

Capacity Building for Health Cadres in Preventing Degenerative Diseases

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Abstract

Degenerative diseases are conditions that cause deterioration of cell and organ function, with high mortality rates. These diseases are closely related to modern lifestyles, including decreased diet and physical activity. The purpose of this activity is to provide counselling and education to the community of RW 07 Wonokromo Village regarding the prevention of degenerative diseases and increase the knowledge and awareness of the community regarding this matter. The activity was carried out by giving a pre-test to participants to measure their initial understanding of degenerative diseases. Furthermore, education was carried out using the lecture method using media such as laptops and LCD screens to facilitate visualisation of the material. After the delivery of the material, a question and answer session was held as a post-test to measure the increase in participants' knowledge. The programme was attended by 90 participants with various age ranges. The pre-test results showed that the participants still had minimal knowledge about degenerative diseases. After education, the post-test results showed a significant increase in knowledge ($p < 0.05$). The mean value of the pre-test was 68, while the post-test increased to 889, showing a significant increase. Education on degenerative diseases was effective in improving participants' knowledge. This activity is expected to be passed on by participants to the surrounding community to prevent degenerative diseases and maintain health. Obstacles faced such as inadequate venues can be overcome with better preparation in the future. Suggestions or Recommendations: It is recommended that education and counselling activities on degenerative diseases be carried out regularly, involving more people, and accompanied by more adequate facilities. In addition, further training for health cadres would help them become effective agents of education in the community.

Keywords: Degenerative diseases, Health cadres, Health education

1. Introduction

Degenerative diseases are health conditions that cause tissues or organs to deteriorate over time which will greatly affect a person's quality of life, and have a high mortality rate (1). Degenerative diseases are growing due to decreased physical activity, lifestyle, and diet (2). Degenerative diseases have a high mortality rate and can result in decreased productivity (3). Many degenerative diseases are caused by factors that have not yet been identified. Degenerative diseases can be prevented by minimising the risk factors that cause them (4). The emphasis on prevention and health promotion is also inseparable from disease problems due to behavioural and lifestyle changes as a result of increasingly rapid development in the era of globalisation (5). Some degenerative diseases in Indonesia such as diabetes mellitus, hypertension, and stroke are showing an increasing incidence (6).

These degenerative diseases are closely related to the changing lifestyle of modern society, especially the pattern of food intake which is increasingly leading to increased intake of ready-to-eat foods that are rich in energy and fat at increasingly low prices (7). This increasing trend is certainly worrying because, in modern society, excessive intake of calories and fat is not balanced with sufficient physical activity (8). Irregular lifestyles and instant diets are currently favoured by many people (9). This situation can lead to obesity and ultimately increase the risk of various degenerative diseases (10).

Hypertension is also one of the degenerative diseases with a high mortality rate (26.3%) after coronary heart disease and stroke (3). The prevalence of hypertension in Indonesia reaches 31.7% of the total population at the age of 18 years and above, and of the total number, 60% of hypertensive patients end up with stroke (11). Prevention of degenerative diseases is carried out through primary and secondary health care systems by professional organisations, researchers, universities and NGOs through promotive, preventive, curative and rehabilitative activities (12).

Prevention and control efforts include early detection, discovery and monitoring of risk factors for the incidence of degenerative diseases in healthy and at-risk individuals in the community (13). The prevalence of degenerative diseases, namely hypertension, diabetes mellitus, stroke, coronary heart disease and gout in the Wonokromo Surabaya Urban Health Centre working area is still high. This is due to the community's lifestyle, food intake, lack of physical activity, lack of knowledge about

stroke, and the absence of early detection efforts of degenerative diseases in the community. The purpose of the activity is to increase community knowledge in efforts to control risk factors for degenerative diseases in RW 07 Wonokromo Village, Surabaya City.

2. Methods

This community service activity was carried out on 1 June 2024 at RW 07 Wonokromo Village, the participants consisted of men and women who were members of the Elderly Posyandu. The initial step in the service activity process is to give an oral pre-test to the participants, related to matters relating to degenerative diseases. This aims to measure the extent of the participants' understanding. After the pretest, then proceed with education in the form of material delivery and using the lecture method. The material was delivered using a laptop and LCD screen. This is intended to make the process of transferring and visualising the material easier. The next stage was discussion and question and answer. The participants were invited to ask questions to the presenters or the service implementation team if there was still something they did not understand. The last stage is post-test or giving tests (questions) orally to the participants. This aims to measure the achievement of the objectives of the service activities as seen from the increase in the knowledge of the participants after being given education.

3. Results And Discussion

Education about degenerative diseases was held on 1 June 2024 who participated in this activity, namely 90 people with various age ranges. This service activity began with the introduction of the service team delivered by the village head, as well as thanking the service team for their willingness to provide education to the participants. The next stage is the delivery of material interspersed with games in the form of quizzes as a pretest. This is intended to measure the understanding of the participants and to encourage the participants not to be sleepy because it is done at night. The pretest results showed that the participants' knowledge about degenerative diseases was still very minimal.

Education about degenerative diseases is very much needed, as a promotive and

preventive effort from these diseases. The delivery of the material was done by lecture and using the help of PowerPoint. This made the participants look very enthusiastic because of the visualization of the material described. The use of PowerPoint in delivering the material is also supported by those who state that providing counselling using PowerPoint media can increase the knowledge of the elderly in Wonokromo Village.



Figure 1. Participants of Capacity Building Health Cadres RW 07 Wonokromo Village in the Prevention of Degenerative Diseases



Figure 2. Pre-Test and Post-Test of Capacity Building Participants of Health Cadres RW 07 Wonokromo Village in Degenerative Disease Prevention

Table 1. Characteristics of participants in the capacity building of health cadres of RW 07 Wonokromo Village in preventing degenerative diseases

No	Gender	Frequency	Percentage
1	Male	34	37,8%
2	Female	56	62,2%
No	Age Range	Frequency	Percentage
1	< 45 Years	10	11,1%
2	> 65 Years	18	20,0%
3	45 - 55 Years	34	37,8%
4	56 - 65 Years	28	31,1%
No	Profession	Frequency	Percentage
1	Housewife	21	23,3%
2	Private	23	25,6%
3	Retired	46	51,1%
Total		90	100,0%

The material presented was in the form of types of degenerative diseases, characteristics, risk factors and treatments that can be done (14). In addition, it was also explained that family history is also a trigger factor for degenerative diseases in the next generation (15). This is intended so that each participant can carry out independent

prevention and recognise early on. In this session, it was also conveyed that patients with degenerative diseases also need to make curative efforts to avoid complications from getting worse (16).

After the presentation of the material, a question and answer session was held. Questions and answers to participants were conducted as a post-test by asking several questions to participants. This aims to measure the success of this service activity. The post-test results showed that the participants were able to answer the questions given by the service presentation team (17). This means that the service activity has increased the knowledge of the participants. In addition, questions and answers were also asked by the participants to the service team, if there were things that the participants did not understand. Providing counselling in the form of health education to increase community knowledge the following is data from the initial test results before Capacity Building and the final test. This data consists of 10 questions that are normally distributed among 90 participants, here are the pretest and post-test data.

Table 2. Results of Pre-Test and Post-Test Capacity Building Health Cadres RW 07 Wonokromo Village in the Prevention of Degenerative Diseases

No	Knowledge	Pre-Test	Post Test
1	Definition of Degenerative Disease	56	84
2	Causes of Degenerative Diseases	70	89
3	Types of Degenerative Diseases	74	92
4	Prevention of Degenerative Diseases	65	87
5	Signs of Diabetes	68	90
6	Balanced Nutrition Management	67	85
7	Importance of Movement Activity	70	89
8	Diabetic Diet	73	90
9	Diabetes Treatment	74	91
10	Importance of Stress Management	63	92
Total		68	88,9

With the increase in knowledge of the participants, it is hoped that participants who have participated in this activity can pass on the knowledge they have gained to the surrounding community. In addition, the participants are also expected to be more aware of the importance of maintaining health and preventing complications. The obstacle faced during the service was the inadequate place. This can be seen from the results of the reflection. The results of the reflection concluded that a more comfortable and supportive place was needed so that the next community service activity could be even better.

Table 3. Paired Samples Statistics Pre-Test and Post Test Participants

Paired Samples Statistics	Mean	n	Std. Deviation
Pre_test	68	10	5,617433
Post_test	88,9	10	2,766867

Table 3 Paired Samples Statistics shows the descriptive value of each variable in paired samples. Pre-Test has a mean value of 68 out of 10 data. The data distribution (Std. Deviation) obtained is 5.618 while the pre-test has a mean value of 88.9 out of 10 data. The data distribution (Std. Deviation) obtained is 2.77. This shows that the final test data is higher than the initial test. However, the range of the final test data distribution is also getting smaller, this indicates an increase in knowledge related to Degenerative Disease Prevention. The following are Paired sample correlations to test the effect related to the implementation of Capacity Building Health Cadres RW 07 Wonokromo Village in Degenerative Disease Prevention.

Table 4. Paired Samples Correlations Pre-Test and Post-Test Capacity Building Health Cadres RW 07 Wonokromo Village in the Prevention of Degenerative Diseases

<i>Paired Samples Correlations</i>	n	<i>Correlation</i>	<i>Sig.</i>	<i>Sig 2 Tailed</i>
Pre_test & Post_test	10	0,643	0,0447	0,000

Table 4 shows the Paired Samples Correlations showing the correlation values that indicate the relationship between the two variables in the paired samples. This is obtained from the bivariate Pearson correlation coefficient (with a two-sided significance test) for each pair of variables entered in the Paired Samples Test table is the main table of the output which shows the results of the test conducted. This can be known from the significance value (2-tailed) in the table. The significance value (2-tailed) of this case example is 0.000 ($p < 0.05$). So that the results of the Pre-Test and the final post-test have a significant change (meaningful). Based on the descriptive statistics of the initial test and the final test, it is evident that the final test is higher. It can be concluded that Capacity Building Health Cadres RW 07 Wonokromo Village in Degenerative Disease Prevention increases the knowledge of participants.

4. Conclusions

Degenerative diseases are diseases that are difficult to correct, characterized by degenerative (deterioration of function) of cells and organs that are influenced by lifestyle. Extension of degenerative diseases followed by residents with enthusiasm and

enthusiasm which aims to make the community understand the scope of degenerative diseases and can prevent degenerative diseases early on. This community service activity can run smoothly because of the good cooperation between the service team and partners. In addition, the warm welcome from partners is also one of the factors for the smooth running of this community service activity. There has been an increase in the knowledge of the participants after being given education. The significance value (2-tailed) of this case example is 0.000 ($p < 0.05$). So that the results of the pre-test and the final post-test experienced significant changes (meaningful). Based on the descriptive statistics of the initial test and the final test, it is proven that the final test is higher. It can be concluded that Capacity Building Health Cadres RW 07 Wonokromo Village in Preventing Degenerative Diseases increases the knowledge of participants.

It is recommended that education and counselling activities on degenerative diseases be carried out regularly, involving more people, and accompanied by more adequate facilities. In addition, further training for health cadres will help them become effective agents of education in the community.

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