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Abstract

This study aims to analyze the effectiveness of budget use in the health worker needs plan at Intan Jaya District Hospital, Central Papua Province. The research method used is qualitative with a descriptive approach. Data were collected through observation, in-depth interviews with five key informants, and analysis of related documents. The results of the study indicate that the effectiveness of budget use in meeting the needs of health workers at Intan Jaya District Hospital still faces various challenges, such as limited budget allocation, gaps between budget plans and realization, and the mismatch between the number of health workers and existing needs. Factors that support the effectiveness of budget use include accurate budget planning, strong management support, involvement of health workers in planning, transparency and accountability, flexibility in budget use, and ongoing monitoring and evaluation. The impact of budget use on the availability and quality of health workers includes an increase in the number of medical personnel, but there is still a gap in the welfare and incentives of health workers due to suboptimal budget allocation. Therefore, a more adaptive policy is needed in budget planning and management to ensure adequate health workers and quality health services for the community in Intan Jaya Regency.

Keywords: Effectiveness, Budget, Health Workers, Regional Public Hospital, Central Papua.

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INTRODUCTION

Background

The health sector plays a crucial role in the development of a region, especially in areas with geographical challenges and limited resources. The Intan Jaya District General Hospital (RSUD), Central Papua Province, is one of the health service facilities that strives to meet the needs of the local community. However, the challenge of providing adequate health workers is still a major obstacle in improving the quality of health services in this area. Budget limitations and suboptimal allocation often lead to a lack of available health workers, both in terms of quantity and quality (Rauf et al., 2025; Sanggalangi et al., 2025). The effectiveness of budget use in the health worker needs plan is an important aspect in hospital financial management, because an inappropriately allocated budget can hinder health services provided to the community (Mardiasmo, 2018).

Previous studies have shown that good budget effectiveness can increase the availability of health workers and improve the overall quality of health services (Garrison, Noreen, & Brewer, 2021). However, in remote areas such as Intan Jaya Regency, budget planning and management often face obstacles (Paembonan et al., 2024; Rauf et al., 2025; Sanggalangi et al., 2025), such as lack of transparency, unpredictable policy changes, and minimal coordination between local governments and hospitals.

According to data obtained from the Intan Jaya Regency Hospital, the budget for health workers comes from various sources, including the General Allocation Fund (DAU) and the Special Autonomy Fund (Otsus). In 2022, the planned budget was IDR 2.47 billion, but the realization only reached IDR 529 million, indicating a significant discrepancy between the plan and implementation in the field. As a result, the available health workers are insufficient to meet the needs of the community, resulting in low access and quality of health services in the area.

Urgency of Research

The lack of health workers in remote areas not only impacts the quality of services, but also has implications for the welfare of the community as a whole. This study is important to understand the effectiveness of budget use in planning health worker needs, in order to provide recommendations for local governments and hospital managers in increasing budget allocation and use more optimally. By understanding the factors that support or hinder budget effectiveness, it is hoped that this study can provide strategic solutions that have a positive impact on the provision of health workers at the Intan Jaya District Hospital.

In addition, this study is expected to enrich the literature on financial management in the health sector, especially in the context of areas with high geographic and social challenges. This study can also be a reference for academics, practitioners, and policy makers in designing more adaptive and sustainable budget allocation strategies in the health sector, especially in areas with limited resources such as Central Papua.

Based on the background that has been described, this study aims to answer the following main questions:

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- 1. How effective is the use of the budget in the health worker needs plan at Intan Jaya District Hospital?
- 2. What factors support and hinder the effectiveness of budget use in fulfilling health workers at Intan Jaya District Hospital?
- 3. How does budget effectiveness impact the availability and quality of health workers at Intan Jaya District Hospital?

With this research, it is hoped that deeper insights can be obtained regarding strategies for optimizing budget use in the health sector, so that it can help improve health services for the community in Intan Jaya Regency.

LITERATURE REVIEW

1. Effectiveness of Budget Use in Health Financial Management

Effectiveness in organizational financial management, including in the health sector, refers to the extent to which the available budget can be used optimally to achieve the stated goals (Mardiasmo, 2018). In the context of hospitals, budget effectiveness can be measured by how financial resources are used to improve health services, including in meeting the needs of health workers (Sari et al., 2021).

Previous research shows that budget effectiveness is highly dependent on accurate planning, transparent management, and continuous evaluation and supervision (Nugroho, 2020). Without good management, the available budget is often not optimally absorbed or is not allocated according to real needs in the field (Widodo & Santoso, 2022). A study by Kusumawati and Lestari (2019) in the context of regional hospitals in Indonesia also found that health budgets managed with a strategy based on health worker needs can improve access to services for the community, especially in remote areas.

2. Budget in the Health Sector

The budget in the health sector is a financial plan that includes calculating needs, allocating resources, and evaluating the use of funds to improve the quality of health services (WHO, 2020). In the public health system, the hospital budget generally consists of various components, including employee spending (incentives, salaries, and honorariums), hospital operations, and investment in health infrastructure (Tandon et al., 2021).

In Indonesia, health budget management refers to government regulations governing the use of the General Allocation Fund (DAU), Special Autonomy Fund (Otsus), and unexpected spending for the health sector (Ministry of Health of the Republic of Indonesia, 2022). However, research by Prasetyo and Rahmawati (2021) shows that there are still obstacles in budget implementation, such as a mismatch between budget planning and realization, low transparency, and minimal participation of health workers in planning.

At the Intan Jaya Regency Hospital, the budget for health workers still faces challenges in its distribution and realization. In 2022, only IDR 529 million of the total IDR 2.47 billion was successfully realized, indicating obstacles in budget allocation and implementation. This condition is in line with the research findings of Wicaksono and Putri (2023), which stated that budget effectiveness in the health sector is greatly influenced by regional financial stability and management's ability to allocate resources efficiently.

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3. Need for Health Workers and Factors Influencing Their Fulfillment

Health workers are the main component in the health service system that plays a role in providing medical, promotive, and preventive services to the community (WHO, 2021). The availability of adequate health workers is an important indicator in determining the effectiveness of health services in hospitals, especially in remote areas such as Central Papua.

A study by Nugraha and Dewi (2022) showed that the fulfillment of health workers in regional hospitals is influenced by factors such as adequate incentives, decent working conditions, and data-based planning for medical personnel needs. However, other studies show that in remote areas, such as Papua and Kalimantan, there are additional challenges such as geographic accessibility, high cost of living, and low interest of health workers to serve in the area (Handayani et al., 2020).

At the Intan Jaya District Hospital, the number of health workers available does not always match the service needs in the field. This is exacerbated by budget constraints and social challenges such as regional conflicts that cause fluctuations in the number of medical personnel. A study by Widyastuti et al. (2023) showed that more flexible budget planning based on actual needs can increase effectiveness in meeting health workforce needs in remote areas.

4. Transparency and Accountability in Health Budget Management

Transparency in budget management is an important factor in the effectiveness of health fund utilization. According to the theory of Good Governance, transparency and accountability in public financial management play a role in increasing efficiency, effectiveness, and preventing potential budget misuse (World Bank, 2021).

In the context of regional hospitals, research by Susanto and Haryanto (2022) found that hospitals that have a good accountability system tend to have a higher level of budget effectiveness, especially in terms of health worker distribution and service operations. Conversely, hospitals that do not have a strong monitoring system often experience budget inefficiency which causes delays in fulfilling medical personnel and health facilities.

At the Intan Jaya District Hospital, there are still obstacles in the transparency of budget utilization, as indicated by the gap between the planned and realized budgets. This emphasizes the importance of a better evaluation system in ensuring that the allocated budget is actually used to improve health services for the community.

5. Conceptual Perspective in Research

This study refers to the perspective of public financial management and organizational effectiveness theory in evaluating budget utilization in fulfilling health workers at Intan Jaya District Hospital. This approach is supported by the budget effectiveness theory which emphasizes that the success of a budget depends on needs-based planning, transparency, and ongoing monitoring (Miller & Hyman, 2021).

In this study, the effectiveness of budget utilization will be evaluated based on:

- 1. The extent to which the available budget can meet the needs of health workers according to planning.
- 2. Factors that support and hinder the effectiveness of budget utilization.
- 3. The impact of budget utilization effectiveness on the availability and quality of health workers at Intan Jaya District Hospital.

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By using this approach, the study is expected to provide deeper insight into budget optimization strategies in improving health services in remote areas.

METHODOLOGY

This study uses a qualitative approach with a descriptive method that aims to analyze the effectiveness of budget use in the health worker needs plan at Intan Jaya District Hospital, Central Papua Province. The qualitative approach was chosen because this study focuses on an in-depth exploration of the phenomena that occur in the field, including how the budget is managed and how it impacts the availability and quality of health workers in the hospital.

The population in this study includes all health workers and financial management at Intan Jaya District Hospital. However, considering that this study is qualitative, the sample was taken purposively, namely by selecting informants who have knowledge and direct involvement in budget management and health worker needs planning. The main informants consisted of five health workers and several hospital officials who understand the budget policy and distribution of medical personnel. The purposive sampling technique was used to ensure that the data obtained was truly relevant to the research objectives.

This study was conducted at Intan Jaya District Hospital, which is the main referral hospital in the Central Papua region.

The selection of this location was based on geographical conditions and significant challenges in managing health workers, including budget constraints and accessibility. The research period lasted for several months in 2024, with stages starting from initial observation, data collection through in-depth interviews, to data analysis and preparation of research reports.

The data collection technique in this study involved three main methods, namely observation, in-depth interviews, and document analysis. Observations were carried out to understand the real conditions at the RSUD, including how health workers work and how budget management is implemented. In-depth interviews were conducted with selected informants, using semi-structured interview guidelines to dig up further information regarding the effectiveness of the budget in meeting the needs of health workers. In addition, related documents, such as hospital financial reports and local government budget policies, were also analyzed to provide more objective data.

The data analysis technique in this study follows the Miles and Huberman model, which includes three main stages: data reduction, data presentation, and drawing conclusions. Data reduction is carried out by sorting and filtering information obtained from interviews, observations, and documents to make it relevant to the focus of the research. The reduced data is then presented in the form of a descriptive narrative to facilitate further analysis. The final stage is drawing conclusions, where findings from various data sources are compared and analyzed to gain a more comprehensive understanding of the effectiveness of budget use in meeting health workers at Intan Jaya District Hospital.

To improve data validity, this study applies triangulation techniques, namely comparing the results of various data collection methods to ensure consistency and reliability of information. Triangulation is done by confirming the findings from interviews with observation data and official documents that are analyzed. With this approach, the study is

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expected to provide a more accurate picture of the challenges and opportunities in managing the health worker budget in remote areas such as Intan Jaya Regency.

RESULTS AND DISCUSSION

RESULTS

Respondent Characteristics

Respondents in this study consisted of health workers and budget management officials at Intan Jaya District Hospital who have a direct role in planning, implementing, and evaluating the use of the budget for health worker needs. A total of five health workers and several hospital officials were selected as key informants through purposive sampling techniques. The five health workers consisted of doctors, nurses, midwives, and pharmacists, while hospital officials covered the hospital's finance and management divisions.

The characteristics of the respondents reflect their experience and involvement in the health service system in remote areas. Most respondents have worked at Intan Jaya District Hospital for more than three years, which allows them to have a deep understanding of working conditions, budget constraints, and their impact on health workers and services to the community. In addition, almost all respondents acknowledged that although there has been an increase in budget allocation in recent years, challenges in budget distribution and realization are still major obstacles.

Effectiveness of Budget Use in Meeting Health Workforce Needs

The results of the study show that the effectiveness of budget use in the health worker needs plan at Intan Jaya District Hospital still faces various challenges. One of the main challenges is the gap between budget planning and realization in the field. Budget data shows that in 2022, the planned budget for health workers was IDR 2.47 billion, but the realization was only IDR 529 million. This has caused many programs that have been designed, such as health worker incentives and training, not to run optimally.

An interview with one of the pharmacy staff, Mrs. Apt. Hiasinta Lyra, S.Farm, revealed:

"Budget allocation for health workers already exists, but is often not fully realized. Incentives that should be given on time are sometimes delayed, and this has an impact on the welfare of health workers. The biggest problem is access and the high cost of living in this area, but the incentives received are still lacking."

In addition, many health workers stated that the existing budget was not always adjusted to the number of personnel available in the field. For example, the number of medical personnel who leave or move is often not taken into account in the planning, so that the allocated budget becomes irrelevant.

Factors Affecting the Effectiveness of Budget Use

The results of the study identified several factors that contributed to the effectiveness or ineffectiveness of budget use in meeting health workers at Intan Jaya District Hospital. These factors include:

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1. Inaccurate Budget Planning

Many respondents stated that budget planning is often not based on valid data on health worker needs. According to Mr. Hironimus, Amd.Kep:

"Budget planning that has been carried out so far does not consider fluctuations in the number of health workers. Sometimes there are many workers coming in, but the budget is lacking, or vice versa, there is a budget available but there are not enough health workers."

2. Insufficient Management Support

Hospital management has a crucial role in ensuring the effectiveness of budget use. However, the results of the study show that there are still obstacles in coordination between management and health workers. According to Mrs. Yani, S.Kep.Ns:

"On many occasions, we as health workers are not involved in the budget planning process. Even though we are the ones who understand the needs in the field better."

3. Limited Transparency and Accountability

Most respondents stated that there are still shortcomings in budget management transparency. Information on budget distribution is often not available to health workers. This is in line with the research findings by Susanto and Haryanto (2022), which stated that the lack of transparency in budget management in regional hospitals often leads to inefficiency in budget realization.

4. Geographical and Social Factors

Intan Jaya Regency has quite severe geographical challenges, including limited transportation access and high living costs. This has an impact on budget allocations that must be adjusted to regional conditions, such as increasing incentives for health workers working in remote areas.

Impact of Budget Effectiveness on Availability and Quality of Health Workers

The gap between planning and budget realization has a significant impact on the availability of health workers at the Intan Jaya District Hospital. In an interview with **Mrs. Irma Duma, Amd.Keb**, she stated:

"We often lose medical personnel because the incentives are not enough to attract them to stay. Many of us end up working double shifts in several service units due to the lack of medical personnel."

The results of this study are in line with the study by Nugraha and Dewi (2022), which stated that financial factors are one of the main aspects in the retention of health workers, especially in remote areas. Without sufficient budget to support the welfare of health workers, hospitals will continue to experience a shortage of medical personnel which will impact the quality of health services for the community.

In addition, the discrepancy in budget realization also affects the training and development programs for health workers (Halik et al., 2023; Susanti et al., 2024). One of the hospital's financial officers said that many training programs could not be implemented because the budget that had been prepared was not realized properly. This has an impact on

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the quality of health workers who do not receive skills updates in accordance with developments in medical services.

Discussion

The findings of this study indicate that the effectiveness of budget use in meeting the needs of health workers at the Intan Jaya District Hospital still faces various challenges originating from internal and external factors. These results are consistent with the research of Prasetyo and Rahmawati (2021), which found that the effectiveness of budget management in regional hospitals is greatly influenced by transparency, management coordination, and geographical and social conditions in the area.

Compared to similar studies in other regional hospitals, the Intan Jaya District Hospital has additional, more complex challenges, such as geographical and social factors that burden budget implementation.

Therefore, this study recommends several strategies to increase the effectiveness of budget use, including:

- 1. Increasing transparency and accountability in budget management through reports that can be accessed by health workers.
- 2. Involving health workers in the budget planning process to ensure that the allocation of funds is truly in accordance with the needs in the field.
- 3. Adjusting incentive policies to be more competitive for health workers working in remote areas in order to increase the retention of medical personnel.
- 4. Developing a periodic evaluation system to ensure that the allocated budget is actually used according to plan.

By implementing this strategy, it is hoped that Intan Jaya District Hospital can manage its budget more effectively, so that the available health workers can be sufficient and the quality of health services for the community can be improved.

CONCLUSION AND SUGGESTIONS

This study aims to analyze the effectiveness of budget use in the health worker needs plan at Intan Jaya District Hospital, Central Papua Province. The results of the study indicate that the effectiveness of budget use still faces various obstacles, including the gap between budget planning and realization, lack of transparency in fund management, and geographical and social challenges that burden the implementation of health policies. Although the budget for health workers has been allocated, the budget realization is much lower than the initial plan, hampering the fulfillment of adequate medical personnel in the hospital.

The research findings also identified several factors that influence budget effectiveness, including planning that is not based on actual data, minimal involvement of health workers in the planning process, and weak monitoring and evaluation systems. The impact of ineffective budget use is seen in the low retention rate of health workers, limited access to training for medical personnel, and the quality of health services that are not optimal

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for the community. Therefore, improvements are needed in the budget management mechanism that is more transparent, participatory, and adaptive to regional conditions.

This study has limitations, especially in the limited number of informants because the study was conducted using a qualitative approach. In addition, this study only focuses on one regional hospital so that the results may not be generalizable to the context of other hospitals with different characteristics. Limited access to more detailed financial data is also a challenge in delving deeper into the budget allocation and realization patterns in this hospital. For further research, it is recommended to use a mixed-method approach involving broader quantitative data to obtain a more comprehensive analysis of budget effectiveness in the health sector. In addition, comparative studies between several hospitals in other remote areas can provide deeper insights into the best strategies for optimizing the health budget in Indonesia. With further research, it is hoped that more concrete and applicable solutions can be found in increasing budget effectiveness for health workers, especially in areas with geographical challenges such as Central Papua.

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