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RESEARCH ARTICLE

EFFECT OF APPLICATION BREAKFAST HABIT TO ACTIVITIES AND HEALTH IN MARTAPURA RIVERSIDE COMMUNITY AND COAL MINERS (CSR PROGRAM OF CV. DASAR KARYA COAL MINE)

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ABSTRACT

This study aims to determine the effect of breakfast counseling on the coal miners activities and health. This study is an experiment Quasi Experimental with design The Non Equivalent Control Group. This design uses two groups, the first group and the second group are given a pretest and post test, but only one group is given the treatment (counseling). Research instrument was a questionnaire safety and health knowledge with the number of items by 10 item valid and reliable questions, with 10 score for the correct answer and 0 for a wrong answer. The study sample 25 for the control group and 25 samples for the experimental group. Quantitative data analysis use SPSS analysis technique. The study states that there is a significant effect of the counseling provision on having a breakfast on the activity and health of coal miners.

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INTRODUCTION

Healthy Indonesia Vision 2015 aims at improve the life of the people in the improving health, including nutrition. Law No. 36 Year 2009 on the health of article 141, paragraph 1 states that public nutrition improvement efforts aimed at improving the nutritional quality of individual and community (Mariza et al., 2012). And one of these attempt in improve nutrition is by eating breakfast habits (Mariza et al., 2012). Eating breakfast is an activity to consume foods that contain balanced nutrition and meet the 20% -25% of the total daily energy requirement that is done in the morning before activity (Wahyu et al., 2013). Breakfast for adults aim to maintain physical fitness, maintaining endurance while working and increase employee productivity (Sulastri et al., 2012). The habit of eating breakfast is also included in one of the thirteen balanced nutrition messages (Mapandin and Mapandin, 2005). Breakfast foods should contain carbohydrates, protein, high fiber and low fat. Not eating breakfast can have a risk of obesity because over snacking and health problems (Saragih, 2010). In Indonesia, the prevalence of overweight in the population over the age of 18 in 2010 showed high number at 21.7% in overweight and obese class (Nofalia, 2011).

Often missed breakfast can also lead to irregular eating, this can lead to disease gastritis or stomach ulcers (Arijanto et al., 2008). Based on data from the District Selan Bawah Health Center Mataraman Banjar Regency, gastritis disease including the number 2 of the 10 most diseases that suffered by local communities, gastritis is the impact of the habit of missed breakfast (Astuti et al., 2007). The level of knowledge of the mother as manager of the household affects the application eating habits of and the selection kind of food consumed by the family (Ernawati, 2012). Mother's knowledge about eating breakfast plays an important role in healthy nutrition behavior, especially habit in having breakfast.

Knowledge is very important domain for the formation of a person's behavior, it is necessary for efforts to increase knowledge by conduct counseling, counseling is one way to improve the knowledge in order to form a better behavior in the improvement of health in their daily activities (Mardayanti et al., 2008). According Preddy 2010, an increase maternal knowledge before and after counseling healthy and nutritionally balanced meals for a family breakfast, from 57.4% enough category to 77,9% good of category (Hapsari et al., 2009). In this case, breakfast counseling activities is an effort to provide information about the definition of breakfast, eat breakfast benefits, impact of not having breakfast and kind of balanced food for breakfast. With the counseling of healthy

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eating in the morning is expected to motivate people to behave applying breakfast, so that people can live in a healthy activity. Sungai Jati Village is located near the CV Dasar Karya coal mines company, the majority of villagers Sungai Jati worked as latex tapper. Coal mining activities conducted in the vicinity of the village turned out positive and negative impacts to the surrounding community.

Based on preliminary observations dated March 17, 2014, were conducted in the village of Sungai Jati by interviewing some housewives, found complaints housewives who experience health problems such as colds, coughs and ulcers or gastritis, they assume it is because there is the influence of activity mining that adversely affect them. Based on data health center Sungai Jati gastritis is the second most diseases suffered by people in the Sungai Jati village. This is due to the diet they are not appropriate provisions such as not eating breakfast because they work as a latex tapper tapping should go early in the morning that, due to the early morning tapping rubber latex from rubber tree more productive. The habit may be a risk factor for someone to suffer from various diseases due to nutritional adequacy is rarely met. Seeing the above conditions, CV. Dasar Karya as a coal mining company that operates around the village intends to improve public health around through CSR programs such as health promotion activities to improve nutrition.

Promotion and counseling breakfast to housewives in the village of Sungai Jati. Counseling in having breakfast is expected to increase the knowledge of the housewives on the importance of eating breakfast and behavioral changes such as better eating behaviors apply having breakfast so that adequate nutrition community can be met (Hartoyo, 2014). Based on the results of previous research conducted in 2014 showed that eating breakfast can improve education and public health activities. Based on the above, do research to know how to influence policy implementation breakfast on the activity and health, if applied to the mine employees.

MATERIALS AND METHODS

This study is a quasi-experimental to design one group pre-test and post-test. Where in this design there is no comparison group, but made the first observation (pre-test) that allows researchers to examine the changes that occur after treatment (The health profile of South Kalimantan Province in 2006). Population and sample study are all coal miners in the CV Dasar Karya totaling 50 employees. The study sample was divided two groups: 25 controls coal miners and 25 as an experiment. Sample method use Totally Sampling. The instrument in this study is a questionnaire containing material regarding having breakfast such as: understanding the breakfast, having breakfast benefits, impact of not having breakfast and kind of balanced meals for breakfast.

The knowledge questionnaires will be given before and after counseling, while healthy behaviors questionnaire will be given before counseling and one month after counseling it is intended to look at changes in behavior after the experimental group given treatment (counseling). And the control group will be given a pretest and post test just not given the treatment.

Questionnaire for knowledge having breakfast consisted of 10 items, with a score of 10 for correct answers and incorrect answer scores 0. Coal miners knowledge category, very good if the score: 81-100, good if the scores 61-80, enough if the scores: 41-60 poor if the score: 21-40 and very poor if score: 0-20. While the questionnaire is to determine the people healthy behavior, consisting of 10 items, with alternative answers "always, often, not often and never. Category housewife with health behaviors said to be very good, if the answer scores of 31-40, well, if the score 21-30 and less, if the score 10-20. Both questionnaires have been tested for validity and reliability, with values ranging from 0.680 to 0.871 validity and reliability of 0.841 for the knowledge questionnaire and 0.569 to 0.752 the validity and reliability of 0.821 for behavioral questionnaire.

Analysis of the data for the influence of counseling having breakfast on the activity and health of coal miners using different non-parametric test, this is due to all the variables are not normally distributed characterized with a significance value of the Kolmogorov-Smirnov (0,000 to 0,002) <0.05 . Mann-Whitney test was conducted to determine differences in the activity and health of coal miners having breakfast in the control group and the experimental group at pre-test and post-test. Then the Wilcoxon test is also conducted to determine the effect of having breakfast on the activity counseling and health of coal miners in the CV Dasar Karya. Data processing results of the questionnaire used with statistical software

Hypothesis in this study is:

- H1:** There is an effect of having breakfast counseling on the activity of the coal miners.
H1: There is an effect counseling having breakfast on health. of coal miners

RESULTS AND DISCUSSION

The results of the Mann-Whitney test scores of pre-test and post-test knowledge coal miners in the control group and the experimental group showed significant results for $0.256 > 0.05$, this means that the pre-test scores no significant difference breakfast activity in the control group and the experimental group. Thus showed that coal miners the activity about eating breakfast before the treatment counseling provision there is not a significant difference in the control group and the group of experiments.

Table 1. Activity Mann-Whitney test Control and Experiment Group

| | Pre knowledge | Post knowledge |
|------------------------|---------------|----------------|
| Mann-Whitney U | 186.000 | 83.000 |
| Wilcoxon W | 439.000 | 336.000 |
| Z | -1.381 | -3.838 |
| Asymp. Sig. (2-tailed) | .256 | .000 |

a. Grouping Variable: Sample Group

In Table 1 also shows that there are significant differences in post test scores coal miners activity of eating breakfast in the control group with the experimental group. It can be seen from the significance value $0.000 < 0.05$. Thus these results indicate that provision of education is able to influence the increased

breakfast activity of coal miners. To support these results, the Wilcoxon test is also conducted with the following results

Table 2. Wilcoxon test group of Experiment

| | Post activities - Pre activity |
|------------------------|--------------------------------|
| Z | -5.692 ^a |
| Asymp. Sig. (2-tailed) | .000 |

- a. Based on negative ranks.
b. Wilcoxon Signed Ranks Test

In Table 2 the results of the Wilcoxon test scores of pre-test and post-test experimental group obtained a significance value $0.000 < 0.05$. These results indicate that there is the effect of treatment in the form of counseling on eating breakfast on the activity of the coal miners. These results are consistent with the results of previous tests, namely the Mann-Whitney test is also stated that there are differences in post-test scores that were sampled in the experiment group. Thus it can be stated that H1 is accepted, no influence on the activity counseling breakfast coal miners.

There is an increase in the average value of a coal miners activity score in the experimental group, the average score on the pretest was 44.55 while the post-test of 78.45. This can be interpreted that when giving information about the breakfast, coal miners activity had increased and were categorized good score. Then Table 3 the results of Mann-Whitney test score of pretest and post-test behavior of coal miners in the control group and the experimental group showed significant results for $0.702 > 0.05$, this means that the pretest scores did not differ significant health eat breakfast in the control group and the experimental group. Thus showing that the health of coal miners eat breakfast before the provision counseling treatment no significant difference between the control group and the group of experiments.

Table 3. Health Mann-Whitney Test Control and experiment group

| | Pre Health | Post Health |
|------------------------|------------|-------------|
| Mann-Whitney U | 226.000 | 11.000 |
| Wilcoxon W | 479.000 | 264.000 |
| Z | -.382 | -5.486 |
| Asymp. Sig. (2-tailed) | .702 | .000 |

- a. Grouping Variable: Sample Group

In Table 3 also shows that there are significant differences in post test scores coal miners health of eating breakfast in the control group with the experimental group. It can be seen from the significance value $0.000 < 0.05$. Thus these results indicate that the provision of counseling is able to influence the behavior of coal miners about eat breakfast. To support these results, the Wilcoxon test is also conducted with the following results.

Table 4. Wilcoxon Test Experiment Group

| | Post health- Pre health |
|------------------------|-------------------------|
| Z | -4.853 ^a |
| Asymp. Sig. (2-tailed) | .000 |

- a. Based on negative ranks.
b. Wilcoxon Signed Ranks Test

In Table 2 the results of the Wilcoxon test scores of pre-test and post-test experimental group obtained a significance value $0.000 < 0.05$. These results indicate that there is treatment effect in the form of eat breakfast counseling on housewife health. These results are consistent with the results of previous tests, namely the Mann-Whitney test is also stated that there are differences in post-test scores that were sampled in the experiment group. Thus it can be stated that the H2 is accepted, there is the effect of eat breakfast counseling on housewife health. There is an increase in the average value of a housewife's behavior scores in the experimental group, the average score on the pretest was 33.64 while the post-test of 42.45. This can be interpreted that when giving information about the breakfast, health coal miners to eat breakfast have increased and are categorized very good.

Breakfast is very necessary for the people as it can maintain physical fitness, maintaining endurance while working and increase labor productivity (Rismayanthi cerika, 2011). Not eating breakfast can affect the occurrence of heartburn or gastritis due to irregular eating frequency and can be risky for obese and have health problems such as decreased blood sugar levels with signs such as: weak, cold sweat, decreased consciousness and even fainting (Silalahi, 2011). In applying the eat breakfast habits of the housewife is a very important role in the family, particularly in preparing the family meal. Therefore good knowledge possessed by housewife influence on the activity of eating breakfast habituation. Knowledge is influenced by education, occupation, age, environment, and sociocultural attitudes in determining the behavior of the maximum (Biological, 2009). While a person's behavior is influenced by the knowledge, attitudes, facilities, infrastructure, community leaders and health workers in implementing eat breakfast is beneficial for health (Paramita, 2010). Counseling is a eat breakfast program in health promotion and health improvement activities such as coal miners eating habits early (Ayu mirna, 2013). Counseling eat breakfast is an activity provide information about the health benefits of eating breakfast, so that coal miners activity increased and can shape the behavior of applying eat breakfast (Ristianas Siska, 2009).

Results of Mann-Whitney test knowledge score housewives and employees of the mine showing the results of significance of $0.000 > 0.05$, this means that the level of knowledge scores were no significant differences in the group activity morning meal. Thereby showing that the knowledge of housewives and mine employees about breakfast there are significant differences in both groups.

Table 5. Comparison of Knowledge Mann Whitney Test Housewife and Employees After Diet Formulation Policy Implementation

| Test Statistics ^a | |
|------------------------------|-----------|
| | Knowledge |
| Mann-Whitney U | 269.000 |
| Wilcoxon W | 594.000 |
| Z | -.897 |
| Asymp. Sig. (2-tailed) | .000 |

- a. Grouping Variable: IRTdanKaryawan

In Table 5 also shows that there are significant differences in knowledge scores housewives and employees about the breakfast. It can be seen from the significant value $0.000 < 0.05$. Thus these results indicate that the adoption of policies capable of influencing morning meal increases knowledge housewives and mine employees about breakfast. To support these results, the Wilcoxon test is also conducted with the following result.

Table 6. Comparison of Knowledge Employees Wilcoxon test and Housewife Before and After Implementation Policy Formulation Diet

| Test Statistics ^b | |
|------------------------------|-----------------------|
| | Knowledge – Knowledge |
| Z | -1.508 ^a |
| Asymp. Sig. (2-tailed) | .032 |

a. Based on positive ranks.
b. Wilcoxon Signed Ranks Test

In Table 6 the results of the Wilcoxon test in both groups obtained significance value of $0.032 < 0.05$. These results indicate that the application is able to influence the policies breakfast increasing knowledge housewives and mine employees about breakfast. These results are consistent with previous test results, namely the Mann-Whitney test which also states that there are differences in scores on both kelompok. Dengan Thus it can be stated that H1 is accepted, there is the effect of applying the policy morning meal can influence increased activity housewives and mine employees about breakfast.

Table 7. Mann Whitney Test Employee Health and Housewife Before and After Implementation Policy Formulation Diet

| Test Statistics ^a | |
|------------------------------|---------|
| | Health |
| Mann-Whitney U | 269.000 |
| Wilcoxon W | 594.000 |
| Z | -.897 |
| Asymp. Sig. (2-tailed) | .022 |

a. Grouping Variable: IRTdanKaryawan

In Table 7 also shows that there is a significant difference in health scores housewives and employees about the breakfast. It can be seen from the significant value $0.022 < 0.05$. Thus these results indicate that the adoption of policies capable of influencing health breakfast increasing housewives and mine employees about breakfast. To support these results, the Wilcoxon test is also conducted with the following result.

Table 8. Comparison Test Wilcoxon Employee Health and Housewife Before and After Implementation Policy Formulation Diet

| Test Statistics ^b | |
|------------------------------|---------------------|
| | Health – Health |
| Z | -1.508 ^a |
| Asymp. Sig. (2-tailed) | .000 |

a. Based on positive ranks.
b. Wilcoxon Signed Ranks Test

In Table 8 the results of the Wilcoxon test in both groups obtained significance value of $0.032 < 0.05$. These results indicate that the application is able to influence the policies breakfast increasing health housewife and mine employees about breakfast. These results are consistent with previous test results, namely the Mann-Whitney test which also states that there are differences in scores on both kelompok. Dengan Thus

it can be stated that H2 is accepted, there is the effect of applying the policy morning meal can influence increasing health housewife and mine employees about breakfast. There is an increase in the average value of scores kesehatan housewife at 12.50 and the increase in the average value of a mine employee health score of 16.25. This may imply that the implementation of policies morning diet improve your health to be good both groups.

Table 9. Wilcoxon test Comparison Employee Performance Before and After Implementation Policy Formulation Diet

| Test Statistics ^b | |
|------------------------------|--------------------------|
| | Performance- Performance |
| Z | -1.508 ^a |
| Asymp. Sig. (2-tailed) | .012 |

a. Based on positive ranks.
b. Wilcoxon Signed Ranks Test

In Table 9 the results of the Wilcoxon test scores of pre-test and post-test performance of employees obtained significance value $0.012 < 0.05$. These results indicate that there are significant policy implementation diet of breakfast on employee performance. There is an increase in the average value of employee performance scores, the average value prior to the implementation of policies diet of 62.45 while the morning after breakfast policy implementation patterns of 78.90. This may imply that once the policy is applied on breakfast, the performance of employees increased.

Conclusion

Based on the results and discussion there, it can be concluded that the implementation of policies breakfast has a significant influence on the activity and health of mine employees, and the implementation of policies breakfast can improve employee performance mines.

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