



Effectiveness of Training on Improving Knowledge of Non Communicable Diseases Cadres Rempoah Village Baturraden District Banyumas Regency

Eva Rahayu^{1*)}, Dhadhang Wahyu Kurniawan², Dalhar Shodiq³

¹ Nursing Department of Health Scienc Faculty, Jenderal Soedirman University, Indonesia

² Pharmacy Department of Health Science Faculty, Jenderal Soedirman University, Indonesia

³ Sociology Department of Social and Political Sciences Faculty, Jenderal Soedirman University, Indonesia

*Corresponding author: ummufawwaz.rahayu@gmail.com

Abstrak

Penyakit tidak menular (PTM) telah menjadi masalah kesehatan masyarakat secara global, regional, nasional dan lokal. Pemberdayaan masyarakat melalui Program Pos Pembangunan Terpadu (Posbindu) PTM adalah salah satu strategi dalam menekan jumlah insiden PTM. Pelatihan untuk kader PTM Posbindu diharapkan dapat menambah pengetahuan sasaran dalam mengorganisir Posbindu PTM di Kabupaten Banyumas. Tujuan penelitian ini adalah untuk mengetahui efektivitas pelatihan peningkatan pengetahuan kader PTM Posbindu di Desa Rempoah, Kabupaten Banyumas. Penelitian ini menggunakan desain pra-eksperimental. Populasinya adalah kader PTM Posbindu di Desa Rempoah, Kabupaten Banyumas. Metode pengambilan sampel menggunakan teknik random sampling dengan jumlah sampel 20 orang. Analisis data menggunakan uji wilcoxon. Hasil penelitian menunjukkan nilai p pengetahuan sebelum dan sesudah pelatihan adalah: 0,000. Kesimpulan dari penelitian ini adalah pelatihan kader efektif meningkatkan pengetahuan kader PTM Posbindu.

Kata kunci: Kader, pengetahuan, PTM Posbindu

Abstract

Non-communicable diseases (PTM) have become a public health problem globally, regionally, nationally and locally. Community empowerment through the Integrated Development Post Program (Posbindu) PTM is one of the strategies in suppressing the number of PTM incidents. Training for Posbindu PTM cadres is expected to increase their knowledge in organizing Posbindu PTM in Banyumas Regency. The purpose of this study was to determine the effectiveness of training on increasing the knowledge of PTM Posbindu

Cadres in Rempoah Village, Banyumas Regency. This study used a pre-experimental design. The population was the cadres of Posbindu PTM in Rempoah Village, Banyumas Regency. The sampling method is using random sampling technique with a sample size of 20 people. Data analysis using wilcoxon test. The results showed the p value of knowledge before and after training was: 0,000. The conclusion of the study was cadre training effective increased the knowledge of PTM Posbindu Cadres.

Keywords: *Cadres, knowledge, Posbindu PTM*

1. INTRODUCTION

Non-communicable diseases (PTM) have become a public health problem globally, regionally, nationally and locally. World Health Organization (WHO, 2010) reports that 60% of the causes of death of all ages in the world are due to PTM. Inonesia is also one of the countries that has a high prevalence of PTM. The Ministry of Health (Ministry of Health, 2013) reports that the prevalence of asthma, COPD, and cancer in Indonesia based on diagnosis are 4.5%, 3.7% and 1.4 per mile, respectively. The prevalence of DM and hyperthyroidism in Indonesia based on diagnosis or symptoms is 2.1% and 0.4%. The prevalence of hypertension at the age of ≥ 18 years in Indonesia based on the results of measurements at the age of ≥ 18 years by 25.8%. The prevalence of coronary heart disease based on doctor's diagnosis or symptoms is 1.5%. The prevalence of heart failure based on doctor's diagnosis or symptoms is 0.3%. The prevalence of stroke in Indonesia based on diagnosis by health professionals or symptoms is 12.1 per mile. The prevalence of chronic kidney failure based on a doctor's diagnosis in Indonesia was 0.2% and kidney stone disease was 0.6%. The prevalence of joint disease based on diagnosis or symptoms is 24.7%.

The prevalence of PTM in Central Java also continues to increase. The prevalence of stroke in Central Java is a doctor's diagnosis or symptom is 12.3 per mile. The prevalence of heart failure based on doctor's diagnosis or symptoms is 0.3%. The prevalence of hypertension at the age of ≥ 18 years in Central Java based on the results of measurements at the age of ≥ 18 years by 26.4%. The prevalence of DM in Central Java based on diagnosis or symptoms is 1.9%. The prevalence of asthma, COPD and cancer based on diagnosis or symptoms is 4.3%, 3.4% and 2.11%. The prevalence of chronic kidney failure based on a doctor's diagnosis in Central Java was 0.3% and kidney stone disease was 0.8%. The prevalence of joint disease based on diagnosis or symptoms of 5.5% (Ministry of Health, 2013).

PTM incidence in Banyumas Regency also needs serious attention. In 2010, hypertension was the highest compared to other PTM, in 22,143 cases, followed by diabetes mellitus in 4619 cases. The incidence of stroke in Banyumas Regency is also a health problem in the region, because according to the Profile of the Banyumas DKK (2010, 2011) in 2010, stroke cases ranked 6th of non-communicable diseases that occurred in Banyumas Regency, which were 1052 cases, and in 2011 stroke was ranked 7th of non-communicable diseases in Banyumas with 616 cases.

Data from the Banyumas District Health Office (DKK) in 2012 showed that PTM which suffered the most was essential hypertension, with 7976 cases, Asthma bronchiale 2315 cases. The proportion of type 2 diabetes mellitus was ranked 6th of the total non-communicable diseases in the Banyumas Regency Region which was 6.91%. (DKK Banyumas, 2012). Whereas in January to September 2013, the most cases of PTM in this district were still dominated by essential hypertension, namely 6320 cases, bronchial asthma with 2694 cases and subsequently Traffic Accidents (KLL) as many as 1766 cases.

One effort to improve the degree of public health in the prevention and control of non-communicable diseases is to empower the community in its implementation. The government has developed the Posbindu PTM program which previously had been developed a control effort with the concept of Posbindu Elderly which carried out screening activities for Risk Factors for Cardiovascular Disease. The screening activities include early detection, monitoring and follow-up of the results of measurements of risk factors for heart disease and blood vessels. While at Posbindu PTM, the screening activities carried out, in addition to covering heart and blood vessel disease, also included several PTM problems, including cancer, chronic obstructive pulmonary disease (COPD) and disorders due to accidents. In its implementation, Posbindu PTM cadres have a very important role. Therefore, to support the role of the cadre, there needs to be an intensive guidance effort for cadres about PTM and the implementation of PTB Posbindu (Ministry of Health, 2012).

Rempoah Village is one of the villages located in Baturraden District, Banyumas District. At present, Rempoah Village has Posbindu PTM namely Posbindu PTM Bina Kasih which was formed in February 2014, in addition, Rempoah Village also has an Elderly Posyandu. In its implementation, Posbindu PTM Bina Kasih was held at 6 Posbindu PTM Poses scattered in 6 RWs, as well as integrated in the activities of Elderly Posyandu. The number of cadres of Posbindu PTM and Posyandu Elderly that has been formed is 30 cadres. Posbindu PTM activities were held once in February 2014 in each RW, but the activities carried out were not fully in accordance with the standards of the Posbindu PTM activities that the government announced. According to the PTM post of Rempoah postbindu in February 2014, a total of 83 Rempoah villagers suffered from hypertension, 85 people suffered from joint disease, 20 people suffered from diabetes mellitus, and 19 people had cholesterol levels > 200 mg / DL. Based on the results of the preliminary study, the research on the effectiveness of cadre training on increasing the knowledge of postbindu cadres of non-communicable diseases Rempoah Village, Baturraden District, Banyumas Regency needs to be done.

2. OBJECTIVE

The purpose of this study was to determine the effectiveness of cadre training on increasing the knowledge of PTM Posbindu Cadres.

3. METHODS OF IMPLEMENTATION

Community service starts with the process of making media in the form of science and technology audiovisualization, learning modules and turning sheets for cadres. The videos made in this scheme consist of 2 types, namely a video about the implementation of Posbindu PTM and a video about the examination and measurement of PTM risk factors. The making of a video for the holding of Posbindu PTM began with the search for the cast. In this case, the servants worked in cooperation with Posbindu PTM Cadres in Healthy Mandiri Kalimanah Kulon Village, Kalimanah Subdistrict, Purbalingga Regency, where the Posbindu is a pilot Posbindu PTM in Purbalingga Regency. The next step is the preparation of scripts and the same perception with the cast. The process of taking pictures and audiovisualization in the region was carried out on August 14, 2015.

The second audiovisualization video is about procedures for examining and measuring PTM risk factors. As in the first science and technology audiovisualization media, the second video making process begins with the search for the cast, the team from the Nursing Community Community Laboratory in Nursing. The next step was making scripts and then taking pictures. The second process of taking pictures and audiovisualization was carried out on August 15, 2015. At this time, the two videos that

have been arranged in the form of VCDs are being proposed to the LPPM Unsoed to obtain HAKI.

Other preparations made by devotees were making 3 learning modules for Posbindu PTM cadres. The modules contain about: the process of organizing PT Posbindu PTM, procedures for measuring and examining PTM risk factors as well as about counseling procedures for Posbindu PTM cadres. The module contains the information needed by the cadres who are accompanied by pictures that are easily understood by them.

In addition, the service team also made flipchart media that would be used by cadres in the process of implementing Posbindu. The flip sheet consists of a flip sheet about nutritional counseling, a flip sheet about quitting smoking counseling, a flip sheet about physical activity and a flip sheet about stress management.

The core activity of this service is the implementation of training for Posbindu PTM cadres and Posyandu Elderly Bina Kasih Rempoah Village, Baturraden District. The dedication activity was held on September 2, 2015 at Karang Resto Resto Garden Restaurant. A total of 20 cadres attended the training. The training process begins with a written pre-test, then provides classical material about the implementation of PTB postbindu, types of PTM, risk factors and ways of measuring risk factors, and counseling on risk factors for PTM. The training ended with a written post-test. Data analysis used the Wilcoxon test as an alternative t-test paired test because the data was not normally distributed.

4. RESULT AND DISCUSSION

Bivariate analysis is done by comparing the mean knowledge of cadres before the intervention with after giving the intervention. Wilcoxon test results on the effectiveness of training on the knowledge of Posbindu PTM cadres can be seen in table 1 below:

Table 1. Wilcoxon analysis results on cadre knowledge

| Knowledge | Mean | Median | Min-Max | P value |
|------------------|-------|--------|---------|---------|
| - Measurement I | 60,95 | 60 | 40-86 | 0.000 |
| - Measurement II | 78,70 | 80 | 53-93 | |

The results of the pre-test and post-test showed an increase in the knowledge of the cadres, where before the training, the average knowledge of all cadres present was 60.95 with a median of 60 and a minimum-maximum value: 40-86 . After the training, there was an increase in their knowledge with an average knowledge of 78.7 with a median of 80 is obtained, and a minimum minimum value of 53-93. Bivariate test results obtained $p = 0.000$ ($p < 0.01$). It can be concluded that there are significant differences between knowledge in the first measurement (before treatment) and the second measurement (after treatment). These show that cadre training has a significant effect on increasing the knowledge of Posbindu PTM cadres in Rempoah Village. The findings in this study are in line with Fatmah's (2013) study which found that there was an increase in cadre knowledge after receiving technical training of Counseling of Obesity and Hypertension of Posbindu Cadres in Depok City.

The current problem is the high level of community behavior that leads to an increase in PTM risk factors and the prevalence of PTM which is increasing from year to year. Various problems related to PTM will not occur if the community is willing and able to make efforts to prevent and control PTM by controlling various PTM risk factors and can utilize various available health facilities. The role of various sectors as well as all

levels of society is needed in efforts to prevent and control PTM in the community, so that it will avoid delays in handling which will minimize various complications, disability and even death due to PTM in the Posbindu PTM container. Efforts sourced from the community generally strengthen health personnels so that the community can also be involved in controlling non communicable disease one of which is through health cadres, which should be considered as partners and colleagues. Health cadres are members of the community trusted to be the manager of public health endeavor (Notoatmodjo, 2010).

The Posbindu PTM program rolled out by the government has the main activity of early detection of PTM risk factors by cadres or trained health workers. Enhancing the knowledge and skills of Posbindu cadres and Posyandu elderly Bina Kasih after participating in training is expected to have a positive impact on efforts to prevent and control various non-communicable diseases in society. This is in accordance with WHO recommendations that centralization of PTM countermeasures is carried out through three main components, namely risk factor surveillance, health promotion and prevention as well as innovation and health service management reforms that are applied in an integrative / integrated and comprehensive / comprehensive manner. Efforts that are carried out integrally both by the government and other sectors as well as efforts to empower the community are expected to be able to reduce the morbidity and mortality rates due to PTM in the community (Ministry of Health, 2012).

5. CONCLUSION

Based on the activities carried out above, the following conclusions can be concluded:

- a. There is an increase in the knowledge of Posbindu PTM cadres and Posyandu Elderly cadres about the organization of Posbindu PTM.
- b. There is an increase in the knowledge of Posbindu PTM cadres and Posyandu Elderly cadres about PTM and PTM risk factors.
- c. There is an increase in the knowledge of Posbindu PTM cadres and Elderly Posyandu cadres about the measurement and examination of PTM risk factors.
- d. There is an increase in the knowledge of Posbindu PTM cadres and Posyandu Elderly cadres about PTM counseling.
- e. Several media have been organized in the administration of Posbindu PTM (science and technology VCDs, module books and turning sheets).

Suggestions for health practice future:

- a. There is a need for ongoing and continuing activities to be able to improve and refresh the knowledge and skills of Posbindu PTM cadres and Elderly Posyandu about PTM and its prevention and control in the community.
- b. Need support from various sectors in order to achieve optimal prevention and control of PTM in the community.

6. ACKNOWLEDGMENT

We would acknowledge to The Ministry of Rsearch, Technology and Higher Education for funding via Ipteks Berbasis Masyarakat Grand scheme.

7. REFERENCES

Dinas Kesehatan Kabupaten Banyumas. 2010. *Profil kesehatan Kabupaten Banyumas tahun 2010*.

-----, 2011. *Profil kesehatan Kabupaten*

Banyumas tahun 2011.

-----, 2012. *Profil kesehatan Kabupaten Banyumas tahun 2012*

-----, 2013. *Profil kesehatan Kabupaten Banyumas tahun 2012.*

Fatmah. 2013. *Pengaruh pelatihan pada peningkatan pengetahuan dan keterampilan teknis penyuluhan obesitas dan hipertensi kader posbindu Kota Depok.* Makara Seri Kesehatan, 2013, 17(2): 49-54

Kementrian Kesehatan, R.I. 2007. *Riset kesehatan dasar : Riskesdas 2007.* Jakarta : Badan Penelitian Dan Pengembangan Kesehatan.

-----, 2012. *Buku pintar kader posyandu PTM.* Jakarta : Direktorat Pengendalian Penyakit Tidak Menular.

-----, 2013. *Riset kesehatan dasar : Riskesdas 2013.* Jakarta : Badan Penelitian Dan Pengembangan Kesehatan.

Notoatmodjo, S. 2010. *Promosi kesehatan teori dan aplikasinya (edisi revisi).* Jakarta: Rineka Cipta.

Rahayu, E., Kamaluddin, R., Sumarwati, M., (2014). *Pengaruh program edukasi self management intervention berbasis keluarga terhadap kualitas hidup penderita DM.* Jurnal Keperawatan Soedirman, ISSN 1907-6673, Volume 9, No.3, Nopember 2014

World Health Organization. 2010. *Global Health Observatory (GHO)of Non Communicable Disease. World Health Organization: Geneva*

World Health Report. 2010. *Global Health Observatory (GHO)of Non Communicable Disease.* <http://www.who.int/gho/ncd/en/>diperoleh tanggal 20 April 2014