

TRAINING FOR HEALTH CADRES IN CONTROLLING RISK FACTORS FOR NON- COMMUNICABLE DISEASES AS AN EFFORT TO REALIZE A HEALTHY PRODUCTIVE AGE

By Ratna Yunita Sari et al

TRAINING FOR HEALTH CADRES IN CONTROLLING RISK FACTORS FOR NON-COMMUNICABLE DISEASES AS AN EFFORT TO REALIZE A HEALTHY PRODUCTIVE AGE

Ratna Yunita Sari^{1*}, Riska Rohmawati¹, Imamatul Faizah¹, Siti Nur Hasina¹,
Rahmadaniar Aditya Putri¹

¹Nursing Department, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama
Surabaya, East Java Province, Indonesia

* Correspondence

Ratna Yunita Sari

²Nursing Department, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, East Java

¹⁹Province, Indonesia

Jalan SMEA No. 57, Surabaya City, East Java Province, Indonesia, 60243

Email: ratna@unusa.ac.id

Received: January, 30th, 2023; **Revised:** -; **Accepted:** May, 30th, 2023

ABSTRACT

The significant increase in the incidence of Non-Communicable Diseases and progressive diseases makes the burden increase for the community and the government, as a result, the handling of the disease takes a long time, and the cost of treatment is large, causing individuals to become unproductive or less productive and the highest cause of death. Non-communicable diseases can be prevented by controlling risk factors. This service activity has the aim of increasing the knowledge and skills of health cadres in controlling non-communicable disease risk factors in an effort to realize a healthy productive age. Community service activities are carried out in the area of RW 05, Wonokromo Village, Surabaya City. The method of carrying out activities uses a participatory approach by way of lectures, discussions, brainstorming, and direct demonstrations to increase the knowledge of cadres in non-pharmacological therapy in the prevention of PTM. This activity was held in June-July 2022 and was attended by 15 cadres. The results of the evaluation of the training activities obtained an increase in knowledge and skills as indicated by the pretest results of 60% increasing to 80% posttest results and an increase in good cracks where cadres can check blood pressure, temperature measurement, height measurement, weight measurement, abdominal circumference, check blood sugar, uric acid, and check cholesterol independently and in accordance with standard operating procedures and most of the cadres are able to provide counseling to residents, so that it is hoped that this will reduce the incidence of non-communicable diseases and maintain the health status of residents in their target areas.

Keywords: Health Cadres; Non-Communicable Diseases; Promotive Efforts; Productive age

INTRODUCTION

Non-communicable diseases (NCDs) are a distinct threat to the 2030 sustainable development agenda in low- and middle-income countries. The World Health Organization's (WHO) report stated that the increase in the number of cases of non-communicable diseases was largely contributed to cardiovascular disease, diabetes, and cancer (Purnamasari, 2018; Sari & Faizah, 2020; Sujarwoto & Maharani, 2022). In the 2018 Riskesdas survey it was reported that there is a shift in the age of PTM sufferers to a younger age, with a prevalence increase of up to 26 times at productive age (33-35 years). Of the Non-communicable diseases (NCDs) types that cause death in the world, the majority are caused by heart and blood vessel disease by 17.9 million people, below that to cancer by 90 million people, respiratory diseases by 3.9 million, and diabetes mellitus by 1.6 million and predicted there will be an increase of 52 million people will die in 2030. The prevalence of this data is not much different from the cases of NCDs in Indonesia. Research shows that there is an increase in the prevalence of cancer cases by 0.4%, stroke by 3.9%, chronic kidney failure by 1.8%, diabetes mellitus by 1.6%, and hypertension by 8.3%. Whereas for the East Java Province, it shows that NCDs has increased such as diabetes mellitus at 2.3% and hypertension at 8.2% (Ministry, 2018). The increasing frequency of NCDs cases has made PTM a target in the 2030 Sustainable Development Goal (SDGs), which is to reduce up to 23% of premature deaths due to non-communicable diseases.

Integrated Non-Communicable Diseases Foster Post (Posbindu NCDs) is a community-based health effort to implement efforts for early detection and monitoring of NCD risk factors under the

guidance of community health centers with the main target being people aged ≥ 15 years who are in the healthy category or who have NCDs risk factors, which is carried out through strengthening promotion, prevention in an integrated, sustainable and consistent manner where the government has made a breakthrough in the Posbindu NCDs program since 2012 (Kementerian Kesehatan Republik Indonesia, 2014; Setiawan et al., 2022). Posbindu NCDs can be implemented properly and independently if it is supported by health cadres who understand their duties and have the appropriate skills to reduce the increase in NCDs cases with early detection in the community through POSBINDU by assessing a person's risk of non-communicable diseases using a questionnaire, including detection of hypertension and diabetes mellitus. The detection of risk factors is then confirmed by checking blood pressure and blood tests using simple tools to confirm the diagnosis. These activities require the skills of health cadres in running POSBINDU. Based on this urgency, it is necessary to empower cadres at POSBINDU to be able to detect NCDs early in the community with the hope that it can improve public health status.

Based on the results of observations and interviews in RW 05, Wonokromo Subdistrict, there are 30 health cadres, but most of the cadres have never received POSBINDU training and still lack knowledge about non-communicable diseases. So that the implementation of POSBINDU is constrained by staff who have not been able to carry out the 5 (five) service table stages at POSBINDU which include knowledge and skills in early detection of NCDs. Based on this, this service aims to empower the community through training health cadres to train

health cadres in controlling non-communicable disease risk factors in an effort to realize a healthy productive age by optimizing POSBINDU activities in RW 05 Wonokromo Village, Surabaya City.

Based on the findings of the situation in the area, the service team will contribute to carrying out Community Partnership Program (25 KM) activities as an effort to increase the knowledge and skills of cadres and maintain the health status of residents by providing education and training for health cadres regarding NCDs as an optimization of POSBINDU activities in the area of RW 05, Wonokromo Village, Surabaya City. The output target of this activity is the development of cadres and outreach to residents to increase knowledge about controlling NCDs risk factors to realize productive age to remain healthy.

OBJECTIVES

General Purpose

The purpose of this community service activity is expected to increase the knowledge of health cadres about controlling non-communicable disease (NCD) risk factors to create a healthy productive age. The implementation of this community service has received approval from Nahdlatul Ulama University in Surabaya with an assignment letter number 603/UNUSA-LPPM/Adm-E/IV/2022.

Special Purpose

After carrying out community service activities, it is expected that health cadres will be able to:

1. Increase understanding of policies for prevention and early detection of non-communicable diseases (hypertension, stroke, diabetes mellitus, COPD, and hepatitis), the current situation of NCDs, measurement of risk factors for non-communicable diseases, measurement of non-communicable

diseases, symptoms, and signs of NCDs

2. Understand non-pharmacological therapy methods in preventing or controlling risk factors for non-communicable diseases such as hypertension exercises, foot exercises, and Spiritual Emotional Freedom Technique (SEFT) therapy

PLAN OF ACTION

Strategy Plan

The method used in implementing community service is a participatory approach which will be held in June until July 2022 with solutions that have been agreed upon by the service team and partners in overcoming problems according to the results of the situation analysis by carrying out counseling and training activities in increasing the knowledge and skills of health cadres, improving public knowledge about controlling risk factors for non-communicable diseases (NCD) as an effort to create a healthy productive age. The stages of the dedication method are as follows:

1. Training: Training is conducted for 3 days with a total of 15 hours of lessons (theory, demonstration, and simulation). Materials include policies on prevention and early detection of NCDs, current NCDs situation, measurement of NCDs risk factors, measurement of NCDs, symptoms, and signs of PTM, non-pharmacological therapy training in preventing NCDs such as hypertension exercises, foot exercises, and Spiritual Emotional Freedom Technique (SEFT) therapy)
2. Counseling: Counseling about PTM to residents is carried out after training activities for health cadres. Where the giving of education will be carried out by health cadres who have been trained and accompanied by a service team.
3. Post-activity: At this stage, an evaluation is carried out with discussion

and post-test and continued with the preparation of a follow-up plan for this service.

Implementation

The implementation of service activities in its first implementation is to coordinate the implementation of activities, prepare the infrastructure needed to carry out activities and carry out activities according to the planned time. The implementation of this community service has received approval from Universitas Nahdlatul Ulama Surabaya with letter of assignment number 603/UNUSA-LPPM/Adm-E/IV/2022

Setting

This community service activity will be held from June until July 2022 at Balai RW 05, Wonokromo District, Surabaya, East Java, Indonesia. The activity was carried out in that place because there were facilities and infrastructure to support the activity (large room, LCD, laptop) and the location was easily accessible by cadres and residents.

Target

The target of this community service activity is 15 health cadres of RW 05, Wonokromo Village, Wonokromo District, Surabaya.

RESULTS AND DISCUSSION

Community service activities with the theme "Training for Health Cadres in Controlling Risk Factors for Non-Communicable Diseases (NCDs) as an effort to Realize a Healthy Productive Age" was carried out in Juni-Juli 2022 in the RW 05 area of Wonokromo Village, Surabaya City. In the training activities which were carried out for 3 days with 15 JPL (1 lesson hour = 45 minutes). Materials taught include policies on prevention and early detection of NCDs, current NCDs situation, measurement of NCDs risk factors, measurement of NCDs, symptoms, and signs of NCDs, non-pharmacological therapy training in preventing NCDs such as hypertension exercises, foot exercises, and

Spiritual Emotional Freedom Technique therapy (SEFT). The training was held at Balai RW 05 Wonokromo Village, Wonokromo District, Surabaya.

In the implementation activities, the attendance of the training participants was 100%, and the maximum attendance target was reached there was an increase in the knowledge of health cadres, increasing from initially some (54%) sufficient knowledge to almost all (98%) good knowledge and where the training background resource persons internal medicine specialist and medical surgical nursing lecturer. All training participants attended the entire series of training with high enthusiasm. This success was inseparable from the support of good training management and professional resource persons. This is under the statement (Chaghari et al., 2017) which states that the success of training is primarily determined by training management. The characteristics of the health cadres who were trained in the RW 05 area of Wonokromo Village can be seen in table 1.

Table 1. Characteristics of Cadres and Citizens

Variable	Respondent n (65)	
	f	%
Age		
Late adulthood (36-45 years)	3	20
Early seniors (46-55 years)	8	53.3
Late seniors (56-65 years)	4	26.7
Level of education		
Elementary Education	3	20
Secondary Education	10	66.67
Higher Education	2	13.3
Employment status		
Working	2	13.33
Not working	13	86.67

Source: Primary Data 2022

Based on table 1. it can be seen that the majority of the training participants who took part in community service activities (53.3%) were aged 46-55 years with an educational background Most (66.67%)

were with secondary education level and almost all were health cadres doesn't work.

Table 28 Improving the knowledge and skills of pre-test and post-test health cadres

Knowledge	Category	n	p (%)
Pre-Test	Less	9	60
	Enough	3	20
	Good	3	20
Post-Test	Less	7	6.7
	Enough	13	13.3
	Good	30	80

Table 2 shows that there is an increase in the knowledge of community health cadres about the material provided during training related to NCDs prevention and early detection policies, the current NCDs situation, measurement of NCDs risk factors, measurement of NCDs, symptoms, and signs of NCDs, non-pharmacological therapy training in preventing PTM such as hypertension exercises, foot exercises, and Spiritual Emotional Freedom Technique (SEFT) therapy found that before the training the level of knowledge and skills of the residents was in the less (70%) category and after being explained counseling activities, the level of knowledge and skills increased to almost all (80%) belong to good knowledge. During the training, the cadres were very enthusiastic about the activities carried out, the provision of material was felt to be very supportive of abilities that later could be applied during POSBINDU activities and educated the assisted members to maintain their health status by preventing and controlling NCDs risk factors. This is supported by a statement from Van den Broucke (2020) that the more one's knowledge or understanding of one's health status increases, the better one's way of looking at the concepts of health and illness. The

success of an activity carried out is also inseparable from the material delivered according to the needs of the target so that the message to be conveyed can be received and welcomed.



Figure 1. Health Cadre Training Activities (1)



Figure 1. Health Cadre Training Activities (2)

Training is one of the activist efforts that can increase knowledge and skills, cadres are trained to add knowledge and skills in preventing and controlling NCDs and implementing NCDs Posbindu so that the implementation of NCDs Posbindu can be carried out in accordance with the provisions. This is in line with the statement of Untari et al., (2017) that the knowledge and skills of cadres can increase well after being given training using student center learning methods or media that can provide a real picture, direct service practice.

The training activities for health cadres have been completed, followed by providing education to the residents of RW 05 Wonokromo Subdistrict, Surabaya City

about NCDs and how to prevent and control NCDs so they can maintain their health in their productive age. Health cadres are allowed to provide counseling and examiner materials during health check-ups for residents in detecting NCDs who are accompanied by a service team as an initiation from the training outcomes that have been carried out.



Figure 3. Outreach to Residents Figure



Figure 3. Free Health Checkup

The counseling activities carried out as a result of the initiation of the training activities were enthusiastically welcomed by the residents with a total participation of 70. After the training activities were given, it was hoped that the health cadres would be able to run POSBINDU actively to improve the community's health status through routine educational activities and early detection of NCDs in the community in the

context of prevention and NCD control in the community.

CONCLUSION

Training activities carried out for health cadres can increase knowledge and skills in controlling risk factors for non-communicable diseases (NCD) in an effort to realize a healthy productive age. Training activities are also a provision for cadres in carrying out early detection of NCDs which are useful in maintaining the health status of their productive age members.

REFERENCES

- Chaghari, M., Saffari, M., Ebadi, A., & AMERYOUN, A. (2017). Empowering Education: A New Model for In-service Training of Nursing Staff. *Journal of Advances in Medical Education & Professionalism*, 5, 26–32.
- Kementerian Kesehatan Republik Indonesia. (2014). *Pedoman umum pos pembinaan terpadu penyakit tidak menular*. Kementerian Kesehatan Republik Indonesia. <http://p2ptm.kemkes.go.id/dokumen-p2ptm/pedoman-umum-pos-pembinaan-terpadu-penyakit-tidak-menular>
- Purnamasari, D. (2018). The Emergence of Non-communicable Disease in Indonesia. In *Acta medica Indonesiana* (Vol. 50, Issue 4, pp. 273–274).
- Sari, R. Y., & Faizah, I. (2020). Resistance Exercise Influence on Diabetic Neuropathy Improvement in Type 2 DM Patients. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, 10(3), 395–406.
- Setiawan, E., Nurjannah, N., Komaryani, K., Nugraha, R. R., Thabrany, H., Purwaningrum, F., & Sarnianto, P. (2022). Utilization patterns of healthcare facility and estimated

expenditure of PLHIV care under the Indonesian National Health Insurance Scheme in 2018. *BMC Health Services Research*, 22(1), 97. <https://doi.org/10.1186/s12913-021-07434-9>

Sujarwoto, & Maharani, A. (2022). Participation in community-based healthcare interventions and non-communicable diseases early detection of general population in Indonesia. *SSM - Population Health*, 19, 101236. <https://doi.org/10.1016/j.ssmph.2022.101236>

10 Untari, I., Prananingrum, R., & Kusudaryati, D. P. D. (2017). Peningkatan pengetahuan dan ketrampilan kader dalam pelayanan posyandu balita melalui pelatihan dengan metode student center learning. *URECOL*, 15–18.

TRAINING FOR HEALTH CADRES IN CONTROLLING RISK FACTORS FOR NON-COMMUNICABLE DISEASES AS AN EFFORT TO REALIZE A HEALTHY PRODUCTIVE AGE

ORIGINALITY REPORT

19%

SIMILARITY INDEX

PRIMARY SOURCES

1	repository.unej.ac.id Internet	75 words — 3%
2	journal2.unusa.ac.id Internet	38 words — 1%
3	www.coursehero.com Internet	37 words — 1%
4	bmchealthservres.biomedcentral.com Internet	32 words — 1%
5	www.scirp.org Internet	31 words — 1%
6	Riesmiyatiningdyah Riesmiyatiningdyah, Connie Wahyu Wijianti, Sinta Nuriyah, Lidia Getreda Masela et al. "IMPROVED KNOWLEDGE OF YOUNG GIRL ABOUT MENARCHE IN THE RANGKAH KIDUL ELEMENTARY SCHOOL, RANGKAH KIDUL VILLAGE, SIDOARJO SUB-DISTRICT, SIDOARJO DISTRICT, EAST JAVA PROVINCE", Community Service Journal of Indonesia, 2019 Crossref	30 words — 1%
7	poltekkespalu.ac.id Internet	

30 words — 1%

8 conferences.unusa.ac.id
Internet

29 words — 1%

9 knepublishing.com
Internet

25 words — 1%

10 jurnal.poltekkespalu.ac.id
Internet

24 words — 1%

11 Dafrosia Darmi Manggasa, Dewi Nurviana Suharto, Raden Bagus Bambang Hermanto, Ni Nyoman Aldina. "Assistance of health cadres to improve the ability of tuberculosis contact investigation", Community Empowerment, 2021
Crossref

20 words — 1%

12 jurnal.stikesmm.ac.id
Internet

17 words — 1%

13 Sujarwoto, Asri Maharani. "Participation in community-based Healthcare Interventions and non-communicable diseases early detection of general population in Indonesia", SSM - Population Health, 2022
Crossref

16 words — 1%

14 journal.poltekkesdepkes-sby.ac.id
Internet

16 words — 1%

15 Dianita Sugiyo, Himas Surya Adikumoro, Winda Setyadewi, Ridwan Riyadianto et al. "'How Do You Communicate The Non-Communicable Diseases?' A Community Empowerment For Sustained Public Health", STRADA Jurnal Ilmiah Kesehatan, 2020
Crossref

15 words — 1%

- 16 sinta.ristekbrin.go.id Internet 15 words — 1%
-
- 17 jnk.phb.ac.id Internet 14 words — < 1%
-
- 18 Hesti Kurniasih, Melyana Nurul Widyawati, Kurnianingsih Kurnianingsih. "Mobile application for early detection of non-communicable diseases", MEDISAINS, 2022
Crossref 13 words — < 1%
-
- 19 Abdul Muhith, Indira Yulias Wihannusa, Siti Nur Hasina, Imamatul Faizah, Ratna Yunita Sari. "ORGANIZATIONAL COMMITMENT WITH QUALITY OF NURSING IN THE RSI SAKINAH MOJOKERTO", Nurse and Health: Jurnal Keperawatan, 2022
Crossref 12 words — < 1%
-
- 20 Aji Kusumaning Asri, Hsiao-Yun Lee, Chih-Da Wu, John D. Spengler. "How does the presence of greenspace related to physical health issues in Indonesia?", Urban Forestry & Urban Greening, 2022
Crossref 12 words — < 1%
-
- 21 www.alliedacademies.org Internet 11 words — < 1%
-
- 22 R Fachrizal, N M Ginting, Nurliah, A Rizal, N Panga. "The potential of sago processing in supporting farmers' welfare", IOP Conference Series: Earth and Environmental Science, 2022
Crossref 10 words — < 1%
-
- 23 journal.um-surabaya.ac.id Internet 10 words — < 1%

24 Danny Putri Sulistyaningrum, Maya Cobalt Angio Septianingtyas, Tia Nurhanifah, Naylul Izza. "The Effect of Using Fluid Balance Application on Interdialytic Weight Gain in Stage V Chronic Kidney Disease Patients Undergoing Hemodialysis", Babali Nursing Research, 2023

8 words — < 1%

Crossref

25 Tria Firza Kumala, Asep Badrujamalludin, Teguh Akbar Budiana. "Cultivation of Oyster Mushrooms and Making Fried Oyster Mushrooms to Promote Health Efforts of Patients with Tuberculosis", KnE Life Sciences, 2021

8 words — < 1%

Crossref

26 jmk.stikesmitrakeluarga.ac.id

Internet

8 words — < 1%

27 journal.unnes.ac.id

Internet

8 words — < 1%

28 Julia A. Kordsmeier, Christopher Ty Williams, Angelina Anthamatten. "Teamwork and Oral Health in Diabetes Care", Journal of Doctoral Nursing Practice, 2020

6 words — < 1%

Crossref

EXCLUDE QUOTES OFF

EXCLUDE SOURCES OFF

EXCLUDE BIBLIOGRAPHY OFF

EXCLUDE MATCHES OFF