# Analysis Of Factors Affecting The Utilization Of PTM Posbindu At The Jailolo Health Center, West Halmahera Regency

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#### Abstract.

Posbindu PTM is a form of service that involves community participation through promotive and preventive efforst to detect and control early on the presence of PTM risk factors in an integrated manner. The purpose of this study was to determine the factors that influence the utilization of PTM Posbindu at the Jailolo Health Center, West Halmahera Regency. This type of research uses cross sectional approach with a cross sectional study. The population was 201 participants with the sampling technique using the Slovin formula, namely 134 pasticipants. Data obtained by conducting interviews using a questionnaire. Data analysis was univariate and bivariate with che square statistical test with a value of=0,05. Based on the results of the study, it can be concluded that there is a significant relationship between knowledge p-value=0,001<alpha ( $\alpha$ =0,05), family support p-value=0,004<alpha ( $\alpha$ =0,05), while the unrelated is attitude p-value=1.568<alpha value ( $\alpha$ =0.05), health worker support p-value=1.249<alpha value ( $\alpha$ =0.05) and PTM cadre support p-value=0.941<alpha value ( $\alpha$ =0.05) on the utilization of PTM Posbindu at the Jailolo Health Center, West Halmahera Regency. It is recommended that participants take part in PTM cadres are more active in approaching or coordinating so that participants want to visit PTM Posbindu.

Keywords : Knowledge, Attitude, Support for Health Workers, Support for PTM Cadres, Posbindu PTM.

# I. INTRODUCTION

Non-communicable diseases (PTM) are made a national priority in the 2030 Sustainable Development Goals (SDGs). Non-communicable diseases (NCDs) are chronic degenerative diseases including heart disease, diabetes mellitus (DM), cancer, chronic obstructive disease (POK), disorders due to accidents and violence. This disease is often not detected because it does not cause symptoms or complaints and is usually found at an advanced stage so it is difficult to cure and can cause disability or premature death [1] Non-communicable diseases have become the leading cause of death globally at this time (Shilton, 2013). WHO data shows that as many as 57 million (63%) deaths occur in the world and 36 million (43%) morbidity rates are caused by non-communicable diseases [2]. In 2018 WHO released about 71% of the causes of death in the world are non-communicable diseases that kill 36 million people per year. About 80% of these deaths occur in middle and low income countries, 73% of deaths are due to non-communicable diseases, namely 35% of heart and blood vessel diseases, 12% of cancer, 6% of chronic respiratory diseases, 6% of diabetes and 15% of other non-communicable diseases [3]. In Indonesia, 59% of the total deaths and 69.9% of the burden of major NCDs. In 2018 the prevalence of major NCDs and their risk factors increased by around 23-90% from the prevalence in 2013 [4].Based on Riskesdas 2018, PTM in Indonesia shows the prevalence of Non-Communicable Diseases has increased when compared to Riskesdas 2013, including cancer, stroke, chronic kidney disease, diabetes mellitus, and hypertension.

The prevalence of cancer rose from 1.4 per mil (Riskesdas 2013) to 1.8 per mil, the prevalence of stroke rose from 7 per mil to 10.9 per mil and chronic kidney disease rose from 2 per mil to 3.8 per mil. Based on blood sugar examination, diabetes mellitus rose from 6.9% to 8.5% and the results of blood pressure measurements, hypertension increased from 25.8% to 34.1%. The increase in the prevalence of non-communicable diseases is related to lifestyle, including smoking, consumption of alcoholic beverages, physical activity, and consumption of fruit and vegetables. The results of Riskesdas also stated that smoking behavior in adolescents increased from 7.2% (Riskesdas 2013), 8.8% (Sirkesnas 2016) and now 9.1% (Riskesdas 2018). Data on the proportion of alcoholic beverage consumption also increased from 3% to 3.3%. Likewise, the proportion of lack of physical activity increased from 26.1% to 33.5%. Another thing that also contributes to the increase in non-communicable diseases is the proportion of fruit and vegetable

consumption that is less in the population, which is 95.5%. Non-communicable diseases are increasing due to eating too well and lifestyle, causing diabetes to rise, obesity to rise and hypertension to rise. To change their behavior, they need to use a family approach and provide education so that they can encourage people to seek treatment so that they become healthy [5] In 2018 the incidence of PTM in North Maluku Province tends to show an increase, including Diabetes Mellitus, heart and blood vessel disease, asthma, lung disease and land traffic accidents. PTM risk factors such as smoking, physical activity, obesity and an unhealthy diet are now a public health problem in North Maluku. The death rate from NCDs continues to increase, especially in low and middle income areas (LMICs). Currently, there is not much data related to the prevalence of PTM and risky behavior based on the region that affects the magnitude of the PTM problem so that the policy for controlling PTM in North Maluku Province is still below the national target [6] Posbindu PTM is a form of community participation in early detection, utilization and follow-up of risks independently and continuously. This activity was developed as a form of early awareness of PTM because most of the risk factors for PTM do not initially give symptoms [7].

Posbindu PTM is a form of community-based health effort (UKBM) which was developed by the government in 2011 according to WHO recommendations with promotion and prevention efforts as well as reduction of PTM risk factors through community empowerment [8]. According to the Ministry of Health of the Republic of Indonesia 2012, the implementation of PTM Posbindu requires guidelines as a reference for stakeholders and program managers at various administrative levels to facilitate the implementation of PTM Posbindu in the community so that the implementation of PTM Posbindu has leverage data in controlling risk factors [9] The number of PTM Posbindu in Indonesia as of December 2017 was 33,679 (24.9%) with the target and achievement of the P2PTM program strategic plan indicators for 2015-2019 the percentage of Puskesmas that implemented integrated PTM control was realized in 2017 of 49.7% and in 2018 of 74, 25% of the 7363 Puskesmas. While the percentage of Villages/Kelurahan that carried out PTM Posbindu activities realized in 2017 was 24.3% and in 2018 it was realized at 43.92% from 35,749 Villages/Kelurahan [10]. In North Maluku Province in the field of controlling non-communicable diseases, it appears that the percentage of Puskesmas that implement integrated PTM control has shown an increase in the percentage of health centers that carry out integrated PTM control. The number of health centers that have carried out minimal management of hypertension and DM or have carried out development of PTM Posbindu are 533 Posbindu with an achievement of 40.65% [11] In 2020 the target data at the Jailolo Health Center was 1597 participants and a total of 524 participants served in the PTM Posbindu activities. While in 2021 the target at the Jailolo Health Center is 1599 participants who are fostered and served in Posbindu activities as many as 201 participants [12]. From the results of the P2PTM annual report at the Jailolo Health Center, it can be seen that the utilization of Posbindu activities from 2020 and 2021 has decreased from the target, therefore researchers conducted research on the utilization of PTM Posbindu at the Jailolo Health Center, West Halmahera Regency.

#### II. METHODS

The research method used is cross sectional with a cross sectional study approach. This research was conducted from June to August 2002 at the Jailolo Health Center, West Halmahera Regency. The study population was 201 participants and a sample of 134 participants with a sampling technique using the Slovin formula. Data were obtained through interviews using a questionnaire instrument. Data analysis was univariate and bivariate with che square statistical test with = 0.05.

# III. RESULT AND DISCUSSION

#### **Univariate Analysis**

**Table 1.** Frequency distribution of respondents based on the utilization of PTM Posbindu, Age, Gender,

 Occupation, Knowledge, Attitude, Health Officer Support, Cadre Support and Family Support at the

Jailolo Health Center, West Halmahera Regency:

|          |   | 6, |
|----------|---|----|
| Variabel | n | %  |
| Age      |   |    |

| 25-34 Years             | 2   | 1,5   |
|-------------------------|-----|-------|
| 35-44 Years             | 75  | 55,9  |
| 45-54 Years             | 38  | 28,4  |
| 55-64 Years             | 13  | 9,7   |
| >65 Years               | 6   | 4.5   |
| Gender                  |     |       |
| Man                     | 44  | 32,8  |
| Woman                   | 90  | 67,2  |
| Work                    |     |       |
| IRT                     | 88  | 56,7  |
| Self-employed           | 37  | 27,6  |
| civil servant           | 2   | 1,5   |
| Farmer                  | 7   | 5,2   |
| Knowledge               |     |       |
| Well                    | 84  | 62,7  |
| Not enough              | 50  | 37,3  |
| Attitude                |     |       |
| Positive                | 80  | 59,7  |
| Negative                | 54  | 40,3  |
| Health Officer Support  |     |       |
| Well                    | 95  | 70,9  |
| Not enough              | 39  | 29,1  |
| PTM Cadre Support       |     |       |
| Well                    | 83  | 61,9  |
| Not enough              | 51  | 38.1  |
| Family support          |     |       |
| Well                    | 72  | 53,7  |
| Not enough              | 62  | 46,3  |
| Utilization of Posbindu |     |       |
| Well                    | 31  | 23,1  |
| Not enough              | 103 | 76,9  |
| Total                   | 134 | 100,0 |

Based on Table. 1. It can be seen that the frequency distribution of the most respondents based on the age group is 35-44 years, namely 75 (55.9%), female sex is 90 (67.2%), occupation of Housewives (IRT) is 88 (56, 7%), good knowledge as much as 84 (62.7%), positive attitude 80 (59.7%), support from health workers in good category as much as 95 (70.9%), cadre support in good category 83 (61.9%), family support with good category as many as 72 (53.7%), and respondents using PTM Posbindu with good category as many as 31 (23.1%).

# **Bivariate Analysis**

**Table 2.** Relationship of Knowledge, Attitude, Support of Health Officers, Support of Cadres, Family

 Support with Utilization of PTM Posbindu at the Jailolo Health Center, West Halmahera Regency:

| Variabel               | Posbindu Utilization |      |            |      |         |
|------------------------|----------------------|------|------------|------|---------|
|                        | Good                 |      | Not enough |      | P-Value |
|                        | n                    | %    | Ν          | %    |         |
| Knowledge              |                      |      |            |      |         |
| Well                   | 20                   | 64,5 | 64         | 62,1 | 0.001   |
| Not enough             | 11                   | 35,5 | 39         | 37,9 |         |
| Attitude               |                      |      |            |      |         |
| Positive               | 22                   | 71.0 | 58         | 56,3 | - 1,568 |
| Negative               | 9                    | 29,0 | 45         | 43,7 |         |
| Health Officer Support |                      |      |            |      |         |
| Well                   | 19                   | 61,3 | 76         | 73,8 | - 1,249 |
| Not enough             | 12                   | 38,7 | 27         | 26,2 |         |
| PTM Cadre Support      |                      |      |            |      |         |
| Well                   | 22                   | 71,0 | 61         | 59,2 | 0,941   |

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| Not enough     | 9  | 29,0 | 42 | 40,8 |       |
|----------------|----|------|----|------|-------|
| Family support |    |      |    |      |       |
| Well           | 16 | 51,6 | 56 | 54,4 | 0.004 |
| Not enough     | 15 | 48,4 | 47 | 45,6 | 0,004 |

Table.2.Shows that there is a significant relationship between knowledge p-value = 0.001<alpha value ( $\alpha$ =0.05), family support p-value =0.004<alpha value ( $\alpha$  = 0.05), while what is not related is attitude p-value=1,568<alpha value ( $\alpha$ =0,05), health worker support p-value=1,249<alpha value ( $\alpha$ =0,05), and PTM cadre support p-value=0,941<alpha value ( $\alpha$ =0,05) on the utilization of PTM Posbindu at the Jailolo Health Center, West Halmahera Regency.

#### Relationship between Knowledge and Utilization of PTM Posbindu

Knowledge is not the only cause of a person's behavior change, but plays a role in determining the early stages of how a person behaves. The knowledge of respondents in utilizing PTM Posbindu is very important because the knowledge possessed by respondents can help overcome their health problems. Knowledge about Posbindu is one of the factors that determine someone coming to Posbindu, if the respondent's knowledge about Posbindu. Table 1. shows that respondents who have good knowledge are 20 respondents (64.5%), good use of PTM Posbindu, and 64 respondents (62.1%), less use of PTM Posbindu. while respondents with less knowledge were 11 respondents (35.5%), both utilization of PTM Posbindu and 39 respondents (37.9%), less utilization of PTM Posbindu. Some respondents know information about Posbindu activities, both from officers and from cadres, but respondents are often negligent and have other activities.

This is because there are several respondents who have been diagnosed with diabetes mellitus and high blood pressure, so they always regularly participate in Posbindu activities to get free services. In table 2, from the results of the che-square analysis, the p-value =  $0.001 < alpha value (\alpha = 0.05)$  which means that there is a relationship between knowledge and the utilization of PTM Posbindu at the Jailolo Health Center in 2022. This result is in line with research conducted by Sri Natalia Ginting, namely knowledge has a significant value p-value =  $0.001 < alpha value (\alpha = 0.05)$  meaning that knowledge has a significant influence on the utilization of PTM Posbindu in the Work Area of Rantang Medan Health Center, Medan Petisah District [13].Lack of knowledge of respondents about the use of Posbindu will have an impact on understanding in using Posbindu, limited knowledge and health care will be neglected. Respondents who have good knowledge will take advantage of Posbindu, while those with less knowledge will not maximize the use of Posbindu.

### Relationship between Attitude and Utilization of Posbindu

Table 1. shows that respondents who have a positive attitude are 22 respondents (71.0%), both using PTM Posbindu, and as many as 58 respondents (56.3%), less utilization of PTM Posbindu. while respondents with a negative attitude were 19 respondents (29.0%), both using PTM Posbindu and 45 respondents (43.7%), less utilization of PTM Posbindu. This is because the Posbindu activity is close to the respondent's house so that the PTM cadres invite them to participate in the Posbindu activity. In table 2, from the results of the Che-Square analysis, p-value=1.568> alpha value ( $\alpha = 0.05$ ), it means that there is no relationship between attitudes and the use of PTM Posbindu at the Jailolo Health Center. The research is in line with the research of Yuniar Restu Widianti at.el (2020), the statistical test results obtained p=0.044 (P.Value<0.05) meaning there is no relationship between attitude and utilization of PTM posbindu services. Respondents with a bad attitude are more at risk for not using the PTM Posbindu service compared to respondents who have a good attitude. Respondents being positive already have knowledge, information and education [14]

According to Notoatmojo Soekidjo, defines attitude as a person's readiness to act in certain situations, in a positive attitude. Negative attitudes have a tendency to stay away, avoid, hate and not the same as liking certain objects. As individual beings, humans have the urge or mood to establish self-relationships, while human social beings have the urge to establish relationships with other people [15]. According to Azwar (2012), Attitude is an evaluation process from within a person. Evaluative response

means that the form of reaction expressed in the attitude arises based on an evaluation process within the individual that concludes the stimulus in the form of good or bad, supportive or not supportive, positive or negative, pleasant or unpleasant and then ends as a potential reaction to the attitude object [16]

# Relationship between Health Worker Support and Posbindu Utilization

Based on the Law of the Republic of Indonesia concerning health workers No. 36 of 2014, it is explained that everyone who devotes himself to the health sector and has knowledge and skills through education in the health sector for certain types that require authority in carrying out health efforts [17]. Table 1. shows that 19 respondents (61.3%), good use of PTM Posbindu, and 76 respondents (73.8%), less use of PTM Posbindu. while respondents did not get the support of health workers as many as 12 respondents (38.7%), both using PTM Posbindu and 27 respondents (26.2%), less utilization of PTM Posbindu. In table 2, from the results of the Che-Square analysis, p-value = 1,249>alpha value ( $\alpha$  = 0.05), it means that there is no relationship between the support of health workers and the utilization of Posbindu PTM at the Jailolo Health Center.However, there are similar research results on the role of health workers in the use of Posbindu, Indriani at el, (2018) states that respondents who have a bad assessment of the behavior of health workers in PTM Posbindu are caused by several reasons, including:

(a) respondents feel the services provided so quickly or in a hurry that the patient was not satisfied with the explanation of the results of the examination carried out by the health worker (b) the respondent stated that sometimes the health worker came late so that the respondent was forced to wait for the presence of the health worker and (c) most of the respondents had never received information on PTM Posbindu activities both from health workers and through banners, leaflets, and leaflets so that respondents considered that the activeness of health workers in disseminating information on PTM Posbindu activities was still very low [18]Health workers play an important role in improving the maximum quality of health services to the community so that people are able to increase awareness, willingness and ability to live a healthy life so that they are able to realize the highest degree of health as an investment for the development of socially and economically productive human resources. The support of health workers will form their own perception of respondents about Posbindu services. Health workers who provide support and a good impression on respondents will have an impact on the desire of the community to make more use of Posbindu [18]

### Relationship between PTM Cadre Support and Posbindu Utilization

In Table 1. It shows that good respondents received the support of PTM cadres, there were 22 respondents (71.0%) both using PTM posbindu and there were 61 respondents (59.2%) less utilizing PTM posbindu. While respondents did not get the support of PTM cadres, there were 9 respondents (29.0%) both using PTM Posbindu and 42 respondents (40.8%) not using PTM Posnindu. While respondents with less support from health workers were 12 respondents (38.7%), both using PTM Posbindu and 27 respondents (26.2%), less utilization of PTM Posbindu. This is because some respondents are people with diabetes mellitus so that sometimes they feel weak to participate in posbindu activities even though they have been reminded by PTM cadres. While respondents who have less support from PTM cadres but have good use of posbindu are 9 (29.0%), this is because they get support from their families and Posbindu information is obtained from health workers who live around the respondent's home environment. In table 2, from the results of the Che-Square analysis, p-value=0.941>alpha value ( $\alpha$ =0.05), it means that there is no relationship between PTM cadre support and the utilization of PTM posbindu at the Jailolo Health Center. This study is not in line with research by Arininda Rima Kurnia at.el. From the results of hypothesis testing with the Chi-Square test, the p-value = 0.000> alpha value ( $\alpha$  = 0.05) means that there is a relationship between cadre support and visits by people of productive age at Posbindu PTM Puri Praja [19].

Research conducted by Arif Eko shows that there is a relationship between cadre support and the utilization of PTM Posbindu with p-value = 0.000 (p <0.05). This is because the cadres lack the initiative in inviting the community to check their health at the PTM Posbindu so that people are less motivated to visit [20]The irregularity of visits by people of productive age at the PTM Puri Praja Posbindu was due to a lack of positive attitudes towards PTM Posbindu activities. Respondents stated that they did not make regular visits because they were busy working so they did not have time to come regularly and stated that coming to the PTM Posbindu routinely took time even though most respondents had understood the existence of the

PTM Posbindu as an early detection effort to prevent non-communicable diseases for the community.Cadres have an important role in disseminating information about Posbindu to the community, both for PTM sufferers and non-patients, because cadres have duties including assisting the weighing process, measuring blood pressure, abdominal circumference, recording, providing additional food if needed to home visits [21]. In addition, cadres also have good communication in the implementation of Posbindu because they are more equipped with training and have experience. In the theory put forward by Lawrence Green, it states that health cadres are one of the supporting factors that play a role in health behavior because it is a concomitant factor that plays a role in the persistence or disappearance of a behavior [22]. According to the Directorate of Community Participation, Ministry of Health, RI (2005), it is stated that cadres are local community members who are selected and reviewed by the community and can work voluntarily. The role of cadres in Posbindu activities is to play an active role in Posbindu activities and invite the community to be active in these activities. If the cadres do not provide information to the community, they will not take advantage of the Posbindu services. Cadres in addition to having duties and functions must also be able to communicate well and be able to invite and motivate groups and the community. Cadres must also be able to develop everything related to the implementation of posbindu, but monitor the progress of the disease [2]. To improve the self-image of cadres, it must be considered and improve the quality of self as cadres.

This is evident from the information given by the patients who said that they did not receive a complete explanation from the cadres regarding matters related to the PTM Posbindu. Cadres do not routinely provide socialization to patients and the explanations given are very minimal, the reasons why these activities are carried out and the benefits obtained, patients say if the cadres are more active in socializing and reminding patients such as asking about their health conditions, picking up patients home if they arrive late, the patient will be more enthusiastic to participate in these activities. Based on the technical instructions of Posbindu PTM, a number of cadres who have been trained are appointed as coordinators and responsible for movers, monitors, counselors or educators and note-takers. The tasks carried out by the H-1 cadres are carried out in the preparation stage with details of the activities of holding group meetings to determine the schedule of activities, preparing the necessary places and equipment, making and distributing announcements regarding the implementation time, on the D day the implementation stage is carried out, namely carrying out services with a 5 table system according to the schedule. with the need and mutual agreement and carry out joint activities such as exercising together, as well as on H+1 cadres assess the presence of its members, fill out activity implementation notes, identify problems encountered, record the results of problem solving, follow up in the form of home visits if needed, and carry out technical consultation with PTM posbindu supervisor.Nunik et al (2019) stated that the role of cadres as coordinators and movers in PTM posbindu can be played more optimally than their role as risk factor monitors and counselors. This requires periodic training, not only skills in the implementation of the PTM Posbindu program but also training related to effective management and communication [20].

# Relationship between Family Support and Utilization of Posbindu

Table 1. Shows that respondents who have good family support are 16 respondents (51.6%) both use PTM Posbindu, and 56 respondents (54.4%) do not use PTM Posbindu. While respondents who lacked family support, there were 15 respondents (48.4%) both using PTM Posbindu and 47 respondents (45.6%) not using PTM Posbindu. This is part of the respondents revealed that their families have always been supportive in participating in Posbindu activities, but only respondents who sometimes like to delay and sometimes even get scolded for reasons that always come to mind when the results of the examination are not normal. Meanwhile, respondents who have less support from their families but good use of posbindu are 48.4%. This is due to the desire to always control blood pressure and follow gymnastics. In table 2, from the results of the Che-Square analysis, p-value=0.004<alpha value ( $\alpha$ =0.05), it means that there is a relationship between family support and the utilization of PTM Posbindu at the Jailolo Health Center. These results are in line with research conducted by Haniek Try Umayana and Widya Hary Cahyati. The results of the chi square test p-value=0.0001 (>0.05), which means that there is a relationship between family support and population activity in PTM posbindu activities in Semarang City [23] This study shows that good family support can reduce

population activity to PTM Posbindu. The role of the family can also increase information to the population about the importance of posbindu, so that other family members can also participate in health checks at the PTM posbindu on a regular basis.

According to (Wetle, 1997 in Lestari 2011) the family as a strong motivator for residents to participate in PTM Posbindu activities if they always provide themselves to accompany, deliver or remind the PTM Posbindu schedule. The presence of family members plays an important role in preventing or at least delaying people suffering from chronic illness to health care institutions. The extent of involvement and the nature of the services provided by the family depend on economic resources, family structure, quality of relationships, other needs and available manpower [23]. The family as a motivator for family members or vice versa to participate in Posbindu activities if they often provide time to accompany or deliver and remind the schedule to the Posbindu, if you forget or do not know the information on the implementation of Posbindu Family has an important role in reminding family members or vice versa and trying to help overcome family members who have health problems. The presence of family members plays an important role in preventing or at least delaying people suffering from chronic illness so that members who have health problems can use health facilities correctly and optimally.Family support is a process that occurs throughout life, where through family support there is information, advice, real help and attitudes given by family and closest people. Attitude will make a person approach or stay away from other people or other objects. Individuals need social support, one of which comes from the family. The low family support is caused by working family members, so they pay less attention to the importance of health checks in disease prevention efforts [23].

# IV. CONCLUSION

Based on the results of the study, it can be concluded that there is a significant relationship between knowledge p-value=0.001<alpha value ( $\alpha = 0.05$ ), family support p-value=0.004< alpha value ( $\alpha$ =0.05), while those who do not The correlations are attitude p-value=1,568<alpha value ( $\alpha$ =0,05), health worker support p-value=1,249<alpha value ( $\alpha$ =0,05), and PTM cadre support p-value=0.941<alpha value ( $\alpha$ =0.05) on the utilization of PTM Posbindu at the Jailolo Health Center, West Halmahera Regency.

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