Analysis of Early Detection Implementation in Communicable Disease Program at Elderly Posyandu in Wet Rice, Langkat Regency

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Abstract

Purpose: this study was to analyze the implementation of early detection in non-communicable disease programs at the elderly posyandu at the Beras Basah Health Center, Langkat District, North Sumatra.

Method: uses qualitative with a descriptive approach. Data collection techniques are carried out by observation, in-depth interviews and documentation. This study used SWOT analysis. Results: The implementation of early detection activities has not been optimal, which can be seen from inconsistencies in program implementation in the field. Limited medical equipment is also a significant obstacle, reducing the ability of officers to carry out effective early detection. Lack of village government participation and minimal awareness and family support for early detection activities also hamper the implementation of this program. Apart from that, the inadequate knowledge of posyandu cadres is a challenge in optimizing program implementation. Opportunity analysis shows that there are several strategic steps that can be taken to increase the effectiveness of this program. Advocacy and education to the village government regarding the benefits of posyandu for the elderly can increase support and participation from the local government. Providing support and assistance to elderly families will increase their awareness and participation in early detection activities. Training for posyandu cadres is also an important opportunity to increase their knowledge and skills in implementing early detection programs.

Conclusion: The program for non-communicable diseases in the elderly is still underdeveloped and has not achieved its goal of ensuring the health of the elderly.

Introduction

Based on data from the Central Statistics Agency (BPS), Indonesia's morbidity (morbidity rate) decreased to 13.04% in 2021 compared to the previous year of 14.46%. In 2023, it was found that the highest percentage of the population with health complaints was the elderly group as much as 41.49% (Central Statistics Agency of Central Java Province, 2023). In Indonesia, NCDs are one of the health problems and causes of death that are a threat to economic growth in Indonesia. The mortality rate due to NCDs in Indonesia in 2014 was 71% (Sample Registration Survey). Four of the five highest causes of death were stroke (21.1%), coronary heart disease (12.9%), diabetes mellitus with complications (6.7%), and hypertension with complications (5.3%). The Indonesian Cholesterol Foundation explained that cases of high cholesterol in Indonesia, after 2000 continued to increase. Recorded from 2004 – 2016 amounted to 23,636 – 100,231 people.

Regulation of the Minister of Health of the Republic of Indonesia Number 71 of 2015 Article 1 concerning the Management of Non-communicable Diseases NCD management is a health
effort that prioritizes promotive and preventive aspects without neglecting curative and rehabilitative and palliative aspects aimed at reducing morbidity, disability, and death rates which are carried out comprehensively, effectively, efficiently, and sustainably. Article 1 (2) Early detection as referred to in paragraph (1) is carried out on individuals and/or groups at risk or not at risk regularly through: a. interviews; b. measurements; and c. examination (Permenkes RI No.71, 2015).

Research gaps and rationality of this research. Having been introduced in several posyandu, there is a need to identify barriers that may hinder the successful implementation of early detection of NCDs at the posyandu level, as well as to evaluate the long-term sustainability of the program. By understanding this research, research can provide valuable insights to increase the effectiveness of early detection programs for NCDs in elderly posyandu, as well as provide a basis for developing more efficient and sustainable intervention strategies in efforts to prevent and control NCDs in elderly communities. Policies and programs for elderly health services have been developed but in their implementation they still encounter various obstacles, one of which is the development policy at the UPT Puskesmas Beras Basah. The obstacle to the program is still the low quantity and quality of formation and coaching of the elderly group. In the implementation of early detection of non-communicable disease programs, the elderly at posyandu experience obstacles in the elderly posyandu medical devices from puskesmas which currently do not meet service standards because they only have a few medical devices such as tension scales, sugar tests, uric acid and cholesterol. The lack of awareness and participation from the community at the village level in participating in and supporting the activities of the Elderly Posyandu is one of the significant problems.

Beras Basah sub-district, Langkat Regency has 187 elderly people. Based on data from the 2023 Wet Rice Health Center UPT, it was found that there were 70 cases of COPD sufferers, 93 cases of hypertension sufferers, and 61 cases of diabetes sufferers. With these conditions, good handling of elderly health problems is needed. In order to find out how far health workers have made health service efforts for the elderly (Puskesmas, 2022). Based on previous research, it is said that posyandu for the elderly has an important role in facilitating various activities, such as disseminating information, cadres, mentoring, health control, providing additional food, encouragement, health education, and health check services. Driving factors for this activity include free health checks, counseling, provision of additional food, exercise for the elderly, and adequate facilities. However, several inhibiting factors emerged, such as a lack of introductions for the elderly, unfinished homework, and a lack of cadres' approach to the elderly in each hamlet (Sa’diyah & Desmawati, 2021).

Based on previous research, activities carried out at elderly posyandu include: a. Weighing and measuring height, then calculating Body Mass Index (BMI) to determine the nutritional status of the elderly b. Health services, for example measuring blood pressure, and providing simple treatment c. Providing counseling about nutrition, healthy lifestyles and elderly health (Kusumawardani & Andanawarih, 2018). The purpose of this study was to analyze the implementation of early detection in non-communicable disease programs at the elderly posyandu at the Beras Basah Health Center, Langkat District, North Sumatra.

Methods

This research uses a qualitative method with a descriptive approach. The research was conducted in Beras Basah District with a focus on the UPT of the Beras Basah Community Health Center. The informants were deliberately selected and grouped into three groups, namely key informants, main informants and supporting informants. Key informants included one head of the UPT of the Beras Basah Community Health Center. support includes one elderly person Data. Data collection methods include interviews and observation. The tools used for collecting eta are writing instruments, voice recorders, and interview question guide.
sheets. The interview guide covers strengths, weaknesses, opportunities and threats in the implementation of early detection in the non-communicable disease program at Posyandu Lasta at the Beras Basah Community Health Center. Data analysis uses narrative analysis, through theme analysis. The validity of the data is ensured through testing credibility or trustworthiness by triangulating sources, namely by cross-checking, comparing and contrasting data using several informants.

**Result and Discussion**

SWOT analysis is the systematic identification of various factors to formulate institutional strategies, this analysis is based on logic that can maximize strength (Strength) and opportunities (Opportunities), but at the same time can minimize weaknesses (weakness) and threats (threats). The formulation of institutional strategies can be formulated through planning information obtained through SWOT analysis, a good strategy based on SWOT analysis is to maximize all existing strengths and opportunities while minimizing weaknesses and threats faced by companies and institutions. A good strategy is a strategy that is prepared in accordance with the vision, mission, goals and policies that characterize an institution.

**Analysis of the power of early detection of non-communicable disease programs at elderly posyandu in Langkat Regency**

Availability of resources in carrying out early detection activities of the non-communicable disease program at the elderly posyandu:

"For resources for the activities of the elderly posyandu, it is good ko de, the puskesmas officers are also actively participating in the activities I see" (IK).

"The posyandu management is most the puskesmas, our cadres there are 5 cadres for each hamlet as well as the secretary and treasurer" (IU-3).

The resources for posyandu activities refer to the provisions in Permendagri Number 18 of 2018 concerning village community institutions, which consist of chairmen, secretaries, treasurers and fields as needed (cadres). The number of posyandu cadres is not binding, at least 5 people and can be more according to the needs of the local area (Ministry of Health of the Republic of Indonesia, 2023). Based on the results of the interview available resources, including health workers, secretaries, treasurers and 5 cadres. The fulfillment of human resources must have availability both in quantity and quality to be able to create services expected by the community. The availability of human resources is very necessary so that all people get adequate health services (Calista et al., 2021).

Implementation of home visits for the elderly who are vulnerable and unable to participate in early detection activities of the non-communicable disease program at the elderly posyandu:

"For the elderly who are sick, we come to her homecare house on the deck, for her examination at home" (IU-1).

"Home visits are also once a month, that's for the elderly who are sick so they can't go to the posyandu, so the examination is crowded" (IU-3).

Based on the results of interviews, home visits for the elderly who are sick and unable to attend the elderly posyandu activities have been carried out for one month. In this activity, health workers and cadres conducted early detection health checks and provided education to the elderly and their families. The monthly intervention program run by the Tobelo Health Center includes home visits, counseling, with a focus on health services to the elderly who can no longer walk and need health services (Sujana, 2019).

Have a Fixed Schedule in carrying out early detection activities of the non-communicable disease program at the elderly posyandu:
"The advantage is because the schedule for the elderly posyandu itself is scheduled once a month, so it's good because if you don't regularly add the elderly male to come" (IK).

"Our procedure is with the schedule of posyandu every month in every village, every month according to schedule. Wet rice on the third, sei siur on the fifth, payak on the seventh, tanjung pasir on the eleventh and the sluice gate on the sixth faithful morning at 8 o'clock. Most of the time the date is red the next day, so if you have a holiday the next day it's always like that. If ujan alsoaa" (IU-1).

According to the Ministry of Health Regulation No. 44 of 2016 concerning Puskesmas Management, in the implementation of activities of each program according to the schedule in the monthly activity implementation plan and the successful implementation of Puskesmas activities requires integration both across programs and cross-sectors (Permenkes, 2016). Based on the results of regular schedule interviews for elderly posyandu activities which are held for a month and schedule these activities regularly every month, it helps to build awareness of the importance of regular health care among the elderly. Good services provided at the elderly Posyandu will increase the interest of the elderly to visit the elderly Posyandu. To further increase the level of attendance of the elderly visiting the Posyandu, the elderly need information about the schedule and place of the Posyandu (Juniardi, 2013).

Weakness Analysis of the Early Detection of Non-Communicable Disease Program at Posyandu for the Elderly in Langkat Regency

The implementation of the Early Detection Activities of the Non-Communicable Disease Program at the Elderly Posyandu has not been maximized

"The early detection activities are rich in measuring weight, height, cholesterol checks, sugar, tension and gymnastics, if there is no additional feeding because it should be from the village government," (IK).

"Yes, for the activities we only weigh weight, height, measure tension and check pulse rate, check sugar, cholesterol, datengin elderly home, gymnastics, as well as counseling activities too, usually supplementary feeding deck mace" (IU-1).

Early detection in the elderly is in the form of anamnesia of risky behaviors, measurement of BB, TB, Body Mass Index (BMI), abdominal circumference, blood pressure, simple laboratory tests (blood sugar, cholesterol), as well as ADL/AKS and SKILAS screening. Physical activity activities (gymnastics, healthy walking), counseling, counseling, elderly empowerment, supplementary feeding, cross-sectoral activities (Ministry of Health of the Republic of Indonesia, 2023). Based on the results of the interview, there are several programs whose implementation is quite good, it can be seen that the activities of the elderly posyandu are carried out optimally. Several programs such as risk behavior anamnesis, Body Mass Index (BMI) examination, abdominal circumference, simple laboratory tests (blood sugar, cholesterol), as well as ADL/AKS and SKILAS screening, counseling, supplementary feeding, cross-sector activities have not been implemented.

Insufficient Availability of Medical Devices in Early Detection Activities of Non-Communicable Disease Programs at Elderly Posyandu:

"For medical devices, because we have to divide it into 5 posyandu so sometimes it is less... we have also recommended for every village to have a medical device" (IU-1).

"If what I see is most scales, tension, sugar checks, uric acid and cholesterol" (IP).

Medical equipment needed for elderly posyandu such as Adult scale, height meter, adult stethoscope, digital thermometer, digital sphygmomanometer, blood sugar meter and strip, Lancet and alcohol swab, Safety box, cholesterol analyzer, uric acid analyzer, penlight,
anatomical tweezers, mouth glass, Bangkok tweezers, backpack, cloth meter (Ministry of Health of the Republic of Indonesia, 2023). Based on the results of the interview, the availability of medical equipment has not been sufficient, such as Adult stethoscope, digital thermometer, digital sphygmomanometer, Lancet and alcohol swab, Safety box, cholesterol analyzer, uric acid analyzer, penlight, anatomical tweezers, mouth glass, Bangkok tweezers, cloth meter are not yet available. The implementation of the elderly posyandu certainly requires complete facilities and infrastructure so that activities can run optimally. Because facilities and infrastructure are important factors so that the activities of the elderly posyandu run well (Widodo et al., 2020).

Lack of participation of the Village Government in the early detection of non-communicable disease programs at elderly posyandu:

"Actually, the elderly posyandu belongs to the village, but due to lack of knowledge the village they assume that the elderly posyandu belongs to the puskesmas. Puskesmas is only an executor and desalah that should provide such as medical equipment, PMT budget and special place facilities for posyandu activities" (IK).

"Village participation should also be needed, deck, participate in gymnastics, leisurely walks, rich in medical equipment from the health center is limited, so the village should have it. So the role of the village head is to monitor the elderly posyandu" (IU-1).

Based on the results of interviews on the participation of village heads and village governments in various village development programs, this can be seen in the effectiveness of the implementation of these programs. One of the efforts provided by the government is the elderly posyandu (Latumahina et al., 2022). The policy is written in Law of the Republic of Indonesia Number 13 of 1998 concerning Welfare of the Elderly Health services are intended to maintain and improve the degree of health and ability of the elderly, so that their physical, mental, and social conditions can function normally.

Lack of awareness of the elderly community due to lack of family support in early detection activities of the non-communicable disease program at the elderly posyandu:

"If the elderly come, that's just the deck, if there is free health treatment, the medicine is not enough if the mace is at most fifteen decks, because the distance of the house if the distance is far away, it must be between... sometimes the same cadres are also invited, if the family is gtw yes deck" (IU-2).

"It's ignorant here, but it depends on his family too..."(IP).

Based on the results of family awareness interviews on the needs of the elderly, especially in terms of care and attention, it seems inadequate. This can be seen from the lack of participation of the elderly in posyandu activities held to Posyandu can facilitate various activities and programs to maintain the health of the elderly, but still requires self-awareness from the elderly in maintaining their body condition so that the results achieved can be maximized (Tuwu & La Tarifu, 2023). Family support is very important for the elderly in active participation in elderly posyandu activities, because families can provide the necessary attention, motivation, and support to keep the elderly motivated (Suryaningsih & Rini, 2020).

Lack of Cadre Knowledge in Early Detection Activities of Non-communicable Disease Programs in Elderly Posyandu:

"Socialization for elderly posyandu cadres has never been, in my opinion, from the experience of each activity can also increase their knowledge... maybe nnti we will hold it" (IK).

"usually cadres who write books, weigh and measure height" (IP).
Based on the results of interviews, each hamlet has 5 cadres in the activities of the elderly posyandu. However, in their activities, cadres have obstacles due to lack of knowledge due to the lack of socialization. The cadre's task is only to write, weigh the body weight and measure the height. Training of elderly posyandu cadres is also important. Through proper training, elderly posyandu cadres can improve their knowledge and skills in providing optimal services to the elderly (Rohmawati & Rahmawati, 2023).

**Analysis of Opportunities for Early Detection of Non-communicable Disease Programs at Posyandu for the Elderly in Langkat Regency**

Advocacy and Education to the Village Government on the Benefits of Posyandu for the Elderly in Early Detection Activities of Non-communicable Disease Programs at Posyandu for the Elderly:

"The main opportunity possessed by the elderly posyandu is through education to the village government about the benefits that can be obtained from the existence of the elderly posyandu. by actively advocating to the village government, they can help increase understanding and awareness of the importance of the role of the elderly posyandu in improving the health and welfare of the elderly by strengthening the village government's understanding of the benefits of the elderly posyandu, it is hoped that there will be increased support and better allocation of resources to support the activities of the elderly posyandu" (IU-1).

The village government can advocate and educate about the benefits of the elderly posyandu through various means, such as socialization, the establishment of the elderly posyandu working group, mentoring, and budget allocation that supports the program (Sulaiman & Anggriani, 2018). Based on the results of the interviews, Advocacy and education to the village government about the benefits of elderly posyandu aims to provide a deep understanding to the authorities at the village level regarding the importance of the existence and active role of the elderly posyandu. Law of the Republic of Indonesia Number 13 of 1998 concerning Further Welfare Article 8 The Government, the community, and families are responsible for the realization of efforts to improve the social welfare of the elderly.

Providing Support and Assistance to Elderly Families in early detection activities of the non-communicable disease program at the elderly posyandu:

"Actually, it should be from the family first, so if you pay attention to the family, maybe the grandmother wants to be active in her posyandu activities" (IP-2).

"Eeh... it depends on yaaaa because our family is different," (IP).

The role of a good family is proven to be a factor that affects the activeness of elderly visits to the posyandu. The existence of family members plays an important role in preventing or at least delaying elderly people with chronic illness to a nursing home (Lestari et al., 2011). Based on the results of the interview, the support and assistance provided to the family. The elderly are a very important effort in ensuring optimal welfare and health for the elderly. Based on the research of Tinambunan et al. (2023), it is stated that the lack of family support will have an impact on the low participation of the elderly in posyandu activities

Conducting Training for Posyandu Cadres for Early Detection Activities of Non-communicable Disease Programs at Elderly Posyandu:

"Cadre training is important deck, so it should have been done... so cadres should be trained, knowledgeable" (IU-3).

"In my opinion, the elderly health screening training for posyandu cadres is good. so ntti cadres can directly in providing basic health services deck" (IU-2).
Cadre training will be carried out in a standardized manner, which is carried out by the Puskesmas in collaboration with the local Bapelkes in the form of cadre training consisting of 25 health skills. After the training, the cadres returned to provide services at the Posyandu as usual with the knowledge gained from the training (Ministry of Health of the Republic of Indonesia, 2023). The results of the interviews conducted by training for cadres must be carried out to improve the knowledge and skills of cadres in carrying out elderly posyandu activities. The training of Posyandu Elderly Posyandu cadres can increase their knowledge of elderly care, including health problems that are often experienced by the elderly and preventive measures that can be taken. In addition, the skills of cadres in providing physical examinations and providing emotional support also improved after the training (Rahayuningsih & Margiana, 2023).

Analysis of the threat of early detection of the non-communicable disease program at the elderly posyandu in Langkat Regency

Posyandu for the Elderly is not developing and cannot achieve its goals in the early detection activities of the non-communicable disease program at the Posyandu for the elderly:

"Yes, judging from the small participation of the elderly, and the lack of awareness of the village government, it could make this posyandu not develop... because the village government should be active, if he doesn't participate, how can his subordinates, right" (IK).

"The impact of the posyandu is not running" (IP).

Based on the results of the interview, it was shown that the elderly posyandu had difficulty achieving their goals and did not experience the expected development. This can be caused by a lack of community participation, limited resources, lack of infrastructure, and a lack of understanding of the importance of the role of elderly posyandu in maintaining the health of the elderly. The implementation of the Posyandu Elderly program is very important for the support of the surrounding parties involved in implementing the program, so that later the Posyandu Elderly program can achieve its goal, which is to improve the welfare of the elderly. The impact of early detection activities of the Non-Communicable Disease Program at the Elderly Posyandu is not implemented properly, causing the health and welfare of the elderly to be not guaranteed:

"Unfortunately, the impact is quite large. The Posyandu Lansia program is not running properly due to... so the quality of the elderly's health will definitely be compromised" (IU-1).

"This posyandu is targeted at the elderly so this is actually good to see their health, if the posyandu does not work, it will definitely be the elderly who will be bigger to receive the impact on their health" (IU-3).

Based on the results of interviews with elderly posyandu who are ineffective in providing adequate health and social services threaten the welfare of the elderly, therefore, government and community support is very important to ensure optimal operations and a decent quality of life for them. One of the most important supporting factors is support from the family, because in the elderly the family is the closest person who plays the most role in supporting the welfare of the elderly (Bahari & Sudibia, 2021).

Conclusion

The research identifies a significant strength in the availability of resources for early detection activities at the elderly Posyandu. This strength is attributed to the active participation of Puskesmas officers and dedicated cadres in facilitating these activities. Puskesmas officers play a crucial role in providing medical expertise and oversight, ensuring that the early detection
activities are conducted effectively. Additionally, the presence of dedicated cadres further enhances the implementation of these activities, as they contribute to the operational aspects and assist in reaching out to the elderly community. The research underlines the importance of fulfilling human resources requirements, not just in terms of quantity but also in terms of quality. Quantity refers to having an adequate number of personnel such as Puskesmas officers and cadres to carry out the early detection activities efficiently. Quality, on the other hand, emphasizes the need for skilled and knowledgeable personnel who can provide adequate health services to the community. This dual focus on quantity and quality ensures that the early detection activities are not only accessible to the elderly population but also delivered with a high standard of care and professionalism. Furthermore, the emphasis on fulfilling human resources requirements is aligned with regulations outlined by the Ministry of Health. These regulations likely specify the necessary qualifications, training, and responsibilities expected from personnel involved in early detection activities at Posyandu. By adhering to these regulations, the research underscores the importance of maintaining standards and ensuring that the services provided are in line with national healthcare guidelines and protocols.

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