

## Improving Work Rehabilitation Program at PT. KALPRI

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**ABSTRACT:** The work rehabilitation program is one of the important efforts made by the company to help employees who are experiencing health conditions that disrupt work productivity to return to work optimally at PT. KALPRI, there has been an increase in the number of employees undergoing work rehabilitation programs accompanied by a low success rate in returning employees to their original positions after undergoing the program. Therefore, this study aims to identify the factors that cause this condition to occur. This research uses a descriptive quantitative approach, using a questionnaire instrument for 71 respondents and conducting in-depth interviews with 5 members of the rehabilitation committee at PT. KALPRI. The collected data is then analyzed to identify the key factors influencing the increase in rehabilitated employees and the program's low success rate. The research results show that the internal factors causing the rise in the number of employees being rehabilitated are the employees' unhealthy habits and lifestyles, such as smoking habits, irregular exercise, and rest, which trigger the emergence of various diseases such as cardiovascular, musculoskeletal, and obesity. Externally, the COVID-19 pandemic has also contributed to the increase in the number of employees being rehabilitated due to restrictions on activities that have impacted employee health. Meanwhile, the internal factors that cause the low success rate of the rehabilitation program are the employees' habits and lifestyles that slow down the healing process, so some employees have to undergo a "long sick" program that extends the rehabilitation period. Externally, the activity restrictions due to the COVID-19 pandemic have also contributed greatly to the low reabsorption of employees after undergoing a rehabilitation program. The findings of this study indicate the need to increase more intensive health interventions and education to change employees' habits and lifestyles, as well as the need for stronger coordination between the rehabilitation team and management in managing work rehabilitation programs, especially during the pandemic. These efforts are expected to help improve PT. KALPRI's work rehabilitation program's success.

**KEYWORDS:** Employee Health, Habits & Lifestyle, Work Rehabilitation.

### A. INTRODUCTION

PT. KALPRI, a coal mining company with roughly 3,800 people, expects to produce around 50 million tons annually. To achieve this significant production objective, all employees must work together to improve the company's performance each year. With most of its workforce concentrated in the Operations and Major Support Divisions, the Human Resources Division presents a substantial challenge in managing and developing such a vast employee base. Among the primary programs designed to address this issue is the Employee Rehabilitation Program, which tries to help employees recover and reintegrate after illness.

**Table 1. Rehabilitation Committee Performance of PT. KALPRI 2018-2023**

<i>Final Recommendation</i>	2018	2019	2020	2021	2022	2023	Total	Performance Percentage (%)
<i>BTNW</i>	11	8	18	8	18	30	93	62,0
<i>Early Retirement</i>	-	-	1	-	-	-	1	0,7
<i>Job Transfer</i>	1	-	1	-	-	-	2	1,3
<i>Long sick</i>	3	2	-	4	-	3	12	8,0
<i>Normal Retirement</i>	-	1	1	-	1	1	4	2,7
<i>Passed Away</i>	-	1	1	1	-	-	3	2,0
<i>Unfitness</i>	3	-	-	-	1	-	4	2,7
<i>On Process</i>	-	-	1	-	-	30	31	20,7
<i>Total Employee in Rehabilitation Program</i>	<b>18</b>	<b>12</b>	<b>23</b>	<b>13</b>	<b>20</b>	<b>64</b>	<b>150</b>	<b>100</b>



However, despite the program's implementation, the recent increase in the number of employees undergoing rehabilitation and the relatively low success rate in returning these employees to their original roles highlight the ongoing challenges in maximizing the program's effectiveness and maintaining company productivity.

## B. LITERATURE REVIEW

The worker rehabilitation program at KALPRI is intended to assist employees who are unable to work due to health issues. The goals include easing their return to work and determining the impact of absences on corporate production.

The main Advantages of Rehabilitation Programs are:

- **Increased production:**  
Effective rehabilitation enables sick or wounded personnel to return to work faster, enhancing overall production.
- **Employee Retention:**  
Programs that promote employee wellness foster a supportive workplace, leading to improved retention rates.
- **Innovation:**  
Healthier people are more creative and motivated, which promotes workplace innovation (Cappelli, 2023).

According to Pender (1996), attitudes, motivation, health skills, and availability to resources all influence an individual's health behavior. A well-structured program can improve motivation and skill development (Kuvaas & Dysvik, 2023). An aging workforce may require vocational rehabilitation due to physical and cognitive decline, resulting in extended recovery times (Griffin & Moorhead, 2014; Czaja & Sharit, 2019). Men and women heal in different ways, impacted by biological and social factors, which affects rehabilitation outcomes (Hakanen et al., 2022). Biological, psychological, and social aspects all influence health and contribute to successful rehabilitation (Visser et al., 2021).

Re-entry rates are highly influenced by variables such degenerative illness, patient motivation, and treatment compliance. Better participation in recovery is correlated with higher motivation (Deci & Ryan, 2021). A stimulating work environment and social support are critical for a successful recovery (House & Kahn, 2020). Individual self-assurance and workplace support are also important factors in rehabilitation program adherence (Roter & Hall, 2019; Shaw & Turner, 2018).

The risk of injury is increased by poor posture and physically demanding work (Karwowski & Marras, 2017; Snook & Ciriello, 2017). Mental health issues are also exacerbated by high levels of stress and repetitive tasks (Spector, 2013; Cooper & Dewe, 2001). Lifestyle Factors: Chronic disease risk is increased by unhealthy habits such poor diet and inactivity (Soetjiningsih, 2018; CDC, 2023).

Based on the research questions and literature review presented above, the researcher will use the Root Cause Analysis (RCA) and Five (5) Whys methods to obtain a deeper analysis. According to Serratos, J. M., & Valle, R., the 5 Whys method is flexible. Depending on needs, this method can use more or less than five questions (Serratos, J. M., & Valle, R., 2019).

The following is the identification of the root of the problem to the research question using 5 Whys:

Question	Answer
<b>Increasing the number of employees being rehabilitated</b>	
1. <b>Why is the number of workers being rehabilitated increasing?</b>	The elderly working population is more susceptible to degenerative diseases and decreased physical and cognitive function
2. <b>Why are elderly workers more susceptible to degenerative diseases and decreased physical and cognitive function?</b>	Due to natural factors and unhealthy lifestyles such as smoking, not exercising, not paying attention to food and drink intake, and so on.
3. <b>Why do elderly employees experience unhealthy lifestyles?</b>	Due to a lack of compliance with health recommendations



4. Why do employees not comply with health recommendations?	This is because the health advice given by the Company does not contain sanctions that have a direct impact on its income.
5. Why can't the Company's health advice to employees include sanctions that directly impact employee income?	Because the Company cannot intervene directly on employee health except under certain conditions which are conditions regulated in employment law
<b>Low Success Rate of Rehabilitation Programs</b>	
▪ Why is the success rate of rehabilitation programs low?	This is because the illnesses experienced by employees are generally degenerative and difficult to cure
▪ Why are employees' illnesses difficult to cure?	This is because employee compliance with medical recommendations by doctors is still lacking
▪ Why is employee compliance with medical advice from doctors still lacking?	Because there is still a lack of employee knowledge and awareness regarding the importance of health and its benefits
▪ Why is worker knowledge and awareness regarding health and its benefits still lacking?	Because there is still a lack of corporate and government education programs about health
▪ Why don't companies have health education programs?	Because the costs and time required for health education programs are quite large and take up work time.

Figure 1. The Root of the Problem Using 5 Whys

The table above can further explain that based on the analysis of the 5 whys above, 2 (two) main factors influence the increase in the number of employees being rehabilitated and the low level of success of the rehabilitation program, namely:

- 1) Internal factors, which consist of:
  - a. Age of worker
  - b. Habits and lifestyle
  - c. Compliance with health recommendations
  - d. Knowledge about health
- 2) External factors consisting of:
  - a. Company intervention in employee health through the Company health program
  - b. Health education programs from the government
  - c. Cost and time of educational programs

**C. CONCEPTUAL FRAMEWORK**

A conceptual framework outlining a methodical procedure for evaluating and enhancing employee rehabilitation programs is shown in the picture below. The first section uses the Five Whys Analysis approach to investigate the underlying reasons for current issues, using a series of "why" questions to assist in pinpointing variables that impact rehabilitation. Additionally, both internal and external influences are considered in this research. The success of rehabilitation can be influenced by both internal and external factors, which are components of the organization itself and their interactions with other entities.

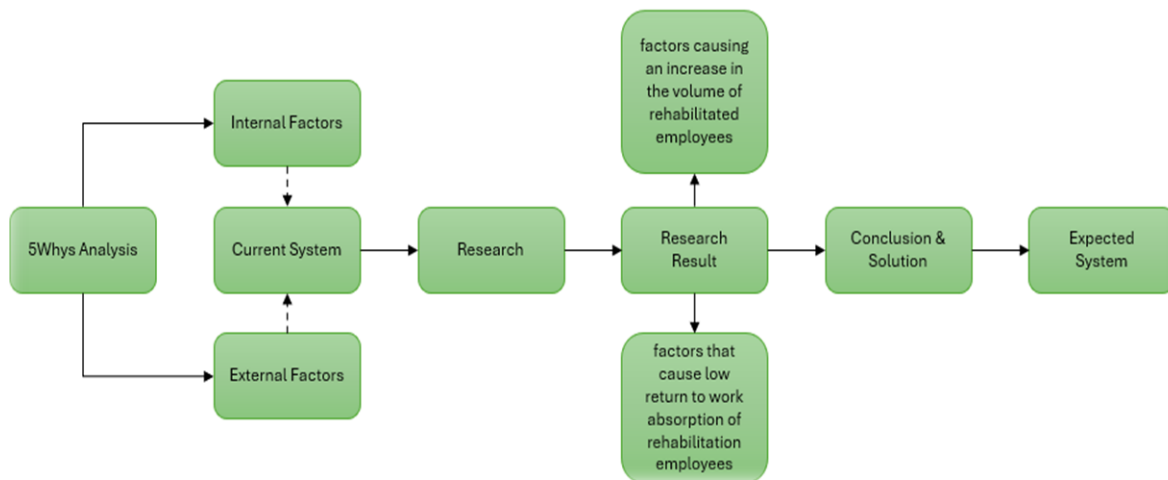


Figure 2. Conceptual Framework

This image illustrates a conceptual framework providing a systematic process for assessing and improving employee rehabilitation programs. The initial segment uses the Five Whys Analysis methodology to explore the fundamental causes of present problems, employing a sequence of "why" inquiries to help identify factors that influence recovery.

Furthermore, this research considers both external and internal effects. Both internal and external elements, which include aspects of the organization itself and their connections with other entities, can have an impact on the success of rehabilitation.

**D. METHODOLOGY**

**1. Research Design**

The occupational rehabilitation program aims to help employees who have experienced injury or illness return to work safely and productively. Research on occupational rehabilitation programs needs to be conducted to understand the factors contributing to program success and failure and to develop effective interventions. For this reason, this research can be depicted in the following diagram:

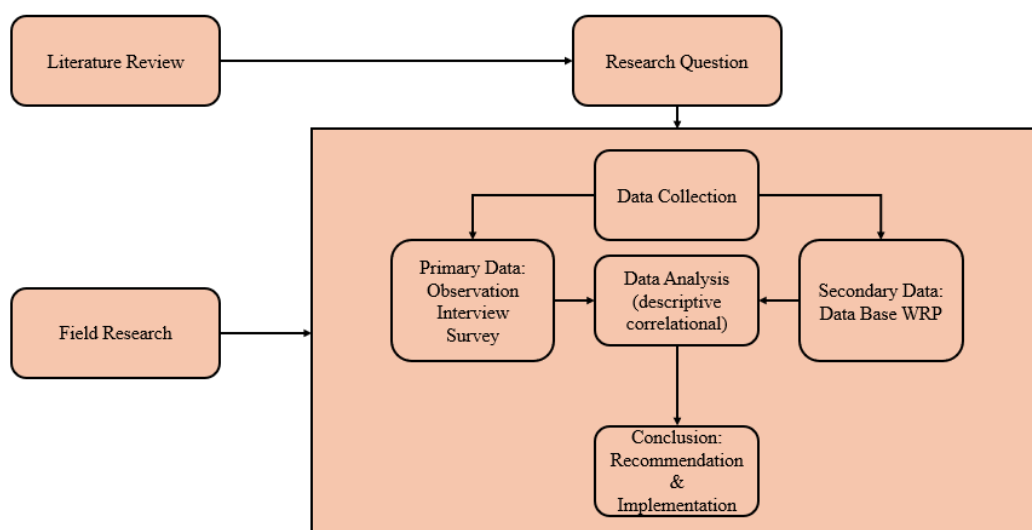


Figure 3. Research Design



**2. Data Collection Method**

**Literature Research**

Sugiyono (2017) emphasized that literature reviews help researchers improve the quality of their research by producing systematic, structured, and coherent research reports. Through this data collection method, researchers can review the literature on injury and disease risk factors to identify relevant variables to measure in their research. Researchers will also try to obtain and study previous research on effective employee rehabilitation programs to develop appropriate interventions for the problems in this research.

**Field Research**

Field research is a data collection method conducted directly at the research location. The activities carried out in field research can vary depending on the type of research, research objectives, and research location. In this field research activity, researchers collect data through several activities as follows:

1. Interview

The interview method was used to determine experiences and obstacles in the rehabilitation process. Interviews will be conducted using semi-structured interviews with respondents by combining elements of in-depth and structured interviews to obtain comprehensive information. It is hoped that, from the interviews, researchers can obtain descriptive data related to experiences and obstacles in the rehabilitation process.

In this study, researchers determined respondents to be interviewed as follows:

- a. Rehabilitation Staff includes Doctors and Medical Staff
- b. Other Stakeholders such as employee superiors

So that the questions given to respondents were more focused, the researcher determined the interview plan as follows:

<i>Respondent</i>	<i>Interview Questions</i>
<i>Rehabilitation Staff includes Doctors and Medical Staff</i>	<ul style="list-style-type: none"> <li>• Rehabilitation Experience</li> <li>• Obstacles encountered.</li> <li>• Company health education program</li> <li>• Experience in organizing Rehabilitation programs</li> </ul>
<i>Other Stakeholders such as employee superiors</i>	<ul style="list-style-type: none"> <li>• Experience in organizing Rehabilitation programs</li> <li>• Obstacles faced in implementing the rehabilitation program, especially the influence of the rehabilitation program's online departments</li> </ul>

**Figure 4. Interview Plan**

After distributing questionnaires to other respondents, survey data was gathered and then these respondents were interviewed.

2. Observation

Observation is a data collection technique by systematically observing and recording human behavior, objects or processes to be observed (Sugiyono (2017)). In the context of this research, observations are carried out by observing various rehabilitation program activities.

To gather observations for this study, the administration process was watched, and it was ascertained which personnel received rehabilitation from upstream to downstream. To gather observational data about the whole rehabilitation process, observation activities are conducted during Rehabilitation Committee meetings and during the job assessment process.

3. Survey

The survey was conducted to gain an in-depth understanding of the factors that cause the increase in the number of rehabilitated employees and the low absorption of returning to work. Some of the information that is expected to be generated from this survey activity is:

- a. Understand the experiences of employees rehabilitated in the rehabilitation program, the obstacles they face in returning to work, and their suggestions for improving the rehabilitation program.
- b. Understand the perceptions of rehabilitation officers (KPR Team) about the rehabilitation program, the obstacles they face in helping rehabilitated employees return to work as before, and their suggestions for improving the rehabilitation program.



c. In addition, this survey aims to explore the views of rehabilitation officers regarding the rehabilitation program, the factors that contribute to the success of the rehabilitation program, and their suggestions for improving the rehabilitation program. Using a Likert scale with five scales, a closed questionnaire distribution approach was used to administer the survey in this study. The responders, who included both personnel who had completed the rehabilitation process and those who were currently going through it temporarily, received a closed statement from the researcher that was pertinent to the findings of the root cause analysis of the five whys.

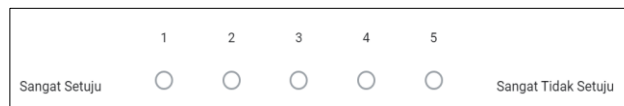


Figure 5. Likert Scale with 5 level

The researcher decides on the questionnaire strategy as follows to ensure that the statements provided are consistent with the research questions and the findings of the root cause analysis:

Respondent	Research Question	Potential Cause Classification	Factors	Statement/Element
Who has participated in the rehabilitation program & Employees Undergoing Rehabilitation	1) What factors cause the increase in the number of rehabilitated employees?	Internal Factor	Habits & Lifestyle	I do not smoke.
				I exercise regularly in my free time.
	I always sleep on time. I always sleep/rest after coming home from work shifts.			
	2) What factors cause the low success rate of rehabilitation programs in returning employees to their original positions?		Compliance with Health Recommendations	If the doctor recommends that I undergo therapy, then I undergo therapy regularly according to the schedule recommended by the doctor.
				I maintain my eating and drinking patterns according to the doctor's instructions.
				I maintain my weight according to the doctor's instructions.
				I avoid fatty foods that contain excessive oil as directed by the doctor.
	Knowledge about Health		I have enough knowledge about the importance of health.	
			I understand that all medications prescribed by the doctor play an important role in my healing process.	
			I understand that to restore my health condition, I need rehabilitation by working within certain limits determined by the Company Doctor while receiving treatment according to the Doctor's direction	



		External Factor	Company intervention in employee health through the Company Health Program	The company has provided excellent health services for employees
			The company is very responsive to employees and families who experience illness.	
			The company provides the best service for employees who are sick	
			The company has a good employee health program	
		Health Education Program from the Company	The company already has a health education program for employees	
			Employees have broad access to learn about health by utilizing Company facilities	

Figure 6. Questionary Plan

Between 2018 and 2023, there will be 150 individuals in the population, according to the number of employees enrolled in the rehabilitation program. however, since 150 people in all since many persons finished the rehabilitation program between 2018 and 2023, the researchers reduced the time frame so that the group under analysis consisted primarily of employees who registered between 2021 and 2023.

Table 2. Population of Employee in Rehabilitation Program 2021 to 2023

Description	2021	2022	2023	Total
Total	13	20	64	97
Total Employees in the Rehabilitation Program				
Return to Normal Work	8	18	30	56
Early Retirement	-	-	-	0
Permanent Mutations	-	-	-	0
Prolonged Sick	4	-	3	7
Normal Retirement	-	1	1	2
Pass Away	1	-	-	1
Unfitness	-	1	-	1
On Process	-	-	30	30

The researcher used Slovin's theory to determine the sample. Referring to Slovin's theory, with a precision level of 5% and a confidence level of 95%, the minimum sample required for a population of 97 people is 78.07 or 79 people after rounding. The following is the application of the Slovin formula to the rehabilitation employee population from 2021 to 2023:

Formula:

$$n = N / (1 + Ne^2),$$

where n is the sample size, N is the population size, and e is the level of precision.

Thus, to get n or sample, then  $97 / (1 + 97(5\%^2))$  so that the value of n or sample is 78.07 or rounded to 79 people.

However, the researcher further determined the sample in this study by paying attention to the distribution of divisions that can be identified from the data population table while still selecting the ideal sample size based on the Slovin formula above.

From these samples, three groups of samples can no longer be accessed/have left the research environment and have died, namely:

- One person in normal retirement classification from the CPHD division and one person from the MOD division,
- passed away one person from the CPHD division, and.



c. unfitness one person from the MOD division.

Thus, four people can no longer be accessed so from the 80-sample people based on the three divisions and the number of employees being rehabilitated, there are seventy-five ideal sample people left for research.

For this sample of seventy-five people, the researchers classified them as follows:

- a) Fifty-three samples of employees who have participated in the rehabilitation program, mostly taken from employees who have Back to Normal Work (BTNW) and long sickness.
- b) Twenty-two samples of employees temporarily participating in a rehabilitation program are taken from employees still in progress.

Based on the description above, the sample in this study can be described in the following table:

**Table 3. Sample of Employee in Rehabilitation Program After First Filtering**

<i>Classification of Sample</i>	<b>CPHD</b>	<b>MOD</b>	<b>MSD</b>	<b>Grand Total</b>
<i>BTNW</i>	6	31	11	48
<i>Long sick</i>		5		5
<i>On process</i>	2	16	4	22
<b>Grand Total</b>	<b>8</b>	<b>52</b>	<b>15</b>	<b>75</b>

**Table 4. Classification of Sample after First Filtering**

<i>Classification of Sample</i>	<b>CPHD</b>	<b>MOD</b>	<b>MSD</b>	<b>Grand Total</b>
<i>employees who have participated</i>	6	36	11	53
<i>employees who are temporarily participating</i>	2	16	4	22
<b>Grand Total</b>	<b>8</b>	<b>52</b>	<b>15</b>	<b>75</b>

Of the seventy-five people samples, it turned out that 4 subjects participated in the rehabilitation program more than once. Thus, to avoid answering more than one questionnaire from the same subject, the 4 subjects in the sample will only be given the questionnaire once. Based on the description above, the samples in this study amounted to seventy-one samples with the following details:

**Table 5. Classification of Sample after Filtering**

<i>Sample Classification</i>	<b>Division</b>			
	<b>CPHD</b>	<b>MOD</b>	<b>MSD</b>	<b>Grand Total</b>
<i>Currently Undergoing Rehabilitation</i>	2	16	4	22
<i>Have undergone rehab</i>	6	32	11	49
<b>Grand Total</b>	<b>8</b>	<b>49</b>	<b>15</b>	<b>71</b>

From the table above, it is determined that the sample in the research, especially for questionnaires, consists of:

- a) 49 sample people who have undergone rehabilitation.
- b) 22 sample people who are currently undergoing rehabilitation.

### 3. Data Measurement Technique

#### Descriptive Analysis

According to Sekaran (2017), descriptive analysis is a statistical technique used to analyze data and produce useful information for decision-making. In connection with this descriptive analysis method, the data collected will be analyzed based on a description of





the distribution of demographic variables (age, gender, length of work, and job position), risk factors (health history, lifestyle, work stress, and ergonomics), and success rate of rehabilitation program (length of rehabilitation time, return to work to the original position, and satisfaction with the rehabilitation program).

**Correlation Analysis**

Correlational analysis is a series of statistical methods used to measure the strength and direction of the relationship between two or more variables. In this correlational analysis, researchers used the Pearson Correlation test method to assess the linear relationship between two numerical variables, such as age and length of rehabilitation time.

**1) Cronbach's Alpha ( $\alpha$ ) using SPSS Statistics**

Cronbach's Alpha ( $\alpha$ ) assesses the internal reliability of a measurement instrument, like a questionnaire or test. Internal reliability refers to a measurement instrument's internal consistency, or the degree of resemblance between the items in the instrument while measuring the same concept or variable. The Cronbach's Alpha ( $\alpha$ ) value varies from 0 to 1. The alpha value indicates the measurement instrument's internal dependability.

Field, in his book "Discovering Statistics Using SPSS" (5 edition), states that SPSS is a powerful tool for conducting correlation analysis. SPSS provides various correlation options, including Pearson and Spearman, and automatically calculates correlation coefficients ( $r$ ) and  $p$ .

**2) Validity Test**

An instrument devised by researchers cannot be utilized immediately instead, it must be re-evaluated to ensure validity. Statistical Learning In the article "Using SPSS Software to Test Validity and Reliability" by Anggraini Puspita Dewi Fitria "et al" (2022), the validity of this factor is measured by comparing the factor score (the sum of the items in one factor) to the total factor score. If we employ more than one factor, we can verify the item's validity by connecting the item score to the factor score and then continuing to correlate the item with the overall factor score. The results of correlation calculations will yield a correlation coefficient, which is used to Assess the validity of an item and evaluate whether a variable item is appropriate for use.

An instrument or statement is considered valid if the value is above the 5% significance level. Otherwise, the instrument or question item is invalid. This study's validity testing is conducted using the SPSS application for Windows. The table below presents the validity test results for contract employee satisfaction.

**Table 6.  $r$  - Table (Table of Critical Values for Pearson Correlation)**

N	The Level of Significance		N	The Level of Significance	
	5%	1%		5%	1%
3	0.997	0.999	38	0.320	0.413
4	0.950	0.990	39	0.316	0.408
5	0.878	0.959	40	0.312	0.403
6	0.811	0.917	41	0.308	0.398
7	0.754	0.874	42	0.304	0.393
8	0.707	0.834	43	0.301	0.389
9	0.666	0.798	44	0.297	0.384
10	0.632	0.765	45	0.294	0.380
11	0.602	0.735	46	0.291	0.376
12	0.576	0.708	47	0.288	0.372
13	0.553	0.684	48	0.284	0.368
14	0.532	0.661	49	0.281	0.364
15	0.514	0.641	50	0.279	0.361
16	0.497	0.623	55	0.266	0.345
17	0.482	0.606	60	0.254	0.330
18	0.468	0.590	65	0.244	0.317



19	0.456	0.575	70	<b>0.235</b>	0.306
20	0.444	0.561	75	<b>0.227</b>	0.296
21	0.433	0.549	80	0.220	0.286
22	0.432	0.537	85	0.213	0.278
23	0.413	0.526	90	0.207	0.267
24	0.404	0.515	95	0.202	0.263
25	0.396	0.505	100	0.195	0.256
26	0.388	0.496	125	0.176	0.230
27	0.381	0.487	150	0.159	0.210
28	0.374	0.478	175	0.148	0.194
29	0.367	0.470	200	0.138	0.181
30	0.361	0.463	300	0.113	0.148
31	0.355	0.456	400	0.098	0.128
32	0.349	0.449	500	0.088	0.115
33	0.344	0.442	600	0.080	0.105
34	0.339	0.436	700	0.074	0.097
35	0.334	0.430	800	0.070	0.091
36	0.329	0.424	900	0.065	0.086
37	0.325	0.418	1000	0.062	0.081

To accommodate the sample size (N) of 71, the researcher used a linear interpolation technique to estimate the critical value between two values in the table: N = 70 and N = 75. According to Chen G., Konishi S., and Zhu Z. (2020) "Linear Interpolation and its Applications in Statistical Learning." Journal of Statistical Software, linear interpolation is useful for critical value estimation, especially when the given data has linear or nearly linear features around known locations. This method's simplicity and convenience make it an appropriate choice for ordinary statistical applications.

Based on the r table data above, it is known:

For N = 70, critical r at 5% = 0.235, at 1% = 0.306.

For N = 75, critical r at 5% = 0.227, at 1% = 0.296.

$$r_{71} = r_{70} + ((N_{71} - N_{70}) / ((N_{75} - N_{70})) \times (r_{75} - r_{70}))$$

Where:

r<sub>71</sub> is the interpolated critical value for N = 71,

r<sub>70</sub> and r<sub>75</sub> are known critical values for N = 70 and N = 75, respectively

N<sub>71</sub>, N<sub>70</sub>, and N<sub>75</sub> are relevant sample sizes.

So that:

- For a 5% Significance Level the calculation is as follows:

$$r_{71} = 0.235 + ((71 - 70) / ((75 - 70)) \times (0.227 - 0.235))$$

$$r_{71} = 0.235 + 1/5 \times (-0.008)$$

$$r_{71} = 0.235 - 0.0016$$

$$r_{71} = 0.233$$

- For a 1% Significance Level, the calculation is as follows:

$$r_{71} = 0.306 + ((71 - 70) / ((75 - 70)) \times (0.296 - 0.306))$$

$$r_{71} = 0.306 + 1/5 \times (-0.01)$$

$$r_{71} = 0.306 - 0.002$$

$$r_{71} = 0.304$$

Based on the description above, the 5% significance level of 71 samples is 0.233 and the 1% significance level of 71 samples is 0.304. Researchers will use this value as a benchmark for the Pearson correlation coefficient.



Table 7. Validity Test Table with Pearson Correlation

Statement Items	R-Count	R- Table 70 – 75 (line interpolation count)	Result
V1	0.712	0.304	Valid
V2	0.694	0.304	Valid
V3	0.577	0.304	Valid
V4	0.656	0.304	Valid
V5	0.876	0.304	Valid
V6	0.718	0.304	Valid
V7	0.607	0.304	Valid
V8	0.564	0.304	Valid
V9	0.748	0.304	Valid
V10	0.744	0.304	Valid
V11	0.616	0.304	Valid
V12	0.638	0.304	Valid
V13	0.666	0.304	Valid
V14	0.681	0.304	Valid
V15	0.666	0.304	Valid
V16	0.709	0.304	Valid

Significant data is presented here, using SPSS version 29 software and Cronbach's alpha as a fixed indicator for this test. Viewing the significance value (sig.)

1. If significant < 0.05 = Valid.
2. If the significance level exceeds 0.05, it is invalid.

Table 8. Pearson Correlation Coefficient Significance Test Table

Statement Items	Sig (R-Count)	Amount of Significant	Result
V1	0.001	0.005	Valid
V2	0.001	0.005	Valid
V3	0.001	0.005	Valid
V4	0.001	0.005	Valid
V5	0.001	0.005	Valid
V6	0.001	0.005	Valid
V7	0.001	0.005	Valid
V8	0.001	0.005	Valid
V9	0.001	0.005	Valid
V10	0.001	0.005	Valid
V11	0.001	0.005	Valid
V12	0.001	0.005	Valid
V13	0.001	0.005	Valid
V14	0.001	0.005	Valid
V15	0.001	0.005	Valid
V16	0.001	0.005	Valid



Based on the table above, the overall significance value of each question is <0.05 so it can be concluded that all question items regarding the factors causing the increase in the number of rehabilitated employees and the low re-employment of rehabilitated employees are declared valid and all questionnaire questions can be used as research instruments.

		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	Total
V1	Pearson Correlation	1	.529*	.514*	.364*	.568*	.515*	.348*	.319*	.406*	.436*	.387*	.354*	.383*	.401*	.416*	.366*	.712*
	Sig. (2-tailed)		<.001	<.001	.002	<.001	<.001	.003	.007	<.001	<.001	<.001	.002	<.001	<.001	<.001	.002	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V2	Pearson Correlation	.529*	1	.581*	.466*	.613*	.541*	.399*	.326*	.480*	.452*	.412*	.476*	.421*	.359*	.321*	.318*	.694*
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001	<.001	.006	<.001	<.001	<.001	<.001	<.001	.002	.006	.007	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V3	Pearson Correlation	.514*	.581*	1	.561*	.523*	.639*	.357*	.407*	.279*	.309*	.057	.198	.196	.090	.255*	.199	.577*
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001	.002	<.001	.018	.009	.639	.098	.101	.453	.032	.096	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V4	Pearson Correlation	.364*	.466*	.561*	1	.695*	.556*	.339*	.414*	.423*	.439*	.409*	.335*	.272*	.406*	.334*	.255*	.656*
	Sig. (2-tailed)	.002	<.001	<.001		<.001	<.001	.004	<.001	<.001	<.001	<.001	.004	.022	<.001	.004	.032	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V5	Pearson Correlation	.568*	.613*	.523*	.695*	1	.776*	.572*	.540*	.716*	.720*	.486*	.409*	.465*	.528*	.548*	.533*	.876*
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V6	Pearson Correlation	.515*	.541*	.639*	.556*	.776*	1	.692*	.477*	.513*	.485*	.240*	.153	.275*	.274*	.344*	.405*	.718*
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	.044	.201	.020	.021	.003	<.001	
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V7	Pearson Correlation	.348*	.399*	.357*	.339*	.572*	.692*	1	.557*	.554*	.391*	.103	.105	.237*	.203	.357*	.509*	.607*
	Sig. (2-tailed)	.003	<.001	.002	.004	<.001	<.001		<.001	<.001	<.001	.393	.383	.047	.090	.002	<.001	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V8	Pearson Correlation	.319*	.326*	.407*	.414*	.540*	.477*	.557*	1	.432*	.442*	.114	.091	.258*	.116	.392*	.588*	.564*
	Sig. (2-tailed)	.007	.006	<.001	<.001	<.001	<.001	<.001		<.001	<.001	.345	.451	.030	.337	<.001	<.001	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V9	Pearson Correlation	.406*	.480*	.279*	.423*	.716*	.513*	.554*	.432*	1	.683*	.436*	.390*	.510*	.513*	.509*	.627*	.748*
	Sig. (2-tailed)	<.001	<.001	.018	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71



N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V10 Pearson Correlation	.436*	.452*	.309*	.439*	.720*	.485*	.391*	.442*	.683*	1	.481*	.449*	.405*	.503*	.617*	.571*	.744*
V10 Sig. (2-tailed)	<.001	<.001	.009	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V11 Pearson Correlation	.387*	.412*	.057	.409*	.486*	.240*	.103	.114	.436*	.481*	1	.746*	.743*	.658*	.311*	.328*	.616*
V11 Sig. (2-tailed)	<.001	<.001	.639	<.001	<.001	.044	.393	.345	<.001	<.001		<.001	<.001	<.001	.008	.005	<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V12 Pearson Correlation	.354*	.476*	.198	.335*	.409*	.153	.105	.091	.390*	.449*	.746*	1	.830*	.756*	.399*	.425*	.638*
V12 Sig. (2-tailed)	.002	<.001	.098	.004	<.001	.201	.383	.451	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V13 Pearson Correlation	.383*	.421*	.196	.272*	.465*	.275*	.237*	.258*	.510*	.405*	.743*	.830*	1	.671*	.291*	.551*	.666*
V13 Sig. (2-tailed)	<.001	<.001	.101	.022	<.001	.020	.047	.030	<.001	<.001	<.001	<.001		<.001	.014	<.001	<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V14 Pearson Correlation	.401*	.359*	.090	.406*	.528*	.274*	.203	.116	.513*	.503*	.658*	.756*	.671*	1	.495*	.572*	.681*
V14 Sig. (2-tailed)	<.001	.002	.453	<.001	<.001	.021	.090	.337	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V15 Pearson Correlation	.416*	.321*	.255*	.334*	.548*	.344*	.357*	.392*	.509*	.617*	.311*	.399*	.291*	.495*	1	.676*	.666*
V15 Sig. (2-tailed)	<.001	.006	.032	.004	<.001	.003	.002	<.001	<.001	<.001	.008	<.001	.014	<.001		<.001	<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
V16 Pearson Correlation	.366*	.318*	.199	.255*	.533*	.405*	.509*	.588*	.627*	.571*	.328*	.425*	.551*	.572*	.676*	1	.709*
V16 Sig. (2-tailed)	.002	.007	.096	.032	<.001	<.001	<.001	<.001	<.001	<.001	.005	<.001	<.001	<.001	<.001		<.001
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71
Total Pearson Correlation	.712*	.694*	.577*	.656*	.876*	.718*	.607*	.564*	.748*	.744*	.616*	.638*	.666*	.681*	.666*	.709*	1
Total Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
N	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Figure 7. Pearson Correlation Matrix for Variables V1 to V16



**Reliability Test**

Reliability refers to the extent to which the measurement of a phenomenon or data produces stable results, which are also related to repetition consistency. For example, a test is considered dependable if repeated measurements under various conditions yield the same results. According to Anggraini Puspita Dewi Fitria "et al" (2022), reliability is a test that determines how well a measurement tool may be used. A measuring equipment is dependable if it consistently gives the same findings even after multiple measurements. A questionnaire is deemed reliable if its responses remain constant or stable.

The reliability test determines if the questionnaire is consistent when measurements are repeated. The rationale for taking the Cronbach Alpha Reliability Test, as written by Wiratna Sujerweni (2014), is that A Cronbach Alpha rating of more than 0.6 indicates that the questionnaire is credible.

		N	%
Cases	Valid	71	100.0
	Excluded <sup>a</sup>	0	.0
	Total	71	100.0

**Figure 8. Case Processing Summary**

Based on the data presented above, it is possible to conclude that all cases are legitimate, indicating that the dataset utilized in the reliability study is comprehensive and free of missing or incomplete data.

This Case Processing Summary demonstrates that the reliability analysis was performed with a complete dataset and no missing data. All 71 cases in the dataset were deemed legitimate and included in the study. This offers a firm foundation for the dependability of test results, ensuring their accuracy and reliability.

Cronbach's Alpha	N of Items
.920	16

**Figure 9. Reliability Statistics**

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered a measure of the reliability of the test. Generally, an alpha value of 0.7 or higher is acceptable for most research purposes. Values between 0.8 and 0.9 are considered good, and values higher than 0.9 are considered excellent, indicating high reliability (Tavakol & Dennick, 2011).

Cronbach's Alpha values can be interpreted as follows:

- 0.90–1.00 : Excellent, suggesting very high internal consistency.
- 0.80 - 0.89 : Good, suggesting strong internal consistency.
- 0.70 - 0.79 : Fair, suggesting acceptable internal consistency.
- 0.60 - 0.69 : Marginal, indicating that internal consistency is acceptable but might be improved.

A score of less than 0.60 indicates low internal consistency and the possibility that the items do not accurately measure the same construct.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
V1	59.41	127.988	.613	.918
V2	59.15	136.304	.654	.914
V3	58.59	140.474	.514	.918
V4	58.49	137.425	.604	.915
V5	58.66	133.770	.864	.908
V6	58.70	136.983	.685	.913
V7	58.86	138.466	.557	.917



V8	58.49	141.768	.537	.917
V9	58.48	136.825	.725	.912
V10	58.39	139.042	.721	.913
V11	58.20	140.446	.549	.917
V12	58.10	142.519	.575	.916
V13	58.13	141.769	.614	.915
V14	58.20	140.818	.623	.915
V15	58.83	134.657	.604	.915
V16	58.70	135.811	.665	.913

Figure 10. Item-Total Statistics

Item-Total Statistics data reveal that most of the scale's items contribute positively to its overall reliability, with reasonably high Cronbach's Alpha values. Items with a strong correlation with the entire scale improve the scale's internal consistency. However, items with low correlation or that cause a fall in Cronbach's Alpha value when deleted should be reviewed further to improve the measurement instrument's quality.

**E. FINDING & ARGUMENT**

**1. Demography Analysis**

In general, personnel at PT. KALPRI ranges in age from 23 to 67—however, the Collective Work Agreement between PT. KALPRI and the Workers' Union/Labour Union, which serve as the company's basic regulations, state the working age of PT. KALPRI personnel is limited to 55 years, after which they are retired—nonetheless, PT. KALPRI allows enterprises to employ employees with employment status for a set amount of time up to 60 years. Furthermore, only specific positions on the Board of Directors may not be time limited.

Based on data from the PT. KALPRI operational division (2018-2023), as shown in the graph below:

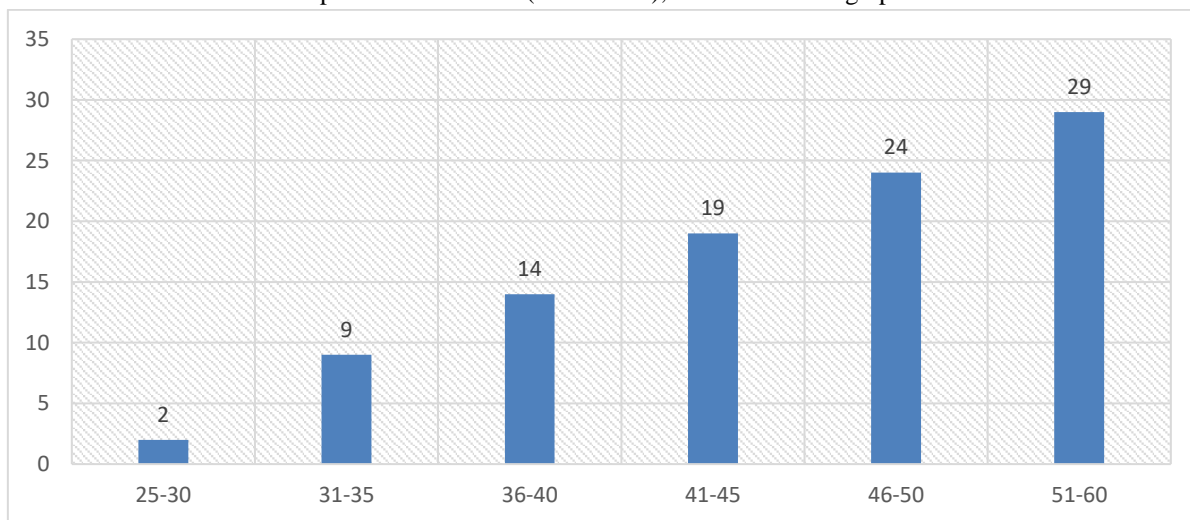


Figure 11. Age of Group by 97 People Population in Research

Age plays a significant role in its impact on human health. According to Leonard Hayflick (2007), age significantly predicts an individual's health state, influencing illness susceptibility and general biological function. According to James L. Kirkland (2016), aging is the most significant risk factor for chronic diseases such as cardiovascular disease, cancer, diabetes, and neurological disorders. This increased vulnerability mainly causes accumulated cellular damage and reduced regenerative capability with age. Demographically, based on the research results of the sample, data was obtained that most rehabilitated employees were between 40 and 60 years old. Based on the work division, generally, most rehabilitated employees aged over 40 come from the MOD division.



**Table 9. Age of Sample Employee in Rehabilitation Program by Position Group**

<i>Position Group</i>	<b>25-30</b>	<b>31-35</b>	<b>36-40</b>	<b>41-45</b>	<b>46-50</b>	<b>51-60</b>
<i>Coordinator</i>	0	0	0	0	0	1
<i>Engineer</i>	0	0	3	2	0	0
<i>Graduate</i>	1	0	0	0	0	0
<i>Leading Hand</i>	0	0	0	1	0	0
<i>Linesman</i>	0	0	1	0	0	0
<i>Mechanic</i>	0	0	1	1	2	2
<b><i>Operator Heavy Equipment</i></b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>7</b>	<b>17</b>
<i>Planner</i>	0	0	0	1	0	0
<i>Schedulers</i>	0	0	0	0	1	0
<i>Statistician</i>	0	1	0	0	0	0
<i>Superintendent</i>	0	0	0	1	1	0
<i>Supervisor</i>	0	0	0	1	3	4
<i>Trainer</i>	0	0	0	0	0	2
<b><i>Total</i></b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>16</b>	<b>14</b>	<b>26</b>

Based on the data above, it can be explained that the rehabilitated employees are generally 40 years and over and most are in the Heavy Equipment Operator position group.

According to MDGS (Chief Medical Officer of International SOS Clinic PT. KALPRI), the age of the patients who were recorded as undergoing a rehabilitation program and could not return to work varies greatly. The majority are in employees aged 35 or 40 years and over. Generally, these employees are employees who suffer from degenerative diseases which the Covid 19 Pandemic triggered. Even though the Company Clinic has provided maximum service to these employees, the weakening of the immune system due to age during the COVID-19 Pandemic also had quite an impact on their recovery so the KPR team's efforts to return the employee to return to work at their original place cannot be fulfilled according to schedule (Interview on June 15, 2024).

According to ND (Occupational Health Specialist on International SOS Clinic PT. KALPRI), the influence of Covid 19 on the return-to-work absorption of employees undergoing rehabilitation is quite large. Apart from the slower recovery process, the system implemented by the Company is also stricter. When the pandemic occurred, the restrictions imposed by the government were also adopted by the Company so that clinics had difficulty monitoring the medical conditions of patients/employees (Interview on June 15, 2024).

Several experts also have a similar view, such as Laura Carstensen, Ph.D. (1992), who argues that Aging is accompanied by declines in physical and cognitive abilities, which can impact an individual's ability to perform work tasks efficiently. These declines can increase susceptibility to health problems and longer illness recovery times.

**2. Position Group Analysis**

According to data gathered from research efforts, personnel receiving rehabilitation are typically class B workers who directly interact with heavy equipment units, either as heavy equipment operators or maintenance. The statistics below provide an overview of rehabilitated employees' distribution by class and position.

**Table 10. Classification of Job Grades for a Sample of Rehabilitation Workers**

<i>Grades</i>	<b>CPHD</b>	<b>MOD</b>	<b>MSD</b>	<b>Grand Total</b>
<i>B</i>	3	37	6	46
<i>C</i>		4	3	7
<i>D</i>	3	5	4	12
<i>E</i>	2	1	1	4
<i>F</i>		1	1	2
<b><i>Grand Total</i></b>	<b>8</b>	<b>48</b>	<b>15</b>	<b>71</b>





Demographically, based on the research results of the sample, data was obtained that most rehabilitated employees were between 40 and 60 years old. Based on the work division, generally, most rehabilitated employees aged over 40 come from the MOD division.

**Table 11. Age of Sample Employee in Rehabilitation Program by Division**

Age Group	MOD	MSD	CPHD
25-30	1	0	0
31-35	5	1	2
36-40	5	2	1
41-45	9	5	1
46-50	10	5	2
51-60	18	2	2
<b>Total</b>	<b>48</b>	<b>15</b>	<b>8</b>

**Table 12. Age of Sample Employee in Rehabilitation Program by Position Group**

Position Group	25-30	31-35	36-40	41-45	46-50	51-60
Coordinator	0	0	0	0	0	1
Engineer	0	0	3	2	0	0
Graduate	1	0	0	0	0	0
Leading Hand	0	0	0	1	0	0
Linesman	0	0	1	0	0	0
Mechanic	0	0	1	1	2	2
<b>Operator Heavy Equipment</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>7</b>	<b>17</b>
Planner	0	0	0	1	0	0
Schedulers	0	0	0	0	1	0
Statisician	0	1	0	0	0	0
Superintendent	0	0	0	1	1	0
Supervisor	0	0	0	1	3	4
Trainer	0	0	0	0	0	2
<b>Total</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>16</b>	<b>14</b>	<b>26</b>

According to MDS, the age of the patients who were recorded as undergoing a rehabilitation program and were unable to return to work varies greatly. The majority are in employees aged 35 or 40 years and over. Generally, these employees are employees who suffer from degenerative diseases which the Covid 19 Pandemic triggered. Even though the Company Clinic has provided maximum service to these employees, the weakening of the immune system due to age during the COVID-19 Pandemic also had quite an impact on their recovery so the KPR team's efforts to return the employee to return to work at their original place cannot be fulfilled according to schedule (interview on June 15, 2024).

According to ND, the influence of Covid 19 on the return-to-work absorption of employees undergoing rehabilitation is quite large. Apart from the slower recovery process, the system implemented by the Company is also stricter. When the pandemic occurred, the restrictions imposed by the government were also adopted by the Company so that clinics had difficulty monitoring the medical conditions of patients/employees (interview on June 15, 2024).

Several experts also have a similar view, such as Laura Carstensen, Ph.D. (1992), who argues that Aging is accompanied by declines in physical and cognitive abilities, which can impact an individual's ability to perform work tasks efficiently. These declines can increase susceptibility to health problems and longer illness recovery times.



3. The Factors causing the increase in the number of rehabilitated employees.

3.1 Internal Factor Analysis

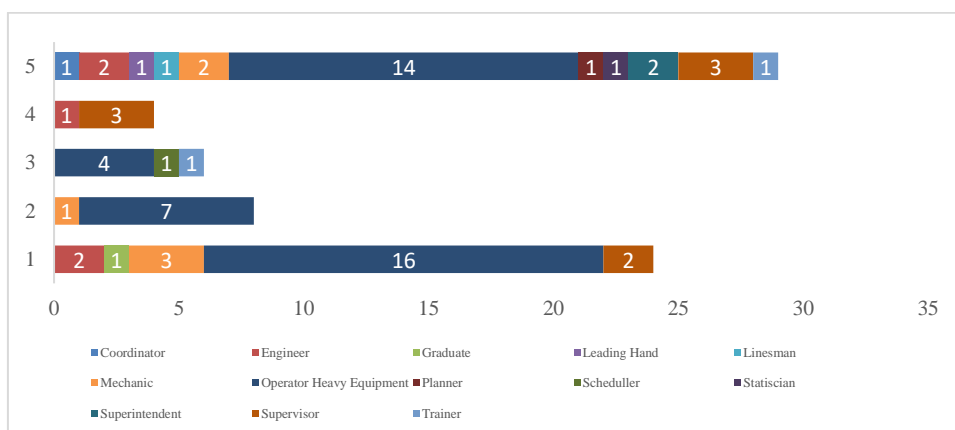
Three internal factors have been identified by researchers based on the findings of root cause analysis:

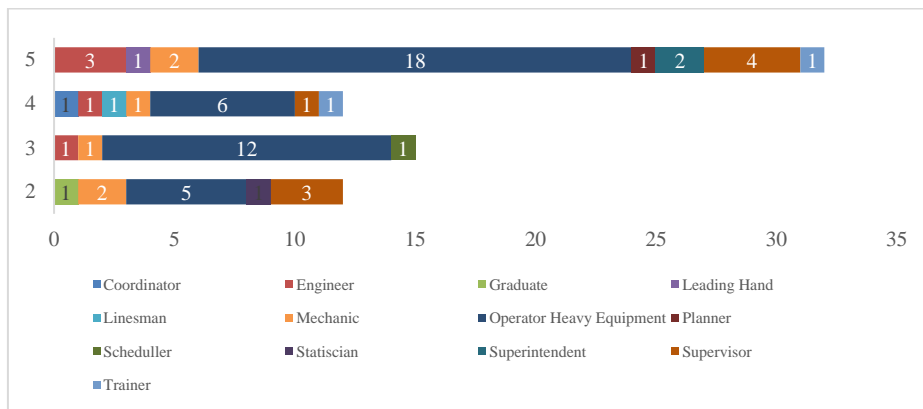
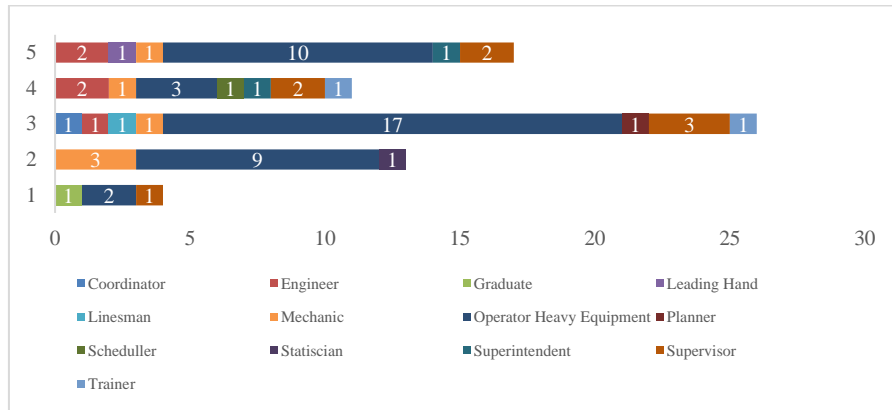
- Habits & Lifestyle
- Compliance with Health Recommendations
- Knowledge about Health

The researcher next asked the respondents a series of questions about these three internal characteristics to ascertain whether the statements were met.

- Statement for Habits & Lifestyle
  - "I do not smoke".
  - "I exercise regularly in my free time".
  - "I always sleep on time. I always sleep/rest after coming home from work shifts".
- Statement for Compliance with Health Recommendations
  - "If the doctor recommends that I undergo therapy, then I undergo therapy regularly according to the schedule recommended by the doctor".
  - "I maintain my eating and drinking patterns according to the doctor's instructions".
  - "I maintain my weight according to the doctor's instructions".
  - "I avoid fatty foods that contain excessive oil as directed by the doctor".
- Statement for Knowledge about Health
  - "I have enough knowledge about the importance of health".
  - "I understand that all medications prescribed by the doctor play an important role in my healing process".
  - "I understand that to restore my health condition, I need rehabilitation by working within certain limits determined by the Company Doctor while receiving treatment according to the Doctor's direction"

According to a study, one of the internal reasons influencing the rise in the number of rehabilitated employees is habit and lifestyle variables, which appear to have a considerable impact. This is inferred from the response graph, which indicates that many respondents "strongly disagree" with the following statements: "I don't smoke," "I work out frequently in my free time," and "I always go to bed on time." "I always take a nap or sleep after my work shifts" below.





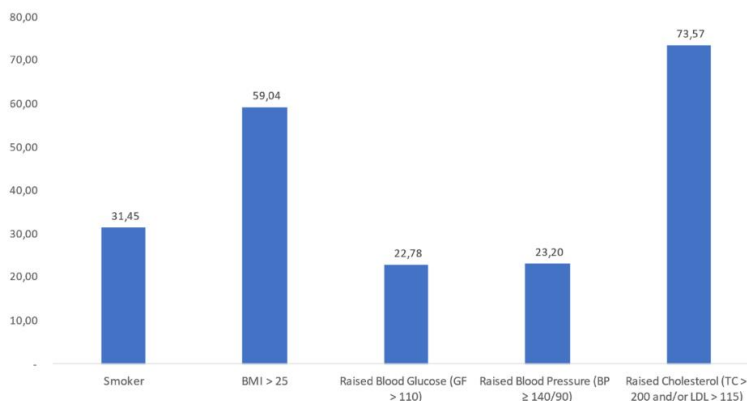
According to the data presented above, out of seventy-one responses, 24 strongly disagreed with the statement "I don't smoke," 8 agreed, and 6 chose neutral. This suggests that the smoking habit remains prevalent, particularly among heavy equipment operators. This is also supported by data on the proportion of health risk factors from the International SOS Clinic's most recent Medical Check-Up Results (January - June 2024), which reveal many smokers, according to the International SOS PT clinic report. KALPRI, of the total 1892 employees who have had medical check-ups, 31.45%, or around six hundred, are active smokers.

MEDICAL SERVICES KALTIM PRIMA COAL

**CURRENT SITUATION:**

**Proporsi Faktor Risiko Kesehatan dari Hasil MCU Jan- Jun 2024**

**Jumlah karyawan yang sudah MCU: 1892 orang**





According to MDGS (Chief Medical Officer International SOS PT. KALPRI Sangatta), the number of smokers at PT is high. KALPRI remains quite high, which can have an impact on the medical state of employees who smoke both before and after illness. However, smoking behaviors are not a direct reason for the rise in rehabilitation rates in 2023 (interview via Zoom meeting, July 15, 2024).

According to ND (Doctor Specialist Occupational Health International SOS PT. KALPRI Sangatta), active smokers are more likely to acquire major diseases like lung cancer, heart disease, and stroke. Furthermore, bad health conditions caused by smoking can have an impact on employee productivity and work performance (interview via Zoom meeting, 15 July 2024).

<i>Disease Group</i>	Coordinator	Engineer	Graduate	Leading Hand	Linesman	Mechanic	Operator	Planner	Schedulers	Statistician	Superintende	Supervisor	Trainer	Grand Total
<i>Blood Problem</i>						1								1
<i>Cardiac</i>		1					4					2		7
<i>Cardiac, Kidney Problems</i>							1					1		2
<i>Cardiac, Metabolic</i>							2							2
<i>Eye Problem</i>							3							3
<i>Fracture</i>	1			1	1			1	1					5
<i>Fracture, Metabolic</i>							1							1
<i>Infection, Blood Problems</i>							1							1
<i>Kidney</i>							1							1
<i>Malignancy</i>		1				1	4				1			7
<i>Mental</i>							1							1
<i>Mental health problem</i>			1											1
<i>Metabolic</i>						2	7				1	2	1	13
<i>Metabolic, Cardiac</i>							1							1
<i>Metabolic, Eye</i>							1							1
<i>Metabolic, Eye Problems</i>							1							1
<i>Metabolic, Kidney</i>							1							1
<i>Metabolic, Kidney, Blood Problem</i>							1							1
<i>Metabolic and Lung Problems</i>							1							1
<i>Metabolic, Musculoskeletal</i>							2							2
<i>Musculoskeletal</i>		3				1	4			1		1		10
<i>Neurology</i>		1				1	3						1	6
<i>Neurology, Ear Problem</i>												1		1
<i>Neurology, Metabolic</i>							1							1
<b>Grand Total</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>41</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>71</b>

Figure. Respondents' Disease Group

Based on the data shown above, it is possible to conclude that the diseases suffered by respondents are directly tied to habits and lifestyle, such as metabolic, cardiovascular, and musculoskeletal. Heavy Equipment Operators are more likely to develop these disorders.



According to ND and LMI (Doctor Specialist Occupational Health International SOS PT. KALPRI), these diseases can potentially increase the rehabilitation of employees by 2023. However, in essence, two major external occurrences are thought to be the reason for the rise in the number of employees rehabilitated in 2023: the Covid 19 Pandemic, which occurred between 2020 and 2022. (Interview via Zoom meeting, 15 July 2024).

**3.2 External Factor Analysis**

External factors consist of:

- Company intervention in employee health through the Company Health Program.  
The statement to the respondent consists of:
  - “The company has provided excellent health services for employees”.
  - “The company is very responsive to employees and families who experience illness”.
  - “The company provides the best service for employees who are sick”.
  - “The company has a good employee health program”.
- Health Education Program from the Company.  
The statement to the respondents consists of:
  - “The company already has a health education program for employees”.
  - “Employees have broad access to learn about health by utilizing Company facilities”.

Based on the research results, respondents generally agreed and/or strongly agreed with the statements mentioned above. It can be explained that external factors consisting of Company intervention in employee health through the Company Health Program and Health Education Program from the Company, which are further indicated through several statements above, do not significantly influence the increase in the number of employees being rehabilitated. But, according to MDGS (Chief Medical Officer) International SOS Clinic PT. KALPRI Site Sangatta, also a member of the Rehabilitation Committee, thinks the increase in the number of employees being rehabilitated in 2023 is caused by the COVID-19 pandemic between 2020 and 2023. When the COVID-19 epidemic struck, personnel who were predisposed to a variety of noncommunicable diseases, including cardiovascular disease, were particularly vulnerable to illness. This was triggered by COVID-19 infection, which induced alterations in medical conditions such as blood clotting, which in turn provoked diseases such as cardiovascular disease, resulting in a rise in sick employees. (Interview via Zoom on July 15, 2024).

**4. The Factors cause the low success rate of rehabilitation programs in returning employees to their original positions.**

Researchers continue to use the same respondent data from earlier surveys to achieve this goal. since, in theory, the same factors that lead to a high rate of rehabilitation also generate a low rate of acceptance of going back to work. This is heavily impacted by the worker's health, which serves as a guideline for increasing the quantity of workers receiving rehabilitation as well as whether or not workers are able to resume their previous roles.

**4.1. Internal Factors Analysis**

Based on the analysis of the respondents' data above, it can be explained that internal factors, especially habits and lifestyle, still have the potential to influence the low level of re-employment of employees rehabilitated at PT. KALPRI.

According to LMI, the illnesses experienced by workers, especially respondents, are very closely related to habits and lifestyles.

<i>Potential Contributing Factor</i>	<b>Disease</b>	<b>Amount</b>
<i>Smoking</i>	Cardiac	7
	Cardiac, Kidney Problems	2
	Cardiac, Metabolic	2
	Malignancy	7
	Metabolic and Lung Problems	1
<i>Irregular Eating Habits</i>	Metabolic	13
	Metabolic, Cardiac	1
	Metabolic, Eye	1
	Metabolic, Eye Problems	1



	Metabolic, Kidney	1
	Metabolic, Kidney, Blood Problem	1
<i>Irregular Exercise</i>	Fracture	5
	Fracture, Metabolic	1
	Metabolic, Musculoskeletal	2
<i>Others</i>	Musculoskeletal	10
	Blood Problem	1
	Eye Problem	3
	Infection, Blood Problems	1
	Kidney	1
	Mental	1
	Mental health problem	1
	Neurology	6
	Neurology, Ear Problem	1
	Neurology, Metabolic	1
<i>Grand Total</i>		71

Several references, such as Brown, L., & Green, P. (2023) argue that smoking damages the immune system reduces the body's ability to fight infection and slows recovery from disease. This is especially relevant for rehabilitation employees, as a weakened immune system can prolong recovery and increase the risk of disease recurrence. Meanwhile, Davis, R., & Thompson, S. (2023) argue that stress and anxiety often increase during the rehabilitation process, and some people smoke to cope with these feelings. However, nicotine can increase anxiety and disrupt sleep, which is important for recovery. Thus, smoking can indirectly slow down the rehabilitation process through its impact on mental health.

According to Miller, A., & Reed, T. (2022), an effective rehabilitation program for employees must include a smoking cessation component, because smoking cessation can significantly improve recovery outcomes. Counseling, nicotine replacement therapy, and group support can help individuals quit smoking and speed up their rehabilitation process.

#### 4.2. External Factors Analysis

Based on the results of research conducted on questionnaire data, it seems that external factors whose indications are grouped into Company intervention in employee health through the Company Health Program and Health Education Program from the Company, which are then measured using several statements, are not proven to influence the low absorption of employee return to work. rehabilitation.

However, from the results of interviews with the Rehabilitation Committee, there were several unique facts which according to the researchers deserved to be explained further in the results of this research. Based on the results of interviews with the Rehabilitation Committee, several factors that influenced the low return to work absorption of rehabilitation employees from external aspects were the Covid-19 pandemic which occurred around 2020 to 2022.

According to MDGS (Chief Medical Officer International SOS Clinic PT. KALPRI), one of the factors suspected of triggering the low return to work absorption of rehabilitation employees is the COVID-19 pandemic from 2020 to 2022. The activity restriction policy launched by the government in connection with the pandemic resulted in management The company also created a policy limiting all employee activities, including sick employees at PT. KALPRI. As a result of these restrictions, employees, especially those undergoing rehabilitation, in 2020 are restricted from carrying out various activities, including visiting clinics to follow up on their healing process. As a solution, the company opened a telephone consultation and online prescription service using courier services to meet the medical needs of patients undergoing treatment. It was further explained that because of these restrictions, many patients who were temporarily undergoing treatment and recovery were hampered or slowed down their recovery from the illness they were experiencing (Interview via Zoom meeting: 15 July 2024).

1. Several policies released by Management PT. KALPRI related to treatment during the COVID-19 pandemic includes the following:



2. GM memo. Human Resources Ref. M036/HR-GM/V/20 dated 18 May 2020 concerning Patient visits for treatment to Company Clinics during the COVID-19 pandemic.
3. GM memo. Human Resources Ref: M059/HR-GM/X/20 dated 12 October 2020 concerning Postponement of MCU Visits.
4. GM memo. Human Resources Ref.M075/HR-GM/XII/20 dated 29 December 2020 concerning MCU Visit Arrangements.

Apart from that, the management of PT is also important. KALPRI also released several other policies related to efforts to prevent and handle the spread of COVID-19 within the company.

According to Dr. Paul B. Spiegel (2020), Director of the Center for Humanitarian Health at Johns Hopkins University, The COVID-19 pandemic has significantly influenced global lifestyle behavior, especially in decreasing physical activity and increasing consumption of unhealthy foods. This impact has the potential to worsen the prevalence of non-communicable diseases (NCDs) such as obesity, diabetes, and cardiovascular disease, especially among vulnerable populations.

Prof. Susan Michie (Professor of Health Psychology at University College London) expressed her opinion that the social restrictions implemented during the COVID-19 pandemic have changed many people's daily routines, affecting eating patterns, physical activity, and smoking behavior. These lifestyle changes can improve the risk of developing or worsening chronic diseases, including type 2 diabetes and hypertension.

Dr. Roberta H. Anding (2021), a Registered Dietitian and Sports Dietitian believes that during the COVID-19 pandemic, changes in eating patterns that occurred, such as increasing consumption of processed foods and decreasing intake of healthy foods, were closely related to increased body weight and obesity. This condition increases the risk of metabolic diseases, such as insulin resistance and dyslipidemia.

Prof. Frank B. Hu (2021), Professor of Nutrition and Epidemiology at Harvard T.H. Chan School of Public Health stated that the COVID-19 pandemic has shown how sedentary lifestyles and poor diet during lockdown contributed to increased rates of cardiometabolic disease. Public health interventions focused on preventing these diseases are critical post-pandemic.

According to the findings of the library research, Dr. James O'Keefe (2022), Director of Preventive Cardiology at Saint Luke's Mid-America Heart Institute, believes that a lack of physical activity is a substantial risk factor for heart disease and diabetes. During the pandemic, many people curtailed their physical activity, contributing to the increasing prevalence of these disorders.

## F. CONCLUSION

Based on the results of the study and data analysis done using various tools such as the 5-whys method and Cronbach's Alpha assessment through the Statistical Package for the Social Sciences (SPSS) program, it is possible to conclude that:

1. The cause of the increase in employee rehabilitation rates tends to be due to negative habits and lifestyles among employees. This is concluded from the research data which shows that there are still quite a high number of respondents who choose answers between strongly disagree to neutral for the statements "I don't smoke", "I exercise regularly in my free time" and "I always sleep on time, including when I am working shifts...". Externally, the high rehabilitation rate is not influenced by the indicators outlined in the questionnaire, however. However, based on the results of interviews with the Rehabilitation Committee, the increase in the number of rehabilitated employees was also triggered by the COVID-19 pandemic. Internally and externally, these two factors can be interrelated, where internal factors are the main factor while the Covid-19 pandemic is the triggering factor.
2. The cause of the low return to work absorption of employees rehabilitated internally is the negative habits and lifestyle of the employees. This is concluded from research data which shows that the habits of smoking, exercising, and sleeping irregularly are still dominant among employees. The choice between strongly disagree and neutral indicates that negative employee habits remain high. Externally, no significant answers were found to be a factor causing the low return to work absorption from respondents' answers. However, based on the results of interviews, the COVID-19 pandemic played an important role in its influence on the patient's recovery process

## G. RECOMMENDATION

To lower rehabilitation rates and boost return-to-work absorption at PT, KALPRI advised the following actions:

- 1) Maximize initiatives that increase employee health and healthy lives through the following activities:
  - Healthy Lifestyle Campaign.



PT. KALPRI now offers a variety of health programs that are carried out regularly and periodically, including calls and invitations to quit smoking, weekly joint sports events, and various other activities. However, these activities are still broad in scope and aimed at the entire community, including employees and their families who reside near the enterprise. These actions should be carried out expressly for the benefit of employees. For instance, sports tournaments between divisions or departments that solely engage employees and have no other components, so that the benefits are felt directly by both employees and the organization.

- Preventive Health Initiatives

A preventive health program is a set of measures or actions to prevent health problems or diseases from causing symptoms or negative consequences, such as routine health checks, nutritional counseling, and fitness programs suited to employee needs.

- Incentives for a Healthy Lifestyle

The corporation provides rewards for employees who can optimize their health conditions. It is envisaged that this reward will motivate employees to optimize their efforts to control their lifestyle.

## 2) Revision and Improvement of the Rehabilitation and Return to Work Policy

- Flexible Rehabilitation Policy

Companies might consider more adaptable and personalized rehabilitation policies. This could involve task changes, temporary reductions in work hours, or remote work for healing employees.

- Effective Reintegration Program

Create a planned reintegration program for individuals who have completed rehabilitation, including retraining, task changes, and continuous assistance to ensure they can return to work productively.

- Evaluation of Post-Rehabilitation Health Performance

Maximize periodic health performance evaluations of employees after rehabilitation to ensure they have the support necessary to return to full working condition.

Companies that apply these ideas can be more effective in minimizing the number of employees who require rehabilitation and increasing re-employment, resulting in increased productivity and overall employee well-being.

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