

Analysis of the Implementation of the Elderly Program and Factors Influencing Hypertension Control at the Simpang Baru Community Health Center, Pekanbaru City

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ABSTRACT

Objective: This study aims to analyze the implementation of the elderly health program and identify the factors influencing hypertension control among the elderly at Simpang Baru Health Center, Pekanbaru City. **Method:** A qualitative research design with a phenomenological approach was employed, involving six key informants, including the Head of the Health Center, the Person in Charge of the Elderly Program, an Elderly Doctor, the BOK Treasurer, and two elderly hypertension patients. Data were collected through in-depth interviews, observations, and document reviews, and analyzed using a fishbone diagram encompassing six aspects: man, money, method, machine, material, and market. **Results:** The findings revealed that the main challenges in hypertension control include insufficient human resources, limited budgets, inadequate facilities, and low elderly awareness of routine blood pressure monitoring. **Novelty:** This study contributes to the development of integrated elderly health management strategies by emphasizing the application of digital-based health promotion and e-Health Center optimization, offering an innovative framework for improving hypertension control within primary healthcare settings.

INTRODUCTION

Hypertension is a condition where systolic blood pressure is greater than 140 mmHg and diastolic blood pressure is greater than 90 mmHg on two occasions, 5 minutes apart, while at rest. High blood pressure (hypertension) is an increase in blood pressure in the arteries. Generally, hypertension is a symptomless condition, where abnormally high pressure in the arteries increases the risk of stroke, aneurysm, heart failure, heart attack, and kidney damage [1].

Hypertension ranks third in deaths worldwide. According to the World Health Organization (WHO), approximately 1.13 billion people worldwide have hypertension, meaning 1 in 3 people suffer from it. 40% of people over 25 years of age have been diagnosed with hypertension [2]. Asia has the second highest prevalence of hypertension at 41%, while the Americas have the lowest prevalence at 35%.

In Indonesia, the prevalence of hypertension ranges from 6-15%. This is because people with hypertension usually have no symptoms or only mild symptoms [3]. Hypertension tends to damage organs, such as the heart (70% of people with hypertension will experience heart damage), kidneys, brain, eyes, and other organs. Hypertension is one of the ten most common outpatient diseases in Riau Province. In 2020, hypertension ranked second with 37,869 cases [4]. The Basic Health Research (Riskesdas) report shows that the prevalence of hypertension in the Riau Islands Province among residents aged 18 years and over was 21% in men and 21.7% in women. The

prevalence of hypertension in the 55-64 age group was 45.6%, 61.8% in the 65-74 age group, and 72.5% in the 75-year-old age group.

Hypertension in the elderly is a major risk factor for cardiovascular diseases such as stroke and heart failure. According to the 2023 Basic Health Research (Riskesdas), the prevalence of hypertension in the age group over 60 years reached more than 63% [5].

Community health centers (Puskesmas) are one of the regional health service providers and serve as the primary healthcare provider for the majority of people in regions throughout Indonesia. A Community Health Center (Puskesmas) is a health care facility that provides primary public health and individual health services, prioritizing promotive and preventive efforts to achieve the highest level of public health in its area of operation [6].

The Simpang Baru Community Health Center, as a primary health care facility, is responsible for controlling non-communicable diseases, including hypertension in the elderly. The main challenges faced include limited human resources, inadequate infrastructure, and low participation of the elderly in integrated health post (Posyandu) activities and routine check-ups. This study aims to analyze the implementation of the elderly program and the factors influencing hypertension control through a fishbone diagram approach.

RESEARCH METHOD

This study employed a qualitative design with a phenomenological approach. Data collection was conducted through in-depth interviews, observation, and document review at the Simpang Baru Community Health Center in Pekanbaru City in 2024. Informants in this study included the Head of the Community Health Center, the Person in Charge of the Elderly Program, the Elderly Doctor, the BOK Treasurer, and two elderly hypertensive patients. Data analysis was performed using a fishbone diagram model that encompasses six main factors: Man, Money, Method, Machine, Material, and Market. Each factor was identified to find the root cause of the problem affecting hypertension control in the elderly.

RESULTS AND DISCUSSION

Result

The research results indicate that several factors hinder the implementation of the elderly program at the Simpang Baru Community Health Center. Health workers often overlap with several programs, thus reducing the focus on elderly services. Field evidence shows that when human resources and the role of cadres are strengthened, elderly participation increases. The limited number of health workers and the lack of specific training for those responsible for elderly programs are the main obstacles in implementing activities. Human factors include the limited number of health workers and the lack of specific training for those responsible for elderly programs. According to the Indonesian Ministry of Health, the competency gaps in those responsible for elderly programs reduce the quality of interventions and service continuity. Practical solutions

include: (a) short training based on the elderly posyandu/ILP (integrated primary care) guidelines with standardized modules; (b) on-the-job coaching related to functional screening, NCD risk factors, nutrition/physical activity counseling; (c) workload mapping to avoid extreme multitasking. This is in line with research by Ispandiyah & Endartiwi which shows that the shortage of health workers has a direct impact on the frequency of services and assistance for the elderly. Sudrajat, et al also emphasized that low staff competency and motivation resulted in suboptimal elderly integrated health service post (Posyandu) activities. Similarly, Ainiah et al. found that a lack of training and disproportionate task distribution were common obstacles in elderly services at the community health center (Puskesmas) level [7], [8], [9].

Discussion

The Money factor indicates the limited Health Operational Assistance (BOK) budget, which is unable to cover all planned activities [10]. The Health Operational Assistance (BOK) funds allocated for the elderly program are still limited and unable to cover all planned activities, such as purchasing simple examination equipment, cadre transportation, and procuring promotional media. This finding aligns with the Indonesian Ministry of Health, which stated that the flexibility of BOK use for promotive and preventive activities is still limited in some regions. Aditya & Raharjo also revealed that a lack of synchronization between field needs and BOK technical guidelines hinders the implementation of the elderly program [11], [12].

The Method factor shows that the reporting system is already based on e-Puskesmas (Community Health Center), but internet network constraints persist. The reporting system at Simpang Baru Community Health Center is based on e-Puskesmas, but its implementation is not optimal due to internet network disruptions. This condition aligns with research by Putri & Syamsir, which shows that the implementation of e-Puskesmas often faces obstacles such as network limitations, lack of operator training, and limited equipment. Nggode also added that dual recording methods (manual and digital) slowed reporting and led to data duplication [13], [14].

The Machine Factor indicates a lack of computers and laptops in each room. The limited number of computers or laptops in each room is a major obstacle in implementing the information and recording system. Some staff still use personal devices for data input. Research by Handayuni et al found that ICT infrastructure in Community Health Centers (Puskesmas) is a critical factor in the success of the health information system. Notoatmodjo added that adequate work facilities influence the motivation and efficiency of health workers [15].

The Material Factor indicates that health promotion is still limited to face-to-face counseling without the support of engaging visual media. Health promotion for the elderly is still limited to face-to-face counseling, without the support of engaging visual media such as videos, posters, or digital infographics. These findings align with Notoatmodjo, who emphasized the importance of a variety of promotional media in changing public health behaviors. The Indonesian Ministry of Health, in its Technical

Guidelines for Elderly Posyandu (Integrated Integrated Health Posts for Elderly) and Posbindu PTM (Non-PTM Integrated Health Posts), also emphasizes the use of visual communication media to make health messages more easily understood by elderly people with sensory limitations [16], [17], [18].

Market factors identified limited elderly and family involvement, low motivation and support, resulting in suboptimal attendance at elderly Posyandus. Community and family participation remains low, as evidenced by suboptimal attendance rates at Posyandus. This aligns with research by Syukuriansah et al, who also found that low participation is due to the elderly's perception that Posyandu activities are unimportant and a lack of outreach from staff.

CONCLUSION

Fundamental Finding : The study concludes that the implementation of the elderly health program at Simpang Baru Health Center faces significant challenges related to limited human resources and training, insufficient budget allocation, technical constraints in the e-Puskesmas reporting system, inadequate technological infrastructure, conventional health promotion methods, and low family support for elderly participation. These factors collectively hinder effective hypertension control among the elderly population. **Implication :** The findings highlight the urgent need to enhance human resource capacity through targeted training, optimize need-based budgeting, strengthen information technology infrastructure, and develop innovative, elderly-friendly digital health promotion media to improve program effectiveness. **Limitation :** This study was limited to one health center and relied on qualitative data, which may restrict the generalizability of the findings to broader healthcare contexts. **Future Research :** Further studies should employ mixed-method approaches across multiple healthcare facilities to evaluate the long-term impact of digital-based health interventions on elderly hypertension management and overall program sustainability.

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