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Early Detection of Non-Communicable Diseases (NCDs) in the Elderly in the Working Area of the Bongomeme Health Center, Gorontalo Regency

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ABSTRACT

The elderly are someone who has reached the age of 60 years and above. The elderly group is a vulnerable age group. In this age range, there is a variety of risks of non-communicable diseases (NCDs) caused by degenerative factors such as hypertension, diabetes mellitus, osteoporosis, and cancer. Generally, the increase in the incidence of some of these diseases tends to increase with age, so it is more experienced by the elderly. This study aims to find out the picture of early detection of non-communicable diseases (NCDs) in the elderly in the working area of the Bongomeme Health Center, Gorontalo Regency. The population in this study is all elderly people aged 60 years in the working area of the Bongomeme Health Center, Gorontalo Regency, which amounts to 3200 elderly people. The sampling technique in this study uses the non probability sampling method with the puposive sampling technique, the sampling of this study uses the 10% slovin formula , the sample size is 97 respondents. This research method uses quantitative descriptive research with an analytical descriptive research model with an observational approach. The results showed that the status of NCDs showed that most of the elderly were detected to have Non-Communicable Diseases (NCDs), namely 59 respondents (60.8%), while 38 respondents (39.2%) were not detected to have NCDs. The most common type of NCD found in the elderly is hypertension, followed by diabetes mellitus, heart disease, chronic respiratory disease, and stroke. The conclusion in this study is that most of the elderly in the Bongomeme Health Center area, Gorontalo Regency are detected with NCDs, so it is necessary to strengthen early detection and prevention efforts in a sustainable manner.

INTRODUCTION

The elderly are someone who has reached the age of 60 years and above. The elderly group is a vulnerable age group. In this age range, there is a variety of risks of non-communicable diseases (NCDs) caused by degenerative factors such as hypertension, diabetes mellitus, osteoporosis, and cancer. Generally, the increase in the incidence of some of these diseases tends to increase with age, so it is more experienced by the elderly. The process of aging is closely related to the decline in the function of body organs due to the reduction in the ability of cells to regenerate and maintain their structure. (Kusumaningrum & Nasrudin, 2024)

Non-Communicable Diseases (NCDs) are diseases that cannot be transmitted from person to person, generally lasting for a long time and developing slowly. NCDs include heart disease, stroke, cancer, diabetes, and chronic obstructive pulmonary disease, as well as mental disorders (Ministry of Health of the Republic of Indonesia, 2019).

NCDs have become one of the most serious global health challenges of the 21st century. Based on the data, NCDs account for about 71% of total global deaths each year, with the majority of cases occurring in the elderly group. In Indonesia, non-communicable diseases are the largest cause of death, causing 1,400,000

deaths each year, which is 73% of all deaths WHO, (2023) (Ministry of Health of the Republic of Indonesia., 2023).

According to , there are ten diseases with the highest mortality rate in Indonesia, including stroke at 131.8 cases per 100,000 population, ischemic heart at 95.68, and diabetes mellitus at 40.78 cases per 100,000 population. The 2023 Indonesian Health Survey (SKI) shows that the prevalence of hypertension in the population aged ≥18 years reached 30.8%, although it decreased from 34.1%. Meanwhile, the prevalence of diabetes mellitus in the population aged ≥15 years increased from 2.0% to 2.2%. World Health Organization., (2023) (Ministry of Health of the Republic of Indonesia., 2024)

Data obtained from the Gorontalo Provincial Health Office, (2023). Specifically, Gorontalo Province faces challenges in controlling NCDs in the elderly, where the prevalence of hypertension increased from 25.8% to 34.1%, and diabetes mellitus increased from 6.9% to 8.5%. This increase is closely related to people's lifestyles, especially smoking habits and other behavioral risk factors

Factors that play a role in the occurrence of NCDs include uncontrollable risk factors and controllable risk factors. Risk factors that cannot be controlled such as heredity, gender, age. Meanwhile, risk factors that can be controlled are obesity, lack of exercise or physical activity, smoking, drinking coffee, education, work and diet (Aspirani, 2019).

The main risk factors for NCDs in the elderly include high-fat diets, lack of physical activity, smoking habits, stress, and metabolic disorders such as obesity and high cholesterol. This condition shows that early detection of NCDs in the elderly is very important to prevent complications and reduce morbidity and mortality rates in the elderly age group (Roosihermiatie et al., 2023).

Early detection of NCDs in the elderly is a key strategy in efforts to prevent and control degenerative diseases. Through early detection, cases of NCDs can be identified at an early stage before they cause more serious complications. (Dwi et al., 2021)

The NCD early detection program implemented through the Integrated Development Post (Posbindu) of NCDs is one of the innovations in the public health service system that involves the active participation of health cadres and the community. However, the implementation of the NCD early detection program in the elderly at the health center level still faces various challenges. Factors such as limited human resources, facilities and infrastructure, geographical accessibility, and the level of public awareness are obstacles in achieving program targets. In addition, sociodemographic and local cultural characteristics also affect the effectiveness of NCD early detection programs. A preliminary study conducted by the Posyandu emphasized the importance of early detection of non-communicable diseases in the elderly through Posyandu/Posbindu activities. In this activity, blood pressure, blood sugar, cholesterol, and uric acid were checked followed by health education. The results of the study show that early detection is able to increase the awareness of the elderly about their health conditions and encourage the prevention of further complications. This proves that simple interventions at the community level can have a significant impact on NCD prevention. (Sri et al., 2022) (Widiyati et al., 2021) (Global Health Science Group, 2024)

A research study conducted by Febriyanti et al. (2024) highlights the importance of hypertension screening as one of the steps for early detection of NCDs in the elderly. The cross-sectional study involving 151 respondents aged ≥60 years found a high proportion of elderly people with uncontrolled blood pressure. These findings suggest that routine blood pressure screening in the community is needed to prevent cardiovascular complications that often occur in the elderly group.

The research study carried out by the team through the Elderly Posyandu program in one of the villages, which conducted health checks included measuring weight, height, blood pressure, and GCU (glucose, cholesterol, uric acid) tests. This study emphasizes that the integrated screening activity not only functions as an early detection of NCDs, but also as a means of health education for the elderly and families. The results show that many elderly people are at risk of hypertension and diabetes, so follow-up in the form of referrals and continuous health monitoring is needed. Servant, (2024)

The research study was conducted by conducting early detection of hypertension and diabetes mellitus through the measurement of blood pressure and blood sugar in the elderly population. The results show that there is a significant proportion of elderly people who experience increased blood pressure or hyperglycemia. This study reinforces the evidence that simple screening methods can be an effective step in detecting NCD cases early and preventing the worsening of health conditions later in life. Sinaga et al., (2024)

Based on preliminary studies or preliminary observations conducted at the Bongomeme Health Center in August 2025, it is known that cases of non-communicable diseases (NCDs) in the elderly are quite high, especially hypertension and diabetes mellitus. Based on the report of the health center, out of a total of 327 elderly people who visited for one month, around 100 elderly people were detected with hypertension, while around 60 elderly people had diabetes mellitus. A third of the elderly who visited were detected with hypertension, while the other half had diabetes. This condition is exacerbated by limited resources, both in terms of health workers and examination facilities, so that the implementation of the early detection program has not been able to reach the entire elderly population in the work area.

Early detection efforts of NCDs have been carried out through Posbindu PTM activities which are held regularly every month in villages. The examination carried out includes measuring blood pressure, weight, abdominal circumference, and blood sugar at any time. However, the achievement of elderly attendance is still relatively low, which is only around 50-60% of the target number. This is influenced by geographical factors, because some elderly people live in hilly areas with difficult access, as well as behavioral factors, namely low awareness of the elderly on the importance of health checks even though there are no complaints.

Interviews with Posbindu cadres revealed that most of the elderly were reluctant to attend because they felt healthy or were constrained by transportation. However, the elderly who regularly attend examinations admitted that they were helped by the existence of the Posbindu, because they can monitor their health conditions without having to go far to the health center. In fact, some elderly people feel more motivated to control their lifestyle after receiving education from cadres and health workers. This shows that early detection of NCDs through the Posbindu PTM is very useful, but still faces obstacles in terms of accessibility, participation, and adequate resource support

This research is expected to contribute to the development of a more effective health service model for the elderly and in accordance with local conditions. Based on the description above, the researcher is interested in conducting a research entitled "Early Detection of Non-Communicable Diseases (NCDs) for the Elderly in the Working Area of the Bongomeme Health Center, Gorontalo Regency" as an effort to provide a comprehensive overview of the implementation of the NCD early detection program and provide input for future program improvements.

RESEARCH METHODOLOGY

This research method uses quantitative descriptive research with an analytical descriptive research model with an Observational Analytical approach is a research design that aims to describe the phenomenon of Infectious Diseases (NCDs) in the elderly at the Bongomeme Health Center. This study aims to find out the picture of early detection of non-communicable diseases (NCDs) in the elderly and analyze risk factors related to early detection of NCDs, This study is not to find correlations, cause-effects, or compare between variables, but only to describe the situation in the field. (Notoatmodjo, 2014). Where to find out Early detection of non-communicable diseases (NCDs) for the elderly in the working area of the Bongomeme Health Center, Gorontalo Regency. This research will be carried out at the Bongomeme Health Center, Gorontalo Regency. This research will be carried out from September to October 2025.

Data Analysis Techniques

Univariate analysis

Univariate analysis is used to display or see an overview of the frequency distribution of respondents according to the variables studied. In this study, univariate analysis is presented in the form of the frequency of each variable by calculating its distribution and proportions with the following formula:

The univariate analysis in this study is all the variables studied, namely the early detection of non-communicable diseases in the elderly using frequency distribution presented in the form of a table.

RESULTS

Table 1 Characteristics of Respondents

Characteristics	Frequency	Introduce yourself
Age:	N 68	
60-74 Years	29	70,1
75-90 Years		29,9
Total	**97**	**100,0**
Final Education:		
SD	38	39,2
Junior High	31	32
School	21	21,6
D3/S1	7	7,2
Total	**97**	**100,0**
Gender:		
Male Female	51	52,6
	46	47,4
Total	**97**	**100,0**
Occupation : Retired		
Farmer	50	51,5

Merchant	32		33
	15		15,5
Total		**97**	**100,0**

Data Source 2025

Based on table 1, the researcher obtained from 97 respondents the age frequency distribution table, the majority of respondents aged 60-74 years old were 68 respondents (70.1%), based on the last education frequency distribution table, the majority of respondents were elementary education as many as 38 respondents (39.2%), then based on the gender frequency distribution table the majority of respondents were male as many as 51 respondents (52.6%) then based on the distribution table of the frequency of the majority of work 50 respondents (51.5%) are no longer employed or retired.

Distribution of Non-Communicable Diseases (NCDs) in the Elderly in the Working Area of the Bongomeme Health Center, Gorontalo Regency

Table 1. Distribution of Non-Communicable Diseases in the Elderly

Status PTM	Frequency	Introduce yourself
Detected	59	60,8
Undetectable	38	39,2
Total	**97**	**100**

Data Source 2025

Based on table 2, the researcher obtained the results of the analysis of non-communicable diseases in the elderly from 97 respondents, the majority of respondents were included in the category of detected NCDs, as many as 59 respondents (60.8%) and as many as 38 respondents (39.2%) were included in the category of undetected NCDs.

Distribution of Non-Communicable Diseases in the Elderly in the Working Area of the Bongomeme Health Center, Gorontalo Regency

Table 3 Distribution of Non-Communicable Diseases in the Elderly

Types of PTM	Frequency	Introduce yourself
Hypertension	39	60,1
Diabetes Mellitus	15	23,1
Heart Disease	6	9,2
Chronic Respiratory Diseases	4	6,1
History of Stroke	1	1,5
Total	**65**	**100**

Data Source 2025

Based on table 3, it can be seen that of the 65 elderly respondents who were detected, the most common type of Non-Communicable Disease was hypertension as many as 39 respondents (60.1%). Furthermore, diabetes mellitus ranked second with 15 respondents (23.1%), followed by heart disease with 6 respondents (9.2%). Chronic respiratory diseases such as COPD were experienced by 4 respondents (6.1%) and stroke was identified in 1 respondent (6.2%). Of the 65 respondents, there were 6 respondents who had more than 1 non-communicable disease.

DISCUSSION

Identify the Characteristics of the Respondent

Age

Based on the results of the study obtained from 97 respondents in the age frequency distribution table, the majority of respondents aged 60-74 years as many as 68 respondents (70.1%), This finding illustrates that

the early elderly group (young-old) is the most dominant population in health services in the region, including in early detection of non-communicable diseases (NCDs).

According to Nugroho, (2020) the age group of 60–74 years is categorized as the early elderly, who generally still have better functional capacity than the elderly. The elderly in this group are still active enough to participate in health checks and early detection services. This is in line with the WHO statement (2021) that the participation rate of the elderly in health programs is highest in the age group of 60–74 years because the mobility and health awareness functions are still relatively good.

The findings of this study are in line with a recent study by Sari et al. (2022) which showed that the majority of participants in the Posbindu PTM program are in the age range of 60–74 years and are more at risk of developing NCDs, especially hypertension and diabetes mellitus, due to physiological changes in the body such as decreased blood vessel elasticity and glucose metabolism.

In addition, research by Hidayati & Wulandari (2023) found that the early elderly group had a high prevalence of NCDs due to the accumulation of unhealthy lifestyles at previous productive age. This emphasizes that the largest number of elderly people in the age range of 60–74 years is very relevant to the title of this study because this group is an ideal target for early detection interventions. Early detection in this age group is important because they are in the transition phase to the elderly and are at risk of an increased incidence of NCDs if they are not routinely prevented and monitored.

The researcher assumes that the high number of respondents in the age group of 60–74 years who participate in NCD early detection activities is influenced by the still good level of mobility, higher health awareness compared to the age group of 75 years and above, and easier access to health facilities. In addition, researchers suspect that this group is more proactive in participating in health activities because they begin to feel changes in physical condition so that they are more motivated to carry out early examinations.

Education

Based on the results of the research obtained from 97 respondents, it is known that the majority of respondents have an elementary school (SD) education level, namely 38 respondents (39.2%), while other education levels such as junior high school, high school, and D3/S1 have a smaller proportion. These findings show that the majority of the elderly in the working area of the Bongomeme Health Center have a relatively low level of education. In theory, education level is one of the factors that greatly affects a person's knowledge, understanding, and awareness in maintaining health.

According to Notoatmodjo (2018), the lower a person's education level, the more limited their ability to receive health information and make decisions related to healthy living behaviors. This is in line with the WHO statement (2022) which states that low education is closely related to low health literacy, which has an impact on delays in early detection of non-communicable diseases (NCDs).

These findings are also strengthened by research by Sari & Widyaningsih (2021) which found that the elderly with low education tend to have a minimal understanding of NCD risk factors, such as diet, physical activity, and the importance of regular health checkups.

Another study by Hastuti et al. (2023) shows that the level of education has a significant effect on the behavior of seeking health services for the elderly with elementary and junior high school education, which tends to rarely do early examinations unless they have experienced symptoms. Thus, this condition is very relevant to the research focus on Early Detection of Non-Communicable Diseases in the Elderly, because low education is one of the factors that can hinder the optimal implementation of early detection programs in the community.

In the context of the Bongomeme region, the low level of education of the elderly can be caused by rural environmental factors and limited access to education when they are still of productive age. Low education is also likely to contribute to the high rate of NCDs in the region, as low health literacy can lead to a lack of understanding of the management of risk factors such as hypertension, diabetes, and heart disease.

The researchers assumed that the respondents' low education affected their level of understanding of NCD prevention and early detection information. With low education, the elderly tend to have limitations in understanding health instructions, so participation in posbindu activities or NCD screening programs may not be optimal. The researcher also suspects that this limited education contributes to the relatively high number of NCDs in the working area of the Bongomeme Health Center.

Gender

Based on the results of the study, it was found that the majority of respondents in this study were male, namely 51 respondents (52.6%), This gives an idea that the male group is more involved in health check-up activities or visits to health service facilities, especially in NCD early detection activities in the work area of the Bongomeme Health Center. In theory, sex differences have a relationship with the risk and incidence of non-communicable diseases (NCDs).

According to the Indonesian Ministry of Health (2023), men have a higher risk of hypertension, heart disease, and diabetes mellitus than women, especially because patterns of physical activity, smoking habits,

and unhealthy lifestyles are more commonly found in the male group. In addition, Notoatmodjo (2018) also stated that gender factors affect health behavior, where men tend to ignore changes in health symptoms so that NCDs are often detected at a later stage, so early detection activities are very important. The results of this study are in line with the latest study by Rahmawati et al. (2023) entitled "Risk Profile of Non-Communicable Diseases in the Elderly by Gender at Puskesmas in the Eastern Region of Indonesia", which found that men have a higher prevalence of NCDs than women, especially in blood pressure and blood glucose levels indicators. The study also confirms that lifestyles such as tobacco consumption and lack of physical activity are more common in older men.

In line with research by Hastono & Azizah (2022) in a study entitled "Gender Relationship with the Incidence of Non-Communicable Diseases in the Elderly in Primary Services" shows that men have a 1.6 times higher chance of experiencing NCDs than women, due to greater exposure to risk factors throughout life.

The researcher assumes that the dominance of male respondents in this study is influenced by several conditions related to the social characteristics and activity patterns of the elderly in the working area of the Bongomeme Health Center. Older men generally have higher activities outside the home so that they are more affordable in health service activities, including early detection of NCDs. In addition, heavier physical workloads during productive periods, such as farming or other manual work, are thought to increase the risk of non-communicable diseases in old age.

Jobs

Based on the results of the research, the majority of respondents in this study were elderly who were no longer working or retired, namely 50 respondents (51.5%). This condition illustrates that most of the elderly in the work area of the Bongomeme Health Center are in a phase of non-productive age, where physical activity begins to decrease and dependence on family or health services increases. Inactive or retired employment status is closely related to the risk of non-communicable diseases (NCDs), because the elderly with low levels of physical activity have a greater tendency to experience metabolic disorders such as hypertension, diabetes mellitus, obesity, and heart disease. According to the theory presented by Notoatmodjo (2018), work is a social factor that affects a person's healthy living behavior and health status. Elderly people who no longer work tend to experience a decrease in physical activity routines, which can accelerate the appearance of degenerative diseases. This is reinforced by the Ministry of Health of the Republic of Indonesia (2023) which explains that physical activity is one of the important indicators in the prevention of NCDs, especially in the elderly population.

This is in line with the latest study by Rahman et al. (2023) in a study entitled "The Relationship between Employment Status and the Risk of Non-Communicable Diseases in the Elderly in Primary Health Services", which shows that retired seniors have twice the risk of developing hypertension and diabetes compared to the elderly who are still working lightly. The study explains that lack of physical activity and lifestyle changes after retirement are the main factors in the increased risk of NCDs.

The researcher assumes that the high proportion of elderly retirees in this study also affects the high number of NCDs found. Elderly people who are no longer working tend to have low physical activity, a more passive lifestyle, and less frequent health checkups. Changes in routine after quitting work can also affect mental and physical health, which in turn contributes to an increased risk of non-communicable diseases. In addition, some elderly people living in rural areas such as Bongomeme tend to have limited knowledge about the importance of early detection of NCDs, so they come to health facilities after experiencing more severe symptoms.

Analysis of non-communicable diseases (NCDs) in the elderly in the working area of the Bongomeme Health Center, Gorontalo Regency

Based on the results of the research, the researcher obtained the results of the analysis of non-communicable diseases in the elderly from 97 respondents, the majority of respondents were included in the category of detected NCDs as many as 59 respondents (60.8%), This finding shows that the prevalence of NCDs in the elderly population in the working area of the Bongomeme Health Center is relatively high. This condition indicates that the elderly group is a group that is very vulnerable to chronic health disorders and requires optimal early detection efforts.

Of the total 59 elderly respondents who were detected with NCDs, there were 65 types of diseases identified because some respondents experienced more than one type of non-communicable disease. The most common type of NCD is hypertension, as many as 39 cases (60.1%). This was followed by 15 cases of diabetes mellitus (23.1%), 6 cases of heart disease (9.2%), 4 cases of chronic respiratory disease (COPD), and stroke found in 1 case (1.5%). In addition, it is known that there are 6 respondents who have more than one non-communicable disease, such as a combination of hypertension and diabetes or hypertension and heart disease.

According to WHO, (2021) The presence of the elderly who have more than one non-communicable disease is also in line with the theory that *multiple noncommunicable diseases* are a common condition in the elderly because metabolic disorders and organ degeneration occur simultaneously.

Hypertension is the most dominant non-communicable disease in the elderly in the working area of the Bongomeme Health Center. In theory, hypertension is indeed the most common degenerative disease found in the elderly as a result of decreased elasticity of blood vessels, impaired blood pressure regulation, and accumulation of unhealthy lifestyles throughout life.

This is in line with the statement of the Indonesian Ministry of Health (2023) that hypertension is the NCD with the highest prevalence in the elderly, followed by diabetes mellitus and heart disease. Hypertension, diabetes mellitus, and coronary heart disease are also the most common diseases found in the elderly due to the presence of degenerative processes, decreased

This research is in line with the latest research by Hastuti et al. (2023) entitled "The Prevalence of Non-Communicable Diseases in the Elderly and Factors Affecting Them in Primary Health Services", which found that more than 55% of the elderly who participated in the Posbindu PTM were detected to have hypertension or diabetes. The study emphasized that lack of physical activity and a high-salt diet are the main causes of high NCDs in the elderly. Another study by Rahmawati & Samad (2022) titled "Analysis of Risk Factors for NCDs in the Elderly in Rural Areas" showed that the prevalence of NCDs reached 62%, with hypertension being the most dominant condition. This study confirms that the elderly in rural areas often lack routine health check-ups, so NCDs are only known when screening is carried out.

Researchers assume that the high prevalence of hypertension and diabetes mellitus in the elderly in the Bongomeme Health Center area is influenced by geographical factors, past lifestyles, and limited access to health. Hilly environments that require high mobility can cause excessive physical stress in youth, but in old age the activity decreases drastically so that metabolic balance is disturbed. In addition, the habit of consuming foods high in salt, lack of physical activity, and low frequency of routine health checkups are suspected to contribute to the increase in cases of hypertension and diabetes. The presence of the elderly with more than one NCD also indicates a lack of optimal continuous health monitoring.

Based on the results of the study, as many as 38 respondents (39.2%) were included in the category of not detectable to experience Non-Communicable Diseases (NCDs) at the time of examination. However, analysis of the questionnaire results showed that some of them still had some important risk factors that could increase the chances of developing NCDs in the future. Some of these risk factors include smoking habits, lack of physical activity, unhealthy diet, and a family history of NCDs.

The presence of these risk factors indicates that although respondents have not shown clinical signs of NCDs, they are included in the group that should receive attention in prevention and health education efforts. In theory, behavioral risk factors such as smoking, consumption of foods high in salt and sugar, and lack of physical activity are the main components that trigger the occurrence of NCDs, especially hypertension, diabetes mellitus, heart disease, and chronic lung disease.

This is in accordance with the statement of the Indonesian Ministry of Health (2023) that NCDs develop gradually and often do not show symptoms in the early stages, so early detection through screening is very important. It is also in line with WHO (2021) which emphasizes that individuals without a diagnosis of NCDs but have risk factors are still included in the "high risk" group and have the potential to experience disease progression if appropriate interventions are not carried out.

This study is in line with the findings of Fitriani et al. (2022) in a study entitled "Risk Factor Profile of NCDs in the Elderly Without Clinical Diagnosis", which shows that the elderly who have not been detected with NCDs still have one or more behavioral or genetic risk factors. The study emphasizes that this risk can trigger the development of NCDs in the coming years if lifestyle changes are not made.

Another study by Wardani & Utama (2023) entitled "The Relationship of Behavioral Factors with NCD Risk in the Elderly in Rural Areas" shows that even though the elderly have not shown any indication of NCDs at the initial examination, they are still in the vulnerable group if they have a family history or unhealthy lifestyle habits.

The researchers assumed that although the 38 elderly were not detected with NCDs at the time of examination, the presence of several important risk factors suggests that this group still needs regular health surveillance and coaching. These factors are thought to affect their health conditions in the future, especially if they are not balanced with healthy lifestyle changes. In addition, the challenging geographical conditions of the Bongomeme area and limited access to health can cause some elderly people to rarely carry out routine check-ups, so there is a possibility that NCDs have not been fully identified.

CONCLUSION

The results of the Characteristics of elderly respondents show that the majority are aged 60-74 years (70.1%), with the highest level of education at the elementary level (39.2%). Respondents are also dominated by men (52.6%), and most of them are no longer employed or in retirement (51.5%).

The results of the NCD status analysis showed that most of the elderly were detected to have Non-Communicable Diseases (NCDs), namely 59 respondents (60.8%), while 38 respondents (39.2%) were not detected to have NCDs.

The most common type of NCD found in the elderly is hypertension, followed by diabetes mellitus, heart disease, chronic respiratory disease, and stroke. Some elderly people experience more than one type of non-communicable disease (comorbidities), which indicates a double burden of disease in the elderly group.

ADVICE

It is suggested that the Bongomeme Health Center strengthen the implementation of the Posbindu PTM program by increasing the coverage of routine screening for the elderly, especially through pick-up balls, home visits, or mobile services in hard-to-reach areas.

The elderly are expected to be more active in participating in routine health check-up activities, both through the PTM Posbindu and health center services. It is necessary to increase understanding of the importance of maintaining a healthy lifestyle, such as regulating diet, increasing physical activity, and avoiding smoking habits.

Health cadres are advised to improve their ability to provide education that is communicative, easy to understand, and in accordance with the characteristics of the elderly. The role of cadres also needs to be strengthened in monitoring and following up after NCD screening, so that the information obtained from early detection can be used appropriately in health intervention planning.

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