

## EVALUATION OF INTEGRATED COUNSELING POST SERVICES FOR NON-COMMUNICABLE DISEASES AT SINGGANI COMMUNITY HEALTH CENTER

Evi Hinelo<sup>1\*</sup>, Mohammad Irfan Mufti<sup>2</sup>, Asrifai<sup>3</sup>

Tadulako University, Indonesia

\*Email Correspondence: [evi.hinelo1973@gmail.com](mailto:evi.hinelo1973@gmail.com)

### Abstract

*Non-communicable diseases (NCDs) remain a significant health issue that requires proper management. Data from the Central Sulawesi Provincial Health Office indicates a continued rise in NCD cases, with 39,961 cases reported in 2021, increasing to 51,805 in 2022. This study aimed to evaluate the integrated NCD development post services at the Singgani Health Center in Palu City. Using a qualitative research method and a descriptive analytical approach, three informants were interviewed: a program holder, a cadre of the Integrated Service Post (Posbindu), and a participant. Data were collected through in-depth interviews, observations, and document reviews. The findings revealed that the implementation of human resources, facilities, recording, and reporting is still suboptimal. Cadres' skills are not yet fully developed, and there are gaps in essential facilities, such as missing height measuring instruments and waist circumference tools. The Integrated Service Post has also not adopted the 5-table system as per standard procedures. However, budget allocation and planning have been satisfactory, including transportation arrangements for cadres and staff. The study concludes that the lack of adequate training for cadres and insufficient facilities are disrupting the effectiveness of the service process. To improve, it is suggested that certified training be provided, technical guidelines for the Integrated Service Post be clearly communicated to all cadres, and the 5-table service system be fully implemented to optimize the service process.*

**Keywords:** *Integrated PTM Service Post, Cadres, Non-Communicable Diseases.*

### INTRODUCTION

There has been a shift in disease patterns from infectious diseases (CMD) to non-communicable diseases (NCDs) which are the cause of the world's population experiencing a more severe disease burden due to NCDs. NCDs cannot be transmitted from one person to another. These diseases are the main causes of death and physical disability in Indonesia and throughout the world (Ministry of Health of the Republic of Indonesia, 2021; Yandrizal, Utami, et al., 2017). According to the Minister of Health Regulation No. 5 of 2017 concerning the Action Plan for Controlling Non-Communicable Diseases 2015-2019, non-communicable diseases (NCDs) include hypertension, diabetes mellitus (DM), chronic obstructive pulmonary disease (COPD), asthma, cancer, stroke, coronary heart disease, obesity, blindness, deafness, cataracts, and disability.

The World Health Organization (WHO) in 2021 stated that non-communicable diseases cause 41 million deaths each year, equivalent to 71% of all deaths globally. WHO (2021) stated that each year, more than 15 million people die from non-communicable diseases between the ages of 30-69 years. As many as 77% of deaths from non-communicable diseases occur in low- and middle-income countries.

The National Basic Health Research (Riskesmas) in 2021 on the prevalence of non-communicable diseases based on doctor's diagnosis in the population of all ages according to the type of disease in Indonesia has the largest percentage, namely the prevalence of

stroke with a percentage of 10.9% followed by the prevalence of hypertension of 8.36%, then the prevalence of joint disease of 7.30%, the prevalence of asthma of 2.4%, the prevalence of cancer of 1.79%, the prevalence of diabetes mellitus and the prevalence of heart disease of 1.5% and the smallest percentage of disease prevalence is chronic kidney failure with a percentage of 0.38%. This figure actually interprets that the prevalence of non-communicable diseases in Indonesia is still high.

Data from the Riskesdas of Central Sulawesi Province in 2022, the prevalence of non-communicable diseases diagnosed by doctors in the population of all ages according to the type of disease in Jambi Province, namely the prevalence of joint disease with the highest percentage of 8.67%, followed by the prevalence of hypertension of 7.43%, then the prevalence of asthma of 1.70%, the prevalence of cancer of 1.32%, the prevalence of diabetes mellitus of 1.02%, the prevalence of heart disease of 0.89%, the prevalence of stroke of 0.68% and the lowest percentage of disease prevalence, namely chronic kidney failure of 0.32%.

Non-communicable diseases are known as chronic diseases or lifestyle diseases, not transmitted from person to person. Non-communicable diseases are diseases that have a long duration and progress slowly. The four main types of non-communicable diseases are cardiovascular diseases (such as heart attacks and strokes), cancer, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes (ESLM., 2021).

Aikins (2020) defines non-communicable diseases as chronic non-communicable diseases (NCDs), which are non-infectious diseases that last a lifetime and require long-term treatment and care. Non-communicable diseases can be prevented through effective interventions against risk factors, namely: tobacco use, unhealthy diet, lack of physical activity, and alcohol use (WHO, 2019). Strong evidence is needed to support the explanation of the role of negative lifestyle behaviors in the incidence of chronic diseases, the role of positive lifestyle behaviors in the incidence and effective management (Dean and Söderlund, 2021).

Based on data from the Central Sulawesi Provincial Health Office, it states that there is still an increase in NCD cases in Central Sulawesi Province. This can be seen from the increase that occurred in 2021 and 2022. Cases of non-communicable diseases in 2021 were 39,961 cases and increased in 2022 by 51,805 cases.

The highest increasing trend of cases from all health centers in Central Sulawesi Province occurred in the Palu City area. Cases of Non-Communicable Diseases in 2021 were 5,322 cases, increasing to 9,110 cases in 2022 with an increase of 3,788 cases. Of the number of NCD cases and

increase in NCD cases in all Palu City Health Centers in 2022, Singgani Health Center is in first place. Data on visits to the PTM Posbindu in the Singgani Health Center work area in 2022 amounted to 1,707 visits. The comparison between the number of visits to the PTM Posbindu and the number of NCD cases in all Palu City Health Centers in 2022, Singgani Health Center is in the lowest first place from other health centers.

The high number of cases of non-communicable diseases has led to the development of a model for community-based control of NCDs through Posbindu PTM, pioneered by health centers in controlling and reducing non-communicable diseases in Central Sulawesi Province. This needs special attention to increase the number of visits to Posbindu PTM in an effort to reduce cases of non-communicable diseases in Central Sulawesi Province. The NCD control program needs to focus on risk factors. Integrated and comprehensive control of NCDs (promotive-preventive, curative-rehabilitative), covering the dimensions of policy, environment, behavior, and health services (Puspromkes, 2021). The purpose of Posbindu PTM is to increase community participation in preventing and early detection of NCD risk factors. The main targets of activities are healthy communities, communities with NCDs, and communities at risk of NCDs aged 15 years and over (Ministry of Health, 2020).

The preparation of planning in implementing Posbindu PTM begins with collecting data and obtaining information related to the magnitude of the PTM problem, human resources, and supporting infrastructure. Data can be seen from data from the Health Center, Riskesdas, District/City Hospitals, Regional Health Profiles, and other health survey results. The Posbindu PTM program manager will hold a meeting to reach a mutual agreement in organizing Posbindu PTM (Ministry of Health, 2020).

The implementation of Posbindu PTM will be carried out by health cadres who are fostered, trained, and facilitated in carrying out the Posbindu PTM activities. The criteria for cadres include being able to write and read, willing and able to carry out activities related to Posbindu PTM and having been certified trained at least having received a certificate of training from the supervising Health Center (Ministry of Health, 2021).

The implementation process of Posbindu PTM uses five stages of service called the five-table system. The activities are early detection services for PTM, then simple follow-up is carried out, and monitoring of PTM risk factors is carried out, then continued with referrals to the Health Center if needed. Cadres who have undergone training will be appointed as Coordinators and Persons in Charge for Activators, Monitors, Counselors/Educators and Recorders (Ministry of Health, 2020).

Recording and reporting activities at Posbindu PTM are carried out by cadres. Recording and reporting of Posbindu activity results are forwarded to the Health Center. Reporting can be done using the PTM Information System application, SMS, and offline reports. The results of reporting and recording are forwarded to the relevant agencies for analysis, then the results determine the basis for implementation, coaching and making feedback to the administrative level below (Ministry of Health, 2021).

This study focused on the Singgani Health Center in addition to being related to the incidence of NCD cases at the Singgani Health Center which was still high, especially in 2022 which increased drastically based on the number of visits to the Health Center (Palu City Health Office, 2020), but also focused on the implementation of posbindu services based on the Posbindu PTM implementation guidebook. Considering that the implementation of Posbindu that has been started so far still has several shortcomings, including implementation that is not up to standard, low participant interest and not all of them can carry out posbindu according to the patient number schedule.

In 2021, there were 10 Posbindu in the Singgani Health Center area in 5 sub-districts consisting of Besusu Barat, Besusu Tengah, Besusu Timur, Lasoani, and Poboya sub-districts. The implementation of PTM Posbindu services was carried out in each sub-district with the location of implementation adjusting to the conditions of the population during the implementation of the activity. The Posbindu service activities carried out were health checks, treatment and counseling.

Based on data from the Posbindu PTM Singgani Health Center from April 2021 to November 2022, it shows that the number of participant visits is still relatively low. The low ratio of utilization of POSBINDU participant services since April 2021 - November 2022 which only ranges from 8.0% -28.1% of the total number of 174 people at the Singgani Health Center. In other words, the POSBINDU PTM service to all people is not optimal, so efforts are needed to carry out an evaluation of the posbindu service. The low ratio of utilization of POSBINDU PTM participants indicates that there is a gap between expectations and the reality felt by participants. Research by Yunevy and Haksama (2013) shows that from the calculation with the SERVQUAL score, a negative number of (-0.63) is obtained, meaning that the service received by the patient is not close to the expectations that the patient wants, resulting in patients being dissatisfied with the service received. Research conducted by Mosadeghrad (2013) states that the quality of health services is good if patients are served with appropriate services, both in terms of competent service methods, good communication, joint decision making and cultural sensitivity.

The purpose of this study was to conduct an evaluation of the Posbindu Non-Communicable Diseases service process implemented by the Singgani Health Center in Palu City.

## **LITERATURE REVIEW**

The following are sources of reference or references from this study as previous research to see the research gap through the similarities and differences between previous research and current research. Research conducted by Nugraheni, Chintya and Cahyono (2022) entitled "Evaluation of the Implementation of the Posbindu PTM Program at the North City Health Center of Kediri City". the results of the implementation of the Posbindu PTM process found obstacles during mobile screening, namely that there were residents who did not bring their ID cards. And for the output, the Health Center has not been able to reach 50%. The conclusion that can be drawn from this study is that the input, process, and output components of the implementation of the Posbindu PTM program still have shortcomings that make the implementation of the program not run optimally.

The similarity of previous research with the current research lies in the research method used, namely using a qualitative method. Meanwhile, the difference in research lies in the subject of previous research, namely informants as holders of the Posbindu PTM program. Meanwhile, the current research informants are not only focused on holders of the Posbindu PTM program but also human resources related to the Posbindu PTM service as a whole.

## **Evaluation Concept**

Evaluation is a valuable tool for decision makers of an activity, in analyzing information to strengthen the quality of activities carried out and improve the benefits or outcomes for people who are served. In this brief definition, evaluation can be defined as aiming to address common problems related to evaluation services (Wirawan, 2020).

Evaluation is a process that determines the extent to which program objectives have been implemented. In addition, evaluation is one of the efforts to determine a quantity and value (Wirawan, 2020). Evaluation is an activity to measure a situation to obtain information as an alternative in decision making. Information, values and standards make decisions related to the standards that have been set to obtain the value of an evaluation activity. If reviewing and examining the definition of evaluation, there are several keywords that can be developed into a framework of thought or conceptual framework related to evaluation. The first keyword is process, the second is measurement, the third is information and the last is decision.

Evaluation is collecting information as an alternative form of making the right decision on an activity. Evaluation is the basis for making a decision or policy on an object after going through the process of selecting, collecting, analyzing and presenting information (Wirawan, 2020).

Policy evaluation is an activity that involves the estimation or assessment of policies that include substance, implementation and impact (Anderson: 1975). Policy evaluation is seen as a functional activity. This means that policy evaluation is not only carried out at the final stage but also throughout the policy process. According to W. Dunn, the term evaluation has related meanings, each referring to the application of several value scales to the results of policies and programs. Evaluation includes: conclusions, clarification, criticism, adjustments and reformulation of problems.

Evaluation has several main functions in policy analysis. First and most importantly, evaluation provides valid and reliable information about policy criteria, namely, the extent to which needs, values, and opportunities have been achieved through public action. In this case, evaluation reveals the extent to which certain goals and targets have been achieved. Second, evaluation contributes to the clarification and critique of the values underlying the selection of goals and targets. Values are clarified by defining and operationalizing goals and targets. Values are also critiqued by systematically questioning the appropriateness of goals and targets in relation to the problem at hand. Third, evaluation contributes to the application of other methods of policy analysis, including problem formulation and recommendation. Information about inadequate policy performance can contribute to the reformulation of policy problems. Evaluation can also contribute to the definition of new policy alternatives or policy revisions by indicating that previously favored policy alternatives need to be discarded and replaced by others (Bardach, E. 2008).

Evaluation has two interrelated aspects; the use of a variety of methods to monitor the outcomes of public policies, programs, and the application of a set of values to determine the utility of these outcomes to some person, group, or society as a whole. Note that these interrelated aspects imply the presence of facts and value premises in every

evaluative claim. However, many activities described as “evaluation” in policy analysis are essentially non-evaluative in nature – that is, they are primarily focused on producing designative (factual) claims rather than evaluative claims. Thus, an approach to “evaluation research” or “policy evaluation” is needed (Bardach, E. 2008).

### **Service Evaluation Model**

There are many models that can be used to evaluate a service. The evaluation models that one with another do seem to vary, but the intent and purpose are the same, namely to conduct data or information collection activities related to the object being evaluated. Furthermore, the information collected can be given to decision makers so that they can accurately determine the follow-up to the service that has been evaluated.

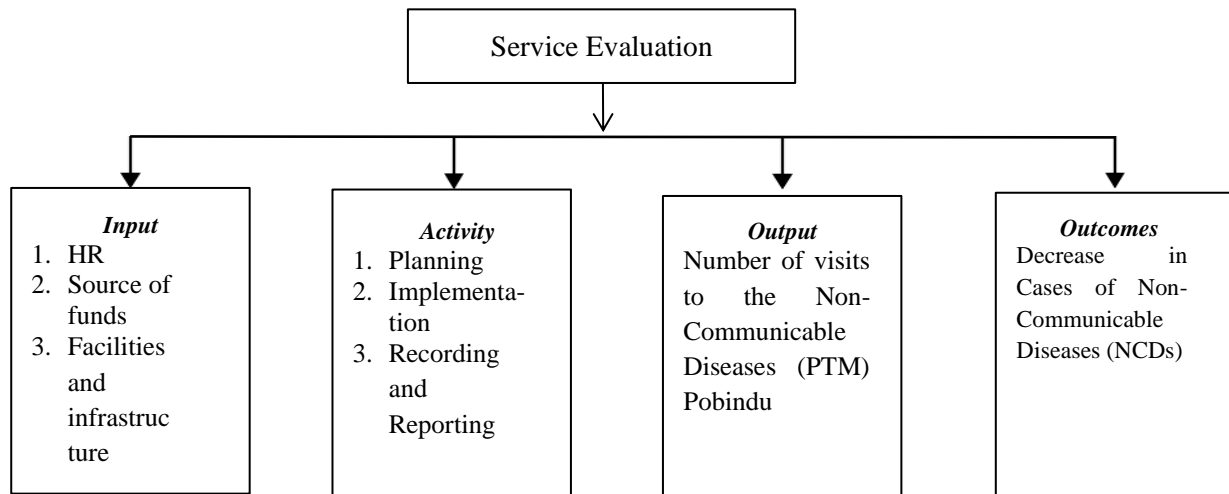
Eko Putro Widoyoko (2020:17) explains that "an evaluation model is an evaluation design developed by evaluation experts, which is usually named the same as the maker or the evaluation stage". To select various service evaluation models, the eclectic approach can be used as a reference. The eclectic approach is to choose various models from several of the best choices according to needs, according to the situation and according to local conditions (Tayibnapis, 2018:7).

According to Kaufman and Thomas, quoted by Suharsimi Arikunto and Cepi Safruddin Abdul Jabar (2019: 40), there are eight evaluation models, namely:

- a. Goal Oriented Evaluation Model, developed by Tyler.
- b. Goal Free Evaluation Model, developed by Scriven.
- c. Formative Summative Evaluation Model, developed by Michael Scriven.
- d. Countenance Evaluation Model, developed by Stake.
- e. Responsive Evaluation Model, developed by Stake.
- f. The CSE-UCLA Evaluation Model emphasizes “when” the evaluation is conducted.
- g. CIPP Evaluation Model, developed by Stufflebeam.
- h. Discrepancy Model, developed by Provus.

The selection of the evaluation model to be used depends on the purpose of the evaluation. In the implementation of the evaluation of the integrated non-communicable disease development post development service, a system approach is used. The system approach is an approach that is implemented in covering the entire RPTRA program process in creating integrated and optimal services at the Singgani Health Center that is implemented.

To evaluate the Posbindu Non-Communicable Diseases service in the Singgani Health Center working area of Palu City, Wirawan Tahun's theory (2016) was used as an analytical tool with a service evaluation theory consisting of 4 (four), namely Input/Sources, Activities/activity processes, Output, and Influence (outcome). The following is a picture of the flow of thought in this study.



After conducting an evaluation of each dimension, the next step is to analyze the findings and identify areas that need improvement or enhancement. Implementation of these improvements can involve employee training, facility improvements, or revision of service procedures. Periodic evaluation is also important to ensure that services continue to meet patient expectations and can have a positive impact on the quality of health services at the Singgani Health Center in Palu City through the massive community carrying out checks at the integrated non-communicable disease development post and decreasing the number of non-communicable disease cases.

## METHOD

This study uses a qualitative method because it is conducted in natural conditions with qualitative data. The analysis is descriptive analytical, which describes the object of research through the data collected without making general conclusions. This study explores the evaluation of the Posbindu PTM service program at the Singgani Health Center, Palu City. The location of the study was the working area of the Singgani Health Center in East Palu District, Palu City, covering the villages of West Besusu, Central Besusu, and East Besusu. The study was conducted from December 2023 to February 2024. Research informants were selected using a purposive sampling technique, including the Posbindu PTM program coordinator, health workers, Posbindu cadres, and Posbindu participants. Informants were selected based on their knowledge and involvement in the program. Data were obtained from primary and secondary sources. Primary data came from observation and in-depth interviews, while secondary data came from documents such as the Singgani Health Center profile and BPS data from Palu City. Data were collected through observation, in-depth interviews, and documentation. Observation involves direct observation of the phenomenon being studied. In-depth interviews were conducted with an interview guide, and documentation involved collecting notes, photographs, and other relevant documents. The research instrument was the researcher herself, who used an interview guide and observation sheets to collect data. Data were analyzed using a qualitative descriptive method with an interactive model from Miles and Huberman. The stages include data collection,

data presentation, data condensation, and drawing conclusions. This process involves collecting words, phenomena, photographs, and behaviors from observations, interviews, and documentation. Data is condensed to simplify and summarize information before presenting it and drawing conclusions.

## **RESULTS AND DISCUSSION**

Research results found that Non-Communicable Diseases (NCDs) are non-infectious diseases that are not caused by microorganisms but occur due to unhealthy lifestyles, such as smoking, congenital diseases, physical disabilities, aging, age, and mental disorders. NCDs are one of the biggest causes of death in Indonesia. When the problem of infectious diseases is still a highlight in health problems and at the same time morbidity, NCD mortality is increasing. This will be a challenge that must be faced in the development of the health sector in Indonesia, especially at the Singgani Health Center.

### **1. Hypertension**

Hypertension is a chronic medical condition with elevated arterial blood pressure. This increase causes the heart to work harder than usual to circulate blood through the blood vessels. Blood pressure involves measuring systolic and diastolic, depending on whether the heart muscle contracts (systole) and relaxes between beats (diastole). Normal blood pressure at rest is in the range of 100-140 mmHg and diastolic 60-90 mmHg. Hypertension occurs when it is continuously at 140/90 mmHg or more. Based on estimates of hypertension patients in 2022, there are 4,592 people.

### **2. Diabetes mellitus**

Diabetes (diabetes mellitus) is a metabolic disease caused by increased levels of glucose or blood sugar. Blood sugar is vital to health because it is an important source of energy for cells and tissues.

- a) Type 1 diabetes, in which the immune system attacks and destroys the beta cells in the pancreas that produce insulin.
- b) Type 2 diabetes, where the beta cells in the pancreas do not produce enough insulin, or the body's cells do not respond to the insulin that is produced.
- c) Gestational diabetes, which is diabetes that occurs during pregnancy.
- d) Other types of diabetes, which can arise due to hormonal, immunological, infectious, or other genetic disorders.
- e) Of the number of DM patients at the Singgani Health Center in 2022, there were 1608 cases of DM.

## **Evaluation of Integrated Development Post Services for Non-Communicable Diseases at Singgani Health Center**

To determine the level of success of a program, an evaluation is needed. Evaluation is an activity to measure a condition to obtain information as an alternative in decision making. Information, values and standards make decisions related to the standards that have been set to obtain the value of an evaluation activity. If reviewing and examining the definition of evaluation, there are several keywords that can be developed into a framework



of thought or conceptual framework related to evaluation. The first keyword is process, the second is measurement, the third is information and the last is decision.

The goals and objectives of a program or service can be measured through evaluation so that evaluation here is a benchmark for how far the goals and objectives of a program have been achieved. And to assess the success of a program, it is also necessary to develop several indicators or criteria that serve as a reference in conducting the evaluation. Evaluation is very important to be carried out in a program.

Evaluation is a valuable tool for decision makers of an activity, in analyzing information to strengthen the quality of the activities carried out and improve the benefits or outcomes for the people who are served.

To evaluate the Posbindu Non-Communicable Diseases service in the Singgani Health Center working area of Palu City, Wirawan's theory (2016) was used as an analytical tool with a service evaluation theory consisting of 4 (four), namely:

- a. Input/ Sources
- b. Activities/activity processes
- c. Output
- d. Influence (outcome)

### **Input/Sources**

#### **1. Human Resources (HR)**

Posbindu is one form of UKBM (Community-Based Health Efforts). This means that the concept of Posbindu is an activity from the community carried out by the community and to serve the community. The role of cadres is very important in the implementation of Posbindu PTM activities, they are the spearhead in providing information and education, coordinating the implementation of posbindu, community mobilizers, monitoring the measurement of PTM risk factors.

The availability of human resources (HR) at Posbindu PTM is 3 cadres per Posbindu with a total of 30 cadres from 10 Posbindu PTM in the Singgani Health Center work area of Palu City. Cadres are taught directly by health center officers. The results of the observation also found that there were 3 cadres and all of them were present during the implementation of Posbindu.

The results of the study obtained in terms of human resources at Posbindu showed that the availability of cadres at Posbindu was sufficient, namely 3 cadres per Posbindu. From the availability of these cadres, all cadres have received direct learning during the Posbindu by Puskesmas officers called On The Job Training. This is not optimal because there has been no special training for cadres provided by the Puskesmas or the Palu City Health Office. The cadre appointment system is carried out by the Village Head and receives a Decree from the Singgani Puskesmas, Palu City. This is related to the theory of Stephen B. Thacker (2008:56) who states that the development of human resources in the health sector requires continuous and structured training to improve the competence and performance of cadres. Special and targeted training is useful for helping cadres in providing better and more effective services to the community.

This study is in line with the study conducted by Ratnasari (2020) which stated that the availability of cadres and health workers at the Health Center in organizing Posbindu PTM activities was sufficient. These cadres are cadres who also serve as Posyandu cadres consisting of 7 cadres in each Posbindu.

This study is also in line with the study conducted by Yunia and Wahyono (2021) which stated that the availability of cadres in terms of numbers is not sufficient based on technical instructions, namely 5 cadres for each Posbindu, from several Posbindu there are cadres who serve as toddler posyandu cadres and elderly posyandu cadres. And in line with the study conducted by Dewi and Idaria (2020) which stated that the availability of cadres in Posbindu PTM activities is sufficient.

There is no training certificate or certificate of training from the supervising Health Center, but only a decree (SK) given by the sub-district for Posbindu cadres. From the observation results, the knowledge and quality of this informant are indeed good in conducting measurements. The Technical Instructions from the Ministry of Health state that the criteria for certified trained cadres are at least receiving a certificate of training from the supervising Health Center. This is in accordance with the theory of Knowles (2007:89) on Andragogy, which states that adult training must be structured and formally recognized to ensure accountable competence and quality.

## 2. Source of funds

The use of funds for Posbindu service activities at the Health Center provides an understanding of the importance of Posbindu services among the community. Proof of maximum implementation of duties to the community is by providing excellent and sincere service.

Based on the results of in-depth interviews with informants, it was found that the Posbindu budget was sufficient. The source of funds for Posbindu PTM in the Singgani Health Center working area of Palu City was obtained from various sources of funds, namely the Regional Revenue and Expenditure Budget (APBD), Health Operational Cost (BOK) funds for Health Centers, community contributions, and sponsors. The budget from the APBD is used for the procurement of Posbindu PTM facilities and infrastructure at the Singgani Health Center. The use of budget sources from the Health Center BOK is used to pay for official travel for health center officers, transportation for cadres and procurement of Posbindu PTM consumables, and the use of budget sources from community contributions is used to make healthy food and drinks for participants.

Supporting the policy of the Minister of Health Regulation Number 39 of 2016 concerning Guidelines for the Implementation of the Healthy Indonesia Program with a Family Approach states that in terms of developing priority health fund resources, it is allocated for the completeness of Puskesmas facilities, organizing health worker training, and operational costs. As is known, blood sugar measurements, blood pressure measurements, body mass index measurements, interviews with risky behaviors and education on healthy living behaviors are early detection of PTM risk factors in Posbindu.

This is in accordance with research conducted by Nugraheni and Hartono 2018 which stated that the budget sources come from the APBN, APBD and BOK. Limited and unstable funding, as well as the lack of facilities to improve performance cause the results of public health programs to not be as desired. In relation to this, the Health System theory from the World Health Organization (WHO) (2007:112) explains that the success of a health program is greatly influenced by the availability and stability of resources, including funds, personnel, and adequate health facilities. Without sufficient support from these aspects, the implementation of health programs will face various obstacles that can reduce their effectiveness and efficiency.

This is also in accordance with research conducted by Vebrino (2022) The budget and planning of Posbindu PTM have been running quite well. such as the adequacy of official travel for health center officers and cadre transportation and from the Posbindu planning, cadres prepare everything before the implementation of Posbindu.

This study is in line with research conducted by Wirasmi et al. (2022) which states that the use of budget sources includes procurement of medical devices, purchase of laboratory reagents, recording and reporting, outreach to the community, screening for officers, transportation of posbindu officers, training and coaching of posbindu cadres and honorariums for cadres.

### 3. Facilities and infrastructure

In terms of supporting facilities, including facilities and infrastructure to assist in the implementation of Posbindu at the Singgani Health Center, it is sufficient to support ongoing activities.

Based on the results of the interview explanation, it can be concluded that the problem of infrastructure is not yet sufficiently supportive due to the lack of availability of tools and materials, which can hinder the Posbindu service process.

Based on the minimum standards for facilities at Posbindu listed in the 2019 Posbindu PTM guidebook. The minimum standards determined by the Indonesian Ministry of Health are blood pressure measuring devices, blood sugar measuring devices, weight measuring devices, height measuring devices, waist circumference measuring devices, participant monitoring books, and recording books 13. So it can be concluded that the availability of minimum facilities and infrastructure for Posbindu PTM in the Singgani Health Center work area of Palu City is still not in accordance with the established Ministry of Health standards. This is closely related to Donabedian's theory (2009:17) on the quality of health services which states that the quality of health services is influenced by structure, process, and results. The structure in this case includes the available facilities and infrastructure, which if they do not meet the standards will affect the quality of services provided. According to Notoatmodjo (2020:55), the lack of adequate facilities and infrastructure can have an impact on the low quality of health services received by the community. In addition, Andersen's theory (2005:81) on access to health services states that the availability of adequate health facilities is an important factor in determining the accessibility and use of health services by the community.

This study is in accordance with the study conducted by Chriswardani et al. (2019) which stated that the implementation of the Posbindu PTM program at the Sukolilo I Health Center was hampered because the facilities and infrastructure used, such as scales for measuring body weight, were not functioning properly. This study is also in line with Yunia and Wahyono (2021) in several Posbindu, the tools used to carry out activities are still combined with Posyandu, such as scales and meters. This study is in line with the study conducted by Ewilda and Zuripal (2020) which stated that the facilities and infrastructure in the implementation of the Posbindu PTM at the Tigo Baleh Health Center were inadequate so that the activities could not run well.

The availability of infrastructure at the Singgani Health Center in Palu City only has 1 Posbindu kit. As for the complete Posbindu kit facilities owned by the Health Center, they are not distributed or left at the PTM Posbindu but are brought from the Health Center during the implementation of the PTM Posbindu which are used alternately because there is no storage place for the equipment at the Posbindu for fear that the equipment will be damaged if left at the cadre's place. The Posbindu Kit owned is only 1, where the height and waist circumference measuring instruments are not available. This causes the availability of facilities to be still insufficient when implementing the PTM Posbindu. The availability of Posbindu Kit infrastructure based on the technical manual from the Ministry of Health includes Height Measurement, Waist Circumference Measurement, Tension Meter, Weight Measurement, and Blood Sugar Level Measuring Instrument.

This study is in line with the study conducted by Primiyani et al. (2019) which stated that the use of the Posbindu Kit must be alternated with other Posbindu during the implementation of Posbindu activities. This is because not all PTM Posbindu in the health center work area have Posbindu Kits. This study is in line with the study conducted by Handayani et al. (2021) which stated that the availability of other equipment is still lacking, namely the Posbindu kit, which is used alternately. In accordance with the research of Andayasari and Opitasari (2020), it was stated that the Posbindu kit that was not yet owned by all PTM Posbindu caused the Posbindu kit usage system to have to be alternated during the implementation of Posbindu.

The theory that supports these results is the theory of health service accessibility. According to Green and Kreuter (2005:11), the availability and accessibility of health facilities are very important in improving the quality of health services. Inadequate facilities and infrastructure such as height and waist measurement tools can affect the effectiveness of the health services provided. In addition, according to Donabedian (2001:36), a good health facility structure is one of the important indicators in assessing the quality of health services. Thus, the incompleteness of facilities and infrastructure at Posbindu can have a negative impact on the assessment of the quality of health services provided by the Health Center.

## **Activities/Activity Processes**

According to Pranandari (2017), the conclusion of the Community Empowerment Program in the prevention and early detection of NCDs is the Integrated Development Post (Posbindu) for Non-Communicable Diseases (PTM). This Posbindu is one form of UKM which then develops into a community-based health effort (UKBM) under the guidance of the health center. The existence of Posbindu PTM is expected to implement prevention and control through early detection, monitoring, and early follow-up of NCD risk factors in an integrated and periodic manner. Posbindu PTM is one of the community-based health efforts (UKBM) that is oriented towards promotive and preventive efforts in controlling NCDs by involving the community starting from planning, implementation and recording reports. Posbindu PTM is developing under the guidance of the health center and is one of the demands of the Indonesian Health Law Number 36 of 2009 Chapter X Article 158 that local governments and communities carry out prevention efforts.

### **1. Planning**

Promotion and socialization to villages about the Posbindu PTM program is carried out by health workers, village officials and cross-programs by conducting outreach in each RT and RW by providing education.

The conclusion of the planning of Posbindu PTM in the Singgani Health Center work area of Palu City is through socialization carried out by health center officers after the formation of Posbindu from the community. After that, village officers provided counseling and then discussed the implementation time of this Posbindu PTM. The day before the implementation of Posbindu, the village provided information to the community via Whatsapp and announced it through the mosque to come to Posbindu, as suggested by Glanz, Rimer, and Viswanath (2020) in health communication theory. The community approach involving community leaders and places of worship is also in line with the theory of community-based health promotion proposed by Nutbeam (2020).

Research conducted by Lestari et al. (2020) stated that the activity will begin with socialization and advocacy to related parties in this case hamlets, sub-districts, and health centers. Socialization aims to gain support and commitment in organizing Posbindu PTM. Immediately after Posbindu PTM is formed, the next priority is to train cadres to be able to carry out the roles, tasks, and technical activities at Posbindu PTM.

This study is in line with the study conducted by Hosni et al. (2020) Socialization/advocacy of PTM to community groups has been going well. This study is in line with that conducted by Ni'mah (2020) who stated that socialization has been carried out to the community regarding the Posbindu PTM program in the Undaan Health Center work area. This study is different from the study conducted by Rahajeng and Nurhotimah (2020) who stated that Posbindu PTM has not been managed according to the technical instructions set by the Ministry of Health. Socialization and advocacy to stakeholders have never been carried out.

## 2. Implementation

The implementation of the Posbindu program in the health center work area uses a 5-step system, only sometimes due to a lack of facilities, only 1 table is used but still uses a 5-step system.

The conclusion obtained from the implementation stage of Posbindu PTM is that the implementation system still does not use the 5-table system but still uses 5 stages of implementation. In the implementation of Posbindu PTM, it is still assisted by the Posbindu program manager from the Health Center so that the implementation of Posbindu PTM is not entirely carried out by Posbindu cadres. The implementation of Posbindu PTM is not entirely smooth but also has obstacles or constraints, namely the difficulty of inviting the community and the lack of consumables. This is in line with the findings of Susanti et al. (2020) which shows that the role of program managers from the Health Center is still very crucial in the sustainability and success of Posbindu PTM in various regions. The implementation of Posbindu PTM is not entirely smooth but also has obstacles or constraints, namely the difficulty of inviting the community and the lack of consumables.

This study is different from the study conducted by Oktarianita (2020) which stated that the implementation activities had used a 5-table system and were carried out sequentially according to the procedures that had been prepared. And it is not in accordance with the research of Putri et al. (2018) where the implementation of Posbindu PTM in the Simpang Sungai Duren Health Center work area has been running with a 5-table system. This study is not in line with the research conducted by Nisa et al. (2022) which stated that Posbindu PTM UNNES was implemented with 5 service stages called the 5-table system.

The target of Posbindu PTM visits based on the provisions of the Health Office is 100 per month. However, this visit target is only known by the Posbindu program manager at the Health Center. Meanwhile, cadres and participants do not know the Posbindu PTM visit target. During the implementation of Posbindu, the participation of the community visiting Posbindu PTM ranged from 12-23 people because the implementation of Posbindu was often postponed. Of course, the visit target set by the health office was not achieved to conduct health screening in the community. The strategy carried out by officers to achieve the target that was not achieved during the implementation of Posbindu was by making home visits to the community to meet the target that had been set.

According to Heath and Heath's theory (2020), clear understanding and equitable distribution of information are essential in achieving the goals of a public health program. Cadres and participants who do not know the target of the visit can reduce their motivation to actively participate. Therefore, an effective communication strategy must be implemented so that all parties involved have the same understanding of the goals and targets of the program.

The strategy used by officers to achieve targets that were not achieved during the implementation of Posbindu is by conducting home visits to meet the targets that have

been set. This approach is in line with Kotter's theory (2020), which states that adaptation and flexibility in implementing a program can increase its effectiveness. By conducting home visits, officers can reach people who may not be able to attend Posbindu for various reasons, thus enabling better achievement of visit targets and increasing the coverage of health screening.

This study is supported by research conducted by Mardiyati et al. (2019) stating that the Utilization of Posbindu PTM in RW 18 Kel. Meteseh found that 81% of respondents did not utilize Posbindu PTM. Based on the questionnaire and interviews, it was found that in the last six months, 16 respondents (19%) utilized Posbindu PTM.

### 3. Report Recording

The results of interviews with Posbindu program managers found that the Posbindu PTM recording and reporting system used a manual system by cadres and was inputted using the Sehat IndonesiaKu (ASIK) Application for Posbindu PTM recording by program holders. The results of manual recording of Posbindu PTM activities were reported directly to the Health Center officers with a special recording form, then the results were inputted by the Non-Communicable Disease program manager. The results of the observation found that the recording system was carried out by Posbindu cadres manually and had not used the ASIK application in recording because the cadres had not received training related to this.

The conclusion of the Posbindu recording and reporting system is that the Posbindu recording and reporting system is still manual using a help book carried out by cadres with the results of the reporting recording submitted to the program manager to be inputted into the Healthy Indonesiaku application. The Posbindu recording and reporting system in the Singgani Health Center work area of Palu City is good. The obstacles to the recording and reporting system conveyed by the program manager are related to networks and quotas, but according to cadres, the obstacles are when there is a new format. According to the latest theory, the manual recording and reporting system still has advantages in terms of ease of access and flexibility, but on the other hand it also has weaknesses in efficiency and data accuracy compared to the digital system (Santoso, 2020). This weakness in efficiency is often caused by limited resources such as a stable internet network and quota availability (Wibowo, 2020). Furthermore, the transition to a new format is often a challenge for cadres because it requires adaptation and additional training to understand and apply the new format correctly (Suryani, 2020).

This study is in line with the study conducted by Oktarianita et al. (2020) stating that recording and reporting have been carried out by the Beringin Raya Health Center. Recording is carried out on every implementation of the Posbindu PTM activity. This study is also in line with the study of Nugraheni et al. (2022) stating that there are monitoring books and personal data forms used to record patient visit data.

The results of manual recording of Posbindu PTM activities carried out by cadres are reported directly to the Health Center with a special recording form provided by the program manager to Posbindu cadres. Then the results are inputted by the program manager and submitted to the City Health Office. This is not an obstacle in carrying out

the Posbindu recording and reporting process. Because based on the Posbindu guidebook by the Indonesian Ministry of Health in 2019, which states that reporting the results of Posbindu activities can be done online via the web. The PTM Information System application can be downloaded via smartphone. In addition, the PTM Information System application is also available which can be downloaded via smartphone to facilitate access and management of data in real time.

## Output

The implementation of Posbindu regarding time is appropriate, while regarding the purpose of Posbindu it is not appropriate. This can be seen from the low coverage of visits by people who checked themselves at Posbindu from January to June, which was 7.39% or around 12-23 visits out of 100 target visits.

**Table 1.** Community participation coverage at Posbindu from January to June 2024

Ward	Total population	Visit Target	Number of Visits
West Besusu	11,388	100	17
Central Milk	6,343	100	23
East Besusu	7,326	100	12

Source: Kinjera Puskesmas Achievement Report 2024

This data certainly also provides information that the achievement has not been in accordance with the target set in the technical guidelines of the Central Sulawesi Provincial Health Office, which is above 50%. In terms of the implementation of Posbindu activities, it has not been in accordance with the Standard Operating Procedure (SOP) set out in the technical guidelines for implementing Posbindu, namely the implementation of 5 stages of the table and interviews of PTM risk factors were not carried out so that Posbindu participants who have PTM risk factors are not properly screened so that they have the potential to be diagnosed with PTM while PTM sufferers are at risk of disability and even death. The flow of implementation of the Reporting of Posbindu implementation activities at the Singgani Health Center is from the cadre then summarized by the person in charge of Posbindu activities which is then forwarded to the Health Office via the web system. However, reports related to the number of referrals from Posbindu to the health center have not been recorded in the report from January to June 2024, but the referral activities carried out at Posbindu have been in accordance with the instructions for implementing Posbindu. stricter supervision and increased training are needed for cadres and those in charge of Posbindu activities. This aims to ensure that all stages of the procedure, including the implementation of the 5-stage table and interviews of NCD risk factors, can be carried out consistently and in accordance with established standards. In addition, an effective monitoring system is needed to ensure that posbindu participants who have NCD risk factors can be properly screened and receive appropriate follow-up. Thus, the potential for NCD

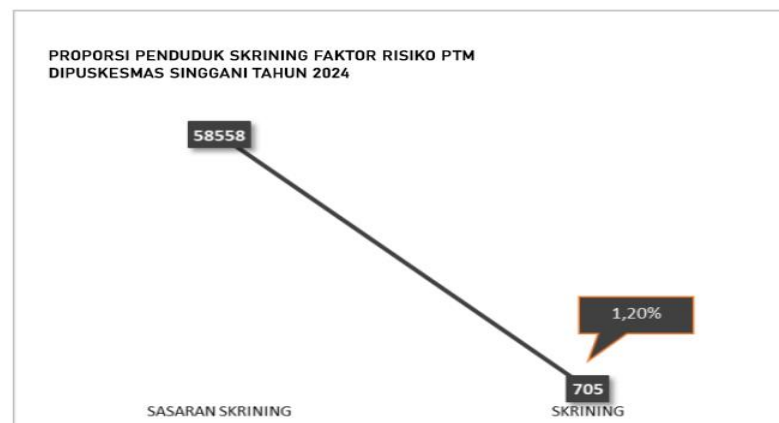


diagnosis in posbindu participants can be minimized, reducing the risk of disability or even death due to NCDs in the community. In addition, there needs to be a concrete effort to improve reporting related to the number of referrals from posbindu to health centers, so that accurate and comprehensive data can be available for better evaluation and planning of activities in the future.

This is supported by the theory that shows that the implementation of Standard Operating Procedures (SOP) in the implementation of Posbindu is crucial to ensure the effectiveness of public health services. According to Smith et al. (2020), the implementation of 5 stages of tables and interviews of NCD risk factors in Posbindu systematically can increase early detection of non-communicable diseases (NCDs). Non-compliance with this SOP, as occurred at the Singgani Health Center, can result in decreased efficiency in screening participants at risk of NCDs, which in turn increases the risk of serious complications such as disability and even death. Therefore, it is important for health institutions to ensure that all procedures are strictly followed in order to maximize the benefits of Posbindu activities and meet the established health targets. And the theory of Smith et al. (2020) states that the implementation of proper SOPs in Posbindu activities not only increases efficiency in screening NCD risk factors, but can also minimize the potential for serious complications such as disability and death in NCD sufferers.

## Outcomes

The results of the screening of Non-Communicable Disease Risk Factors obtained at the Singgani Health Center in 2024 are as follows:



Source: Kinerja Puskesmas Achievement Report 2024

Based on the data above, it indicates that the number of cases of non-communicable diseases in the Singgani Health Center work area has not shown good results, because the achievement of the decrease in numbers is still relatively low, namely 1.20%. It is known that the steps that have been taken have not been able to achieve the expected target in controlling the spread of non-communicable diseases. As in the implementation of integrated postal services for non-communicable diseases carried out in the Singgani Health Center work area has not run optimally, which is known from patients who have not yet reached the

expected target. In addition, the health education and campaign programs that have been implemented have not been fully effective in increasing public awareness of the importance of a healthy lifestyle and disease prevention. There needs to be an in-depth evaluation of the strategies that have been implemented and increased coordination between related agencies in order to achieve a more significant decrease in numbers in the future. In addition, the difficulty of inviting people to come to Posbindu and ChatGPT is exacerbated by the lack of accessibility and understanding of its benefits. Efforts to increase community participation need to strengthen education about the importance of early detection and management of non-communicable diseases. A more inclusive and comprehensive communication strategy is also needed to reach various levels of society, including those who live in remote areas or have limited access to transportation. Synergy between the Health Center, local government, and community is also key to building strong support in encouraging active participation in these health programs. Based on the Health Belief Model (HBM) Theory proposed by Hochbaum (2007), the low level of community participation in early detection and management programs for non-communicable diseases can be explained by several factors. This model suggests that there are four main factors that influence individual behavior towards health, namely perception of disease severity, perception of susceptibility to disease, perceived benefits of preventive measures, and barriers to taking such measures. The application of this theory can help in designing more effective interventions to increase community participation in efforts to prevent non-communicable diseases at the Singgani Health Center level.

The Social Cognitive Theory (SCT) developed by Bandura (2000) is also relevant from the results obtained. This theory emphasizes the importance of factors such as direct observation, learning through personal experience, and interaction with the social environment in shaping health behavior. Based on SCT, low community participation in health programs can be understood as a result of the lack of role models who practice healthy behavior, as well as the lack of adequate social support in encouraging behavior change. By considering SCT, communication and education strategies that involve the active role of local community leaders and the development of social support networks can increase the effectiveness of health programs at the Singgani Health Center.

## **CONCLUSION**

Evaluation of Posbindu PTM services at Singgani Health Center, Palu City, showed that although Posbindu cadres have good skills and experience, they still need special training. Funds are obtained from various sources and used as needed, but facilities and infrastructure are still inadequate. Planning and socialization are going well, the implementation of the 5-table system is still less than optimal, and recording and reporting are done manually but on time. The main obstacles are the low coverage of community visits of 7.39% and the low decrease in cases of non-communicable diseases of 1.20%, caused by shifts in implementation time and shortages of consumables. Further evaluation is needed to overcome these obstacles.

## REFERENCES

- Afifuddin dkk. 2009. Metodologi Penelitian Kualitatif. Bandung: Pustaka Setia.
- Andayasari L, Opitasari C. Implementasi Program Pos Pembinaan Terpadu Penyakit Tidak Menular di Provinsi Jawa Barat Tahun 2015. *J Penelit dan Pengemb Pelayanan Kesehat*. 2020 Aug 3;168–81.
- Azwar, S. 2018. Penyusunan Skala Psikologi. Yogyakarta: Pustaka Pelajar.
- Chriswardani S, Wulan K WD. Evaluasi Pelaksanaan Program Pos Pembinaan Terpadu Penyakit Tidak Menular (Posbindu PTM) Puskesmas Sukolilo I Kabupaten Pati. *J Kesehat Masy*. 2019;7(4):647–57.
- Dewi Rismauli Bancin DRB, Sidabukke I. Analisis Implementasi Program Pembinaan Terpadu Penyakit Tidak Menular (Posbindu PTM) Dengan Menggunakan Teori William C Edward Di Puskesmas Kampung Baru Tahun 2020. *J Healthc Technol Med*. 2020;6(2):625.
- Dunn, W. N. (1994). *Public Policy Analysis: An Introduction*, New Jersey: Pearson Education. Dalam Pengantar Analisis Kebijakan Publik. Yogyakarta: Gadjah Mada University Press.
- Dunn, William N. 1999. Analisis Kebijakan. Diterjemahkan Drs. Samodra Wibawa, Ma Dkk. Jakarta.
- Dunn, William N. 2000. Pengantar Analisis Kebijakan Publik. Yogyakarta: Gadjah Mada University Press.
- Dunn, William N. (2003). Analisis Kebijakan Publik. Yogyakarta: Gadjah Mada University Press.
- Dunn, William N. 2008. Pengantar Analisis Kebijakan Publik. Yogyakarta: Gadjah Mada University Press.
- Ewilda T, Zuripal. Strategi Penguatan Posbindu Penyakit Tidak Menular di Puskesmas Tigo Baleh. *Bonanza*. 2020;1(02):164–74.
- Frinadya, N., Munir, D., & Rambe, A. Y. M. (2018). Sinonasal anatomical variation in chronic rhinosinusitis patients based on CT scan finding. *International Journal of Health and Medical Sciences*, 4(2), 48-53. doi:<https://dx.doi.org/10.20469/ijhms.40003-2>.
- Hamzah, Akbar H, Faisal, Rafsanjani TM, Sartika, Sanaga alex handani, et al. 2021. Teori Dasar Epidemiologi Penyakit Tidak Menular. Sugiyatmi tri astuti, editor. Yayasan Penerbit Muhammad Zaini; 1–241 p.
- Handayani OO, Muhani N, Handayani DD. Evaluasi Pelayanan Posbindu Penyakit Tidak Menular Pada Masa Pandemi Covid-19. *J Qual Heal Res Case Stud Reports*. 2021;1(1):41–53.
- Harbani, Pasolong. 2005. Metode Penelitian Administrasi. Unhas: LEPHAS.
- Iskandar A. Evaluasi Program Pos Pembinaan Terpadu Penyakit Tidak Menular (Posbindu PTM) di Kabupaten Jeneponto. 2020.
- Istichomah. 2020. Penyuluhan Kesehatan Tentang Hipertensi Pada Lansia di Dukuh Turi, Bambanglipuro, Bantul. *J Pengabd Harapan Ibu*. 2(1):24.

- Jayusman, T. A. I., & Widiyarta, A. 2018. Efektivitas Program Pos Pembinaan Terpadu (Posbindu) Penyakit Tidak Menular (PTM) Di Desa Anggaswangi Kecamatan Sukodono Sidoarjo. *Dinamika Governance: Jurnal Ilmu Administrasi Negara*, 7(2). <https://doi.org/10.33005/jdg.v7i2.1207>.
- Kemendes RI. 2015. Peraturan Menteri Kesehatan RI No 71 Tahun 2015 Tentang Penanggulangan Penyakit Tidak Menular. *Peratur Menteri Kesehat RI No 71 Tahun 2015 Tentang Penanggulangan Penyakit Tidak Menular*. (1775):32.
- Kemendes RI. 2017. Permenkes No 5 Tahun 2017 tentang Rencana Aksi Penanggulangan Penyakit Tidak Menular Tahun 2015-2019. (207):1–26.
- Kemendes. Infodatin Tetap Produktif, Cegah, dan Atasi Diabetes Melitus. 2020. Pusat Data dan Informasi Kementerian Kesehatan RI. p. 1–10.
- Kementerian Kesehatan RI. Epidemi Obesitas [Internet]. *Jurnal Kesehatan*. 2018. p.1–8. Available from: [http://www.p2ptm.kemkes.go.id/dokumen\\_ptm/factsheet-obesitas-kit-informasi-obesitas](http://www.p2ptm.kemkes.go.id/dokumen_ptm/factsheet-obesitas-kit-informasi-obesitas).
- Kusumawati F, Hartono Y. 2010. *Buku Ajar Keperawatan Jiwa*. Jakarta: Salemba Medika.
- Marini, Frank. 2000. *Toward a New Public Administration*. Chandler Publishing Company, Scranton, London, Toronto.
- Masyuri, Zainuddin, M. 2008. *Metodologi Penelitian: Pendekatan Praktis dan Aplikatif*. Bandung: Rafika Aditama.
- Miles, Matthew B. & A. Michael Huberman. 2009. *Analisis Data Kualitatif*. Jakarta: UI-Press.
- Ministry of Health (Indonesia). 2018. *Indonesia health profile 2017*. Jakarta, Indonesia: Ministry of Health (Indonesia).
- Ministry of Health (Indonesia). 2020. *Indonesia health profile 2019*. Jakarta, Indonesia: Ministry of Health (Indonesia).
- Ministry of Health (Indonesia). 2021. *Indonesia health profile 2020*. Jakarta, Indonesia: Ministry of Health (Indonesia).
- Moleong, J Lexy, Prof. Dr. 2009. *Metode Penelitian Kualitatif*. Bandung: PT. Remaja Rosdakaya.
- Notoatmodjo S. *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta; 2010. 1–243 p.
- Nugraheni WP, Hartono RK. Strategi Penguatan Program Posbindu Penyakit Tidak Menular di Kota Bogor. *J Ilmu Kesehat Masy*. 2018;9(3):198–206.
- Nurfikri, Ari; Supriadi, Supriadi; and Aufa, Badra Al. 2020. Evaluasi Pelayanan Posbindu Penyakit Tidak Menular di Wilayah Kerja Puskesmas Jagasatru Kota Cirebon Pada Era Pandemi Covid-19. *Jurnal Administrasi Bisnis Terapan (JABT)*, 3(1), Article 2. DOI: 10.7454/jabt.v3i1.1003.
- Oktarianita O, Wati N, Febriawati H. Persepsi Peserta Posbindu PTM Tentang Pelaksanaan Kegiatan Pos Pembinaan Terpadu Penyakit Tidak Menular (Posbindu PTM) Di Wilayah Kerja Puskesmas Beringin Raya Kota Bengkulu. *Avicenna J Ilm*. 2020;15(2):138–46.
- P2PTM, D. 2019. Petunjuk teknis pos pembinaan terpadu posbindu bagi kader. 1–60. <http://p2ptm.kemkes.go.id/uploads/VHcrbkVobjR>

zUDN3UCs4eUJ0dVBndz09/2019/03/Petunjuk\_Teknis\_POSBINDU\_Bagi\_Kader.pdf.

- Prastoyo A. 2016. *Metode Penelitian Kualitatif Dalam Perspektif Rancangan Penelitian*. Jogjakarta: Ar-Ruzz Media;195 p.
- Primiyani Y, Masrul M, Hardisman H. Analisis Pelaksanaan Program Pos Pembinaan Terpadu Penyakit Tidak Menular di Kota Solok. *J Kesehat Andalas*. 2019;8(2):399.
- Profil Puskesmas Singgani Tahun 2022.
- Ratminto, Atik Septi Winarsih. 2018. *Manajemen Pelayanan*. Yogyakarta: Pustaka Belajar.
- Ratnasari IA. Implementasi Program Pos Pembinaan Penyakit Tidak Menular. 2020;4(Special 4):785–98.
- Riset Kesehatan Dasar 2018.
- Satori D, Komariah A. 2017. *Metodologi Penelitian Kualitatif*. Bandung: Alfabeta;1–270 p.
- Setyaji DY, Prabandari YS, Gunawan IMA. 2018. Aktivitas Fisik Dengan Penyakit Jantung Koroner di Indonesia. *J Gizi Klin Indonesia*. 14(3):115.
- Sugiyono. 2017. *Metode Penelitian Kuantitatif, Kualitatif, R & D*. Bandung: CV Alfabeta.
- Wirasmi S, Achadi A, Anggraini anggita bunga. Evaluasi Pelaksanaan Program Posbindu PTM di 5 Provinsi Tahun 2021. *Ilm Indones*. 2022;7(12).
- Wirawan. 2020. *Evaluasi Teori, Model, Metodologi, Standar, Aplikasi dan Profesi*. Jakarta: PT Raja Grafindo Persada;1–613 p.
- Yandrizal Y, Utami SP, et al. 2017. Analisis kemampuan dan kemauan membayar iuran terhadap pencapaian UHC JKN di Kota Bengkulu. *Jurnal Kesehatan Masyarakat Andalas*, 10(1), 3-10. doi: <https://doi.org/10.24893/jkma.v10i1.156>.
- Yunia gladis fiolita, Wahyono B. Program Pengendalian Penyakit Tidak Menular Berbasis Posbindu di Wilayah Kerja Puskesmas Bawen. *Indones J Public Heal Nutr [Internet]*. 2021;1(3):590–9. Available from: <http://journal.unnes.ac.id/sju/index.php/IJPHN>.
- Zeithaml, V.A., Bitner, M.J., Gremler, D.D. (2013). *Services Marketing: Integrating Customer Focus Across the Firm*. 6th ed. McGraw-Hill. Boston.
- Zeithaml, V.A., Bitner, M.J., & Gremler, D.D. (2018). *What Are Services?* (7th ed.). McGraw-Hill Education.

**EVALUATION OF INTEGRATED COUNSELING POST SERVICES  
FOR NON-COMMUNICABLE DISEASES AT SINGGANI  
COMMUNITY HEALTH CENTER**

Evi Hinel<sup>1</sup>, Mohammad Irfan Mufti<sup>2</sup>, Asrifai<sup>3</sup>

DOI: <https://doi.org/10.54443/sibatik.v3i10.2351>

---

