they did not have sufficient knowledge about PPE. This research is in accordance with the theory of Notoatmodjo (2012) which states that the working period is one of the factors that influence the formation of behavior, the longer the working period, the workers will be more familiar with the workplace and familiar with the work environment.

This research is in line with the research conducted by Gumelar (2016) which states that there is a relationship between safety talk and the level of knowledge, with a significance of p-value 0.000 so there is a significant relationship between safety talk and the level of knowledge. The non parametric test (Wilcoxon Test) effect of safety talk on the attitude of the use of personal protective equipment from a total of 57 respondents showed no decrease in attitude from before and after safety talk, then as many as 55 respondents showed that after being given safety talk his attitude became better, and as much 2 respondents indicated that after being given talk safety the same as before given talk safety. The results of Non Parametric test (Wilcoxon test) effect of safety talk on the attitude of using personal protective equipment obtained the value of Asymp. Sig. (2- tailed) of 0.000. From this value it can be interpreted that there is an effect of safety talk on the attitude of using personal protective equipment to the production employees of the plating section at PT Mitsuba Indonesia. The existence of an increase in negative attitudes becomes a positive attitude between before and after talk safety because employees of the plating department do not yet have the awareness that the use of personal protective equipment is very important to use in working to reduce the danger of workplace accidents. This is
evidenced by the existence of workers who do not use masks while working. The formation of attitudes can be influenced by personal experience, the influence of other people who are considered important, the influence of culture and media information. One of the efforts that can be made by the company is to provide information to employees through morning meetings or talk safety (Azwar, 2011). This is in line with the research conducted by Rahmah (2012) which states that there is a relationship between knowledge on the implementation of PPE, stated with significance p-value 0.000, there is a significant relationship between knowledge and implementation of PPE use, where the higher the knowledge the implementation of PPE is higher also.

3 CONCLUSIONS
Based on the results of research conducted on the effect of safety talk on the knowledge and attitudes about the use of personal protective equipment in the production employees of plating parts at PT Mitsuba Indonesia Tangerang, it can be concluded. There is an increase in knowledge about personal protective equipment before implementing talk safety and after the talk safety is implemented. Then it can be concluded that there is an effect of safety talk on the knowledge of the use of personal protective equipment in the production employees of the plating section at PT Mitsuba Indonesia. There is an increase in positive attitude towards employees regarding the use of personal protective equipment before the talk safety is implemented and after the safety talk is implemented. Then it can be concluded that there is an effect of safety talk on the attitude of using personal protective equipment to the production employees of the plating section at PT Mitsuba Indonesia.

REFERENCES