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ONE FOUR MODELS FOR NON-COMMUNICABLE DISEASE CONTROL (12PT; BOLD; UPPERCASE, WRITTEN IN ENGLISH)

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ABSTRACT

According to WHO, 77% of all deaths from NCDs and 85% of premature deaths occur in low- and middle-income countries. The main challenge in preventing and controlling NCDs is that the main drivers and risk factors including poverty, air pollution, lack of physical activity, and the marketing and sale of tobacco, alcohol, and processed foods are all outside the scope of control of government health departments or national health systems. The responsibility to address these underlying determinants lies with various government sectors and departments, such as education, labor, transportation, trade, finance, environment, agriculture, and manufacturing. NCDs in women have major implications, various complications during pregnancy, childbirth, and postpartum in mothers with NCDs trigger higher mortality and morbidity in mothers and children. This shows the need to initiate a program that integrates various parties in efforts to overcome NCDs in the community in the form of "ONE-FOUR". This program is called "ONE-FOUR" because it combines the roles of 4 elements, namely lecturers, students, cadres, and midwives to assist mothers or women of reproductive age with NCDs. Through intensive assistance from various components, it is expected to reduce complications of NCDs which ultimately have an impact on reducing maternal and child mortality. This study aims to analyze the effectiveness of the ONE FOUR programs on increasing knowledge and attitudes of reproductive-age mothers with NCDs. Method: Data analysis used *dependent t-test* aka *paired t-test.* Conclusion: knowledge score test value Sig. (2-tailed) 0.000 <0.05. In the Attitude test value Sig. (2-tailed) 0.000 <0.05 it can be concluded that the application of the ONE-FOUR method in women of childbearing age is effective in increasing knowledge and attitudes about NCDs.

Keywords: One Four; NCD; WUS

Introduction
(*Introduction)*

Non-communicable diseases (NCDs) are one of the greatest global health and development challenges of our time. [1] They are responsible for an estimated 41 million deaths each year globally, of which 17 million are considered premature deaths, affecting individuals aged between 30 and 69 years. [2,3] NCDs are also responsible for two-thirds of all disability-adjusted life years, globally. [4,5] The burden of NCDs falls disproportionately on the most vulnerable population groups. According to WHO, 77% of all NCD deaths and 85% of premature deaths occur in low- and middle-income countries. [6]

A major challenge in the prevention and control of NCDs is the fact that the main drivers and risk factors—including poverty, air pollution, physical inactivity, and the marketing and sale of tobacco, alcohol, and processed foods—are all outside the scope of control of government health departments or national health systems. [7,8] Responsibility for addressing these underlying determinants lies across multiple government sectors and departments, such as education, labor, transport, trade, finance, environment, agriculture, and manufacturing. [9] The growing global burden of NCDs forces policymakers to engage and work across these non-health sectors. [10]

The Sustainable Development Goals (SDGs) present an inherently multisectoral approach to sustainable development. [11] Achieving SDG target 3.4 on NCDs and mental health by 2030 requires multisectoral and multistakeholder engagement, greater policy coherence, coordination and collaboration across government departments and the wider society. More explicitly, SDG Target 17.6 calls for global multistakeholder partnerships to support sustainable development. [12] To include the private sector, SDG 17.17 encourages the promotion of effective public, public-private and civil society partnerships, and SDG 17.14 highlights the importance of enhancing policy coherence across government sectors. [11]

Non-communicable diseases in women have major implications. Various complications during pregnancy, childbirth, and postpartum in mothers with NCDs trigger increasing mortality and morbidity in mothers and children. [12] This shows the need to initiate a program that integrates various parties in efforts to overcome NCDs in the community in the form of "ONE-FOUR". This program is called "ONE-FOUR" because it combines the roles of 4 elements, namely lecturers, students, cadres, and midwives to accompany mothers or women of reproductive age with NCDs. With intensive assistance from these various components, it is hoped that it can reduce NCD complications which will ultimately have an impact on reducing maternal and child mortality.

This study aims to analyze the effectiveness of the ONE FOUR program in improving the knowledge and attitudes of reproductive age mothers with NCDs.

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Methods
(Research *methods)*

The design used is a quasi-experiment with pre & posttest design. Data analysis using paired t-test. Sampling of 20 respondents was carried out using purposive sampling technique. The study was conducted in Purworejo village, Blora. The subjects of the study were 20 women of childbearing age.

Results and Discussion
(Results *and Discussion)*

Research activities were carried out by conducting *a short course* to the PTM class facilitators first, then forming PTM groups and conducting PTM class activities. This study formed a number of 5 groups/classes, each class consisting of 4 WUS accompanied by lecturers, students and cadres with a total number of respondents of 20 respondents.

Table 4.1 Distribution of Respondents According to Education and Occupation

Variables	Frequency	%
Age		
< 20 Years	1	5 %
20-35 Years	17	85%
>35 years	2	10%

Total	20	100%
Education		
JUNIOR HIGH	3	15%
SCHOOL	15	75%
SENIOR HIGH	2	10%
SCHOOL	20	100%
Diploma/		
Bachelor Degree		
Total		
Work		
Work	3	15%
Doesn't work	17	85%
Total	20	100%

Source: Primary Data (2023)

Based on table 4.1, it is known that most of the participants' education level is high school, which is 15 respondents (75%), productive age (20-35 years) which is 17 respondents (85%) and unemployed, which is 17 people (85%). The average score of knowledge and behavior levels before and after *the short course* can be seen in table 4.2 below.

Table 4.2. Average Score of Respondents' Knowledge and Behavior Levels

Variables	Pretest average	Posttest average
Knowledge	52.62	89.69
Behavior	31.50	79.81

Source: Primary Data 2023

Based on table 4.2, it is known that the average score of the participants' knowledge level before being given *a short course* was 52.62 and after being given *a short course* the average was 86.69. The average score of the participants' behavior before being given *a short course* was 31.50 and after being given *a short course* the average was 79.81. Before the paired t-test was conducted, a data normality test was conducted using *Shapiro Wilk* . The results of the data normality test using Shapiro Wilk, the knowledge pretest score was 0.710 (>0.05) and the knowledge posttest score was 0.169 (>0.05) which means the data is normally distributed. The results of the data normality test using *Shapiro Wilk*, the Behavior pretest score was 0.271 (>0.05) and the behavior posttest score was 0.716 (>0.05) which means the data is normally distributed.

The data analysis test of the knowledge and behavior levels using the paired t-test can be seen in table 4.3 below.

Table 4.3 Paired T-Test of Knowledge and Behavior Levels

variable	Paired Differences					t	df	Sig.(2-tailed
				95% CI				
	Mean	Std Dev	Std.Error Mean	Lower	Upper			
Level Knowledge								
Pretest	-21,077	13,974	2,741	-	-	-	20	.000
Posttest								
Behavior								
Pretest	-28,308	14,683	2,880	-	-	-	20	.000
Posttest								

Source: SPSS

Based on table 4.3, it is known that the results of the knowledge score test show a Sig. (2-tailed) value of 0.000 <0.05, so there is a significant difference between the level of knowledge in the pretest and posttest data, which means that there is an influence of One Group, One Student, One Lecture, and One Care Giver on WUS knowledge in controlling PTM. In the Behavior test, the Sig. (2-tailed) value of 0.000 <0.05, so there is a significant difference between the pretest and posttest data, which means that there is an influence of One Group, One Student, One Lecture, and One Caregiver on WUS behavior in controlling PTM.

Conclusion

(Conclusion)

The implementation of ONE-FOUR in women of childbearing/reproductive age is effective in increasing knowledge and attitudes about Non-Communicable Diseases. Strengthening and development of the program is very possible for faster and more focused control of Non-Communicable Diseases. This program has a high potential for sustainability in other similar environments because it is very compatible with the conditions and awareness of Non-Communicable Diseases in the group of women of childbearing age.

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