Effect of Health Coaching Based on Health Belief Model Theory to Dietary

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Abstract: Introduction: Most people with hypertension assume that consumption drugs can control their blood pressure. In fact, lifestyle factor such as physical activity contribute to the burden of account for substantial morbidity, mortality, and rising in hypertension, highly the much for prevention afford to curb public health epidemic. Health coaching was one way for the nurse to improve motivation and patient's beliefs concerning their disease so that they would show good compliance behavior. Objective of this study was to analyze the effect of health coaching toward physical activity. Methods: This study used quasy experiment design with pre-post test control group design. Sample collection technique was by purposive sampling. The amount of sample was 26 people for each group. There were two variables, the dependent and independent variables, the dependent variable was physical activity and the independent variable was health coaching. The location in the work Pandanwangi public health center and the time was April 4th – July 7th, 2019. Statistic analysis used Wilcoxon Signed Rank Test and Mann Whitney. Results: Health coaching has effect toward dietary. Difference test in treatment group using Wilcoxon obtain p value 0.000, while difference test with Mann Whitney obtain p value 0.000. Discussion: There is diit pattern differences between treatment and control group. Furthermore, diit pattern as a management of hypertension. It is expected hypertension patients should be always doing diit pattern that has been recommended.

Keywords: health coaching, hypertension, dietary

1. Introduction

Ignorance of hypertensive patients about the dangers and complications of hypertension makes patients with grade I hypertension rise to grade II hypertension. Hypertension patients assume that taking medication alone is enough to control their blood pressure. In patients with first-degree hypertension who are able to regulate their behavior such as controlling diet and exercise, it is less likely to increase their degree of hypertension to grade II. When someone is diagnosed with hypertension, health workers will ask the patient to adjust his lifestyle. Starting from adjusting eating patterns, salt intake, limiting coffee and alcohol consumption, increasing physical activity or sports, stopping smoking, managing stress or anger conditions, and following treatment programs. Counseling that has been given so far by health workers does not have a visible effect on changes in compliance behavior of hypertension sufferers because there is no feedback or opportunity for hypertensive sufferers to express what information they really need about their health. Changes in behavior using coercive strategies also cannot be applied to rural communities. Another strategy that can be carried out by force or regulation, but so far there has never been a law in the community both written and unwritten that focus on health issues. Therefore the provision of information and assistance in changing compliance behavior was chosen as an intervention for the village community.

In fact, not all people with hypertension can adjust their lifestyle. Related to following the advice of health workers, hypertensive patients will conduct an assessment of their health conditions. The differences will appreciation of the disease suffered by hypertensive patients, related to the patient's assessment of the threat of a disease. Based on the Health Belief Model, the likelihood that someone will take precautionary measures depends on the results of their beliefs or health assessments (Priyoto, 2014). Patients will take actions to prevent, reduce, or control the condition of health problems based on the seven components of the expected health belief model. Behavior compliance can be interpreted as an effort made by the patient in the form, following medical rules, following a diet or lifestyle changes in accordance with medical advice (Sarafino, 2011).

From the results of a preliminary study conducted in the Pandanwangi Public Health Center in Malang, the number of hypertension sufferers was 1060 visits. The 2013 Riskes as fact shows that 23.7% of the population aged 10 years and over smoke every day. Consumption of salt and salty foods in the community is still high, which is 15 grams per person per day, far from the recommended maximum limit of 6 grams per person per day, and as many as 24.5% of people over the age of 10 consume salty food every day. As many as 93.6% of the population consumed less fruits and vegetables (Ministry of Health, 2013). Riskesdas data for 2013, shows the proportion of physical activity of the population which is classified as less active in Indonesia by 26.1%. From all provinces in Indonesia there are 22 provinces whose physical activity of the population is classified as less active with a proportion above the national average, including in East Java Province by 33.9% (Ministry of Health, 2013). As well as data from NHANES 2007-2010, there were 47.5% of hypertension sufferers who did not control their blood pressure (American Heart Association, 2013). Hypertensive patients who have poor compliance behavior can increase the degree of hypertension and lead to complications including myocardial infarction, stroke, kidney failure, and death if not detected early and treated appropriately (James, et al., 2014).

The results of studies on the use of health coaching techniques in several previous studies varied including: providing positive experiences for participants, giving maximum results perceived by Priyoto (2014), namely perceived vulnerability (Perceived susceptibility), perceived danger / pain (Perceived severity ), perceived benefits
(Perceived benefits), perceived obstacles (Perceived barrier), modification variables (Modifying variables), cues to action (Cues to action), and one's beliefs about the ability he has to do something (Self Efficacy). This HBM component is perfect for overcoming behavioral problems that have consequences for health problems (for example: consumption of unhealthy foods, lack of physical activity). HBM has been widely adapted and successfully applied in the design of health interventions (Orji, Mandryk, & Vassileva, 2012).

2. Methods

This study used quasy experiment design with pre-post test control group design. Sample collection technique was by purposive sampling. The amount of sample was 26 person for each group. There were two variables, the dependent and independent variables, the dependent variable was physical activity and the independent variable was health coaching. The location in the area Pandanwangi health public care and the time was April 4th – June 7th, 2019. Statistic analysis used Wilcoxon Signed Rank Test and Mann Whitney.

3. Result

<table>
<thead>
<tr>
<th>Table 4.1: Results of general data analysis</th>
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<tbody>
<tr>
<td>Characteristic</td>
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<tr>
<td>----------------</td>
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<tr>
<td></td>
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<tr>
<td>Gender</td>
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<td>Male</td>
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<td>Female</td>
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<tr>
<td>Age</td>
</tr>
<tr>
<td>36-45</td>
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<tr>
<td>46-55</td>
</tr>
<tr>
<td>Graduate</td>
</tr>
<tr>
<td>Elementary school</td>
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<tr>
<td>Junior high school</td>
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<tr>
<td>Senior high school</td>
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<tr>
<td>Bachelor</td>
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<td>Occupation</td>
</tr>
<tr>
<td>Housewife</td>
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<tr>
<td>Private employee</td>
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<tr>
<td>Civil servants</td>
</tr>
<tr>
<td>Entrepreneur</td>
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<tr>
<td>Hypertension history</td>
</tr>
<tr>
<td>Yes</td>
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<tr>
<td>None</td>
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<tr>
<td>Kidney diseases history</td>
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<tr>
<td>Yes</td>
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<tr>
<td>None</td>
</tr>
</tbody>
</table>

(Sumber: Data Primer, 2019)

Based on table 4.1, it can be seen that in the treatment group in this study the majority were female, with 18 respondents (69.2%) with almost 46-55 years of age (84.6%) and almost half of the education level, namely junior high and high school. With the same number each of 10 respondents (38.5%), almost half of the types of work are housewives and private employees with the same number each of 12 respondents (46.2%), and most have a history of hypertension (61.5%). Whereas in the control group almost all respondents were female as many as 20 respondents (76.9%), with a total age range of 46-55 years (100%), the level of education was almost half as elementary as 12 respondents (46.1%), type most occupations as housewives were 816 respondents (61.5%), and most had a history of hypertension (61.5%).

3.1 Research Variable

Analysis of the Differences in Preit Post Test Post Test Treatment and Control Groups in the Pandanwangi Public Health Center

<p>| Table 5.3: Results of the analysis of pre-test eating arrangements post-test treatment and control groups in the working area of Pandanwangi Public Health Center Malang |
|--------------------------------|--------------------------------|--------------------------------|----------|</p>
<table>
<thead>
<tr>
<th></th>
<th>Kategori</th>
<th>Kelompok Perluakan</th>
<th>Kelompok Kontrol</th>
<th>Mann Whitney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td></td>
<td></td>
<td></td>
<td>a = 0.304</td>
</tr>
<tr>
<td>Kurang</td>
<td>8</td>
<td>31</td>
<td>10</td>
<td>38</td>
</tr>
<tr>
<td>Cukup</td>
<td>14</td>
<td>54</td>
<td>14</td>
<td>54</td>
</tr>
<tr>
<td>Baik</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Post test</td>
<td></td>
<td></td>
<td></td>
<td>a = 0.000</td>
</tr>
<tr>
<td>Kurang</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>38</td>
</tr>
<tr>
<td>Cukup</td>
<td>8</td>
<td>31</td>
<td>14</td>
<td>54</td>
</tr>
<tr>
<td>Baik</td>
<td>18</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Based on table 5.3 above, it is found that the regulation of dietary behavior in the treatment group of 14 respondents migrated in the sufficient and good category and none of the respondents was in the poor category. While in the control group there were no significant changes because the results obtained were the same ... from the table above it can be stated that the value of α = 0.000 means that H0 is rejected or the hypothesis is accepted so that there is a difference between the treatment group and the control group on the diets of hypertensive patients given health coaching with the theory of health belief model approach.

4. Discussion

Respondent's diet pattern before intervention is mostly found in sufficient category for the treatment and control groups. In the treatment group of respondents with less categories found 8 respondents (30.8%), enough categories found 14 respondents (53.8%), and good categories 4 respondents (15.2%). Whereas in the control group there were respondents with less categories found 10 respondents (38.5%), enough categories found 14 respondents (53.8%) and good categories found 2 respondents (7.7%).

This fact is in line with the results of Basic Health Research from the Ministry of Health of the Republic of Indonesia (2013) which shows that the population is categorized as sufficient in consuming vegetables and or fruits. Sumarman Research (2010) mentions the obstacle of hypertension sufferers implementing a low salt diet is the difficulty of changing high salt foods to low salt foods and for a long time or a lifetime. Similar to the results of research from Khan, Banawy, Mirza, Hussain, Khan, & Lashari (2014) which states that most of the non-adherent patients with hypertension are in dietary settings that can have an impact on the health of hypertensive sufferers, focus more on non-compliance with hypertension sufferers in limiting salt and...
In fact, hypertension sufferers already know that the food consumed should not contain a lot of salt and fat, increase the input of vegetables and fruit, but everyday hypertension sufferers are still difficult to go on a diet properly and stable. There are those who do not have an appetite if they are not tasty, and because these dietary arrangements must be done every day and for a lifetime, there are times when people with hypertension can manage the diet with a little sodium properly when motivation is high, sometimes not controlling the food when being lazy, being there is a celebration, a memorial day, and other activities that involve a lot of food.

The diet pattern of the treatment group after being given health coaching mostly had a good category of 18 respondents (69.2%) and for the control group it was found that most of the categories were 14 respondents (53.8%). Based on table 4.4 the test results obtained with Wilcoxon in the treatment group were found to be different between the pre-test and post-test patterns after the health coaching action. The results of the post test in the treatment group did not get even one respondent with a less category, this shows an increase in the category, namely respondents migrated in the category of good and enough. During the research, the process of filling in the pattern booklet was largely filled in correctly according to the column, organized, neat, routine, and filled in consciously not feeling burdensome. Some respondents, who are not good at writing, take the initiative to ask for help from the family to write down their patterns every day. Respondents themselves also felt helped by filling out this booklet because it could automatically control what food was consumed. For behavioral patterns of diits in the treatment group there was an increase in the category of respondents migrating in the sufficient and good category and none of the respondents was in the poor category.

Based on table 4.4, the test results obtained with Wilcoxon in the control group showed no difference in dietary patterns in the pre-test and post-test control groups. The absence of this difference can be seen from the presence of respondents in the control group with a less category. This can occur because a person will behave in accordance with the knowledge he has, behavior change also depends on the quality of the stimulus or stimulus provided, meaning that the quality of the communication source also determines the success of the behavior change (Notoatmodjo, 2014).

This result is also supported by demographic data of respondents who mostly have a job as a housewife, so information about hypertension diets obtained only comes from health workers when the posyandu is elderly or when respondents come for a check up at the puskesmas. Because most of the respondent's time is spent at home.

Increased diet pattern category in the treatment group in accordance with the theory that someone often tends to accept the words or views of people or other parties in the learning process, if that view is supported by the majority of groups or groups, then if someone has accepted the view, usually someone will agree with that view (Priyoto, 2014). Similar research from Kamran, Shekarchi, Sharifirad, Shariﬁan, & Shekarchi (2015) also states that knowledge about essential nutrients is given to people with hypertension in order to increase understanding of diet pattern regulation.

Health coaching provided with simple and practical health information is easier for respondents to follow and do. Health coaching is given directly to respondents in an applicative example of choosing the type of food along with the respondent, the number of servings allowed by giving a direct example of the size or dose that should be consumed, and recommended cooking methods for people with hypertension, simple activities that involve respondents directly more easily captured and remembered by respondents then easy to apply. This activity also involves the active role of the health cadre which is very helpful for direct involvement and motivating respondents.

The results of observing changes in the diet pattern of the treatment group after being given a health coaching intervention showed an increase in the good category, while in the control group there were still respondents in the poor category. Based on the initial interview at the identification stage of hypertension sufferers, it was found that the difficulty of changing eating habits that have been running for years can be one of the obstacles in changing diet patterns.

This fact is consistent with the theory of Huffman (2007) that Health Coaching is the practice of health education and health promotion with a view to improving individual health and to facilitate the achievement of health goals, which effectively motivates behavior change in a structured manner, through supportive relationships between participants and coaches. In line with research from Difran (2015) which states that coaching support can influence patient behavior in managing their disease.

Changes in dietary behavior in this study are dietary arrangements including the amount of consumption of sodium, carbohydrates, fruits, vegetables, side dishes, and fat. In this study, most respondents in the treatment group routinely filled out the diet pattern booklets because they felt helped, respondents also knew what types of food could increase and decrease their blood pressure, and respondents felt controlled so that they were more able to refrain from consuming excessive food.

5. Conclusions and Recommendations

5.1 Conclusion

There is an effect of providing health coaching with the health belief model approach with dietary regulation in the elderly who have hypertension with \( \alpha = 0.000. \)

5.2 Suggestion

1) People with hypertension are expected to have a blood pressure to control it

2) For Nurses

a) The results of this study can be used by nurses to modify nursing interventions by utilizing the diary method to improve the compliance behavior of patients with hypertension. Especially documentation of dietary settings because of the diversity of foods commonly consumed by people with hypertension.
b) Nurses can increase the self-efficacy of hypertension sufferers through public health center programs that involve hypertension sufferers such as the elderly.

c) Give rewards to hypertension sufferers who regularly come to the public health center by giving booklets.

3) Public health center can be used as a basis for program development by forming a support group to care for hypertension sufferers and involving cadres in it.

4) In further research, health coaching can be done in a more structured, routine, and scheduled manner in hypertensive patients so that results are more optimally.

References


Volume 8 Issue 11, November 2019

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