

Determinants Associated with Personnel Motivation in Health Planning within North Sumatra Province

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Abstract

Health personnel play a vital role in ensuring the successful delivery of public health services. Consequently, the government continually strives to fulfill and distribute health workers equitably to meet public expectations for quality care. This study aims to examine the relationship between human resource planning, utilization, and professional development regarding the work motivation of health personnel in North Sumatra Province. This study utilized a quantitative method involving 116 randomly selected respondents from two regencies in North Sumatra Province, specifically Karo and South Labuhanbatu. The research findings were processed through three analytical stages, namely univariate, bivariate, and multivariate analysis. In terms of the planning variable, the chi-squared test yielded a p-value of 0.063, indicating a non-significant result. This suggests that no direct relationship exists between planning and work motivation. On the other hand, the utilization variable and the development variable both produced p-values of 0.000. These significant results imply that utilization and professional development are closely linked to the work motivation of health human resources. Furthermore, logistic regression analysis revealed that the personnel development variable maintained a p-value of 0.000 and an Exp(B) value of 0.551. This indicates that health resource development provides a 0.55-fold opportunity to influence work motivation. Notably, among the three factors studied, personnel development stands out as the most influential determinant of work motivation compared to utilization and planning. As a final point, local governments, community health centers, and health offices should demonstrate a high level of commitment to budget allocation. This funding is necessary for socializing performance indicators and conducting professional training focused on planning, implementation, monitoring, and evaluation.

Keywords: Development, Personnel Motivation, Planning, Utilization

Introduction

Health development is a primary pillar of the 2030 Agenda for Sustainable Development, specifically targeting the third goal of ensuring healthy lives and promoting well-being for all. In this context, the implementation of health development aims to guarantee the delivery of public and individual health services. According to Article 18 of Indonesia's Law No. 17/2023 concerning Health, these services must encompass promotive, preventive, curative, rehabilitative, and palliative care. Additionally, the success of health development in achieving a healthy and productive population depends on a variety of interconnected factors. One such critical factor involves the strategic planning conducted by regional health offices and community health centers. These entities must generate programs that possess the necessary leverage to solve specific health issues within their respective jurisdictions. By extension, the capacity of health human resources to produce high-quality plans becomes the deciding factor in the effectiveness of the resulting programs and activities. Since a plan represents the concrete output of the entire planning process, the documents produced must function as an accurate blueprint for achieving specific goals and targets (Indonesia's Ministry of Health, 2023).

In 2023, Indonesia's Ministry of Health introduced the Integration of Primary Health Care policy as part of a broader health system transformation. This policy represents a core pillar of health reform, focusing on meeting health needs throughout the entire life cycle while ensuring services remain accessible and affordable for communities, families, and individuals. In light of this, Articles 3 and 4 of Ministry of Health Regulation No. 19/2024 specify that community health centers must provide integrated primary care within their jurisdictions. These services aim to (1) fulfill health requirements at every stage of life, (2) improve social and environmental health determinants, and (3) strengthen the overall well-being of individuals and society. To achieve these goals, the administration of health affairs must be synchronized across central, provincial, and regional levels of government. Article 12 of Indonesia's Law No. 23/2014 concerning Regional Government further establishes that health is a mandatory authority related to basic public services. Consequently, the management of these services is handled concurrently across different levels of government, covering areas such as health efforts, human resources, pharmaceutical supplies, medical equipment, and community empowerment (Indonesia's Ministry of Health, 2023).

The Ministry of Health's 2015–2019 Strategic Plan recorded a significant increase in health personnel, rising from 707,234 in 2012 to 877,088 by 2013. In spite of this growth, the distribution of these workers remained largely uneven across the country. The balance of specific roles was also disproportionate, as evidenced by health educators averaging only 0.46 individuals per community health center. To address such disparities, one of the ministry's core strategic goals focused on enhancing the volume, diversity, quality, and equitable distribution of staff. This was measured through key performance indicators, specifically tracking the number of facilities meeting the staffing standards set by national regulations based on Ministry of Health Regulation No. 75/2014. Actually, while the 2017 coverage reached 88.03%, showing an improvement over the 2016 figure of 80.90%, it still fell short of the 96.29% target set for 2019. Failure to meet these indicators results in a carried-over obligation for the following year. Therefore, it cannot yet be concluded that these targets were definitively missed (Indonesia's Ministry of Health, 2019).

North Sumatra Province encompasses 33 regencies and cities with a total population of 14,562,549 residents. Nonetheless, the province ranks as one of five regions in Indonesia facing a critical shortage of health workers in community health centers and hospitals, alongside East Nusa Tenggara, Central Kalimantan, Maluku, West Sulawesi, and Papua (Indonesia's Ministry of Health, 2019). This ongoing crisis demands immediate resolution through the development of precise regulations aimed at the equitable distribution of medical personnel. In addition to these staffing gaps, the professional quality of health workers remains a primary concern in the broader mission to improve public health. Deli Serdang and Langkat stand out as the two largest regencies in North Sumatra. Looking back at the Public Health Development Index for 2013 and 2018, both areas consistently remained in the low-performance category. This data suggests that various health initiatives in these regions have not yet reached their full potential (Government of Langkat Regency, 2020; Board for the Development and Empowerment of Health Human Resources, Indonesia's Ministry of Health, 2017).

The quality of health human resources remains a significant hurdle in implementing regional public health programs. Clearly, the issue is compounded by a persistent shortage and uneven distribution of personnel, while budget allocations for professional development remain insufficient. This lack of investment directly affects the capabilities of program staff, often leading to performance indicators that are inaccurate or inconsistent with actual targets. Furthermore, the staffing situation in Karo Regency illustrates these gaps perfectly, as the number and distribution of

support personnel, such as pharmacists, sanitarians, and health analysts, continue to fall short of requirements (Board for the Development and Empowerment of Health Human Resources, Indonesia's Ministry of Health, 2017). Similarly, the 2018 Health Profile for South Labuhanbatu Regency indicates that several community health centers are still struggling with a deficit of nurses and public health specialists.

Local governments hold the primary responsibility for regional health development, which specifically involves delivering Minimum Service Standards to the public in accordance with Government Regulation No. 2/2018. In this regard, these standards also serve as a vital instrument for strengthening performance-based budgeting within the health sector, particularly during the regional planning and budgeting process. Article 298 of Law No. 23/2014 further mandates that local governments must prioritize regional spending on basic services defined by these standards. Accordingly, health offices, acting as the leading actors in this field, are required to implement these services effectively to reach a 100 percent achievement target. Above all, the successful attainment of these targets depends heavily on the competence and readiness of health human resources. These professionals must be capable of executing health programs efficiently to meet the established benchmarks.

Employee motivation tends to decline significantly whenever individuals feel undervalued or perceive an imbalance between their efforts and the rewards received. First and foremost, fundamental necessities such as food, shelter, and security must be adequately met to maintain a functional workforce. Motivation itself serves as the internal drive that triggers action and directs a person toward achieving specific objectives. By the same token, robust motivation can propel the growth of a corporation or government agency, though factors like workplace discipline also play a critical role in determining overall performance. Furthermore, workplace discipline reflects the level of respect employees have for organizational rules and helps establish a stable operational order. Motivation generally has a profound impact on individual output. For this reason, companies and government institutions must provide consistent support and recognition to boost morale and productivity (Oesraini *et al.*, 2024).

Le Tran and Chiou-shu (2015) assert that motivation directly influences employee performance. In a similar vein, Omolo (2015) suggests that poor performance often stems from a lack of motivation, excessive workloads, and external factors such as high recruitment costs or government regulations. Specifically, Kuranchie-Mensah and Amponsah-Tawiah (2016) agree that motivation boosts morale and provides the inspiration necessary for staff to excel individually and as part of a team. Conversely, low levels of motivation typically result in subpar performance and make it difficult for an organization to reach its established goals. Besides that, career development serves as a major incentive for employees, particularly through promotion opportunities and improved welfare. Leadership must prioritize educational advancement and ensure that equal opportunities are available to all staff members. Indeed, such opportunities should not be restricted solely to those who already possess high levels of education (Kuranchie-Mensah, E. B., & Amponsah Tawiah, 2016).

Furthermore, preliminary studies conducted through focus group discussions (FGDs) with health department officials, community health center heads, and cross-sector stakeholders have revealed a significant lack of professional development programs for health personnel in these two regencies. Moreover, the issue of workforce development remains a low priority for local administrations. Budget allocations for essential training, seminars, and workshops are frequently omitted or overlooked within the annual work plans of the health departments. Even so, proposals for health personnel training are consistently submitted during the drafting phase of the departmental work plans. These initiatives,

however, are routinely rejected during finalization by the regional planning and budgeting teams and throughout deliberations with the Regional House of Representatives. In light of these findings, there is a clear and urgent need to examine the factors influencing personnel motivation within the context of health planning. Consequently, this study focuses on the determinants associated with human resource motivation from the health sector in North Sumatra Province.

Methods

This research employs a quantitative method involving 116 randomly selected respondents from two regencies in North Sumatra Province, namely Karo and South Labuhanbatu. Data collection was conducted through questionnaires distributed directly to the participants. Subsequently, the findings were processed using three levels of statistical examination, namely univariate, bivariate, and multivariate analysis (Sujarweni, 2004). Univariate analysis serves to illustrate the frequency distribution and percentages of respondent characteristics and research variables. Meanwhile, bivariate analysis functions as a statistical tool in this cross-sectional study to identify relationships, influences, or differences between variables. In particular, the bivariate phase utilizes the chi-squared test while examining risk estimate values for the studied variables. Multivariate analysis follows as a method to identify the most dominant or influential relationships among multiple variables simultaneously. Technically speaking, this approach involves statistical techniques that analyze more than two variables for each object or individual at once. Multivariate analysis acts as an extension of the previous two analyses. To illustrate, the requirements for this advanced analysis depend on findings from the bivariate stage, where variables showing a significant relationship with a *p*-value of less than 0.25 are included. Furthermore, the data for the dependent, independent, and confounding variables consist of numerical, nominal, or ordinal types (Sugiyono, 2016). The independent variables in this study are planning, utilization, and development, whereas the dependent variable is the motivation of health personnel. By and large, the objective of this research is to identify the determinants associated with the work motivation of health human resources in Karo and South Labuhanbatu Regencies for the year 2024.

Results

1. Results of Univariate Analysis

Table 1. Characteristics of Health Personnel Respondents in Karo and South Labuhanbatu Regencies, North Sumatra Province

Characteristics	Total	Percentage (%)
Age:		
< 40 years	56	48.2
40–46 years	35	30.2
> 46 years	25	21.6
Gender:		
Male	47	40.5
Female	69	59.5
Occupation:		
Head of Community Health Center	10	8.6
Division Head/Secretary/Section Head	22	19.0
Health Office Staff	36	31.0
Community Health Center Staff	48	41.4

Characteristics	Total	Percentage (%)
Education:	2	1.7
High School	52	44.8
Diploma (D3)	50	43.1
Bachelor's Degree (S1)	12	10.4
Master's Degree (S2)		

Primary Data, 2024

Out of a total of 116 respondents, approximately 48.2% are under the age of 40, while 21.6% are older than 46. The remaining participants fall within the 40 to 46 age bracket. With respect to gender distribution, the data reveals a higher proportion of female respondents compared to males, at 59.5%. In addition, a vast majority of the personnel hold either a three-year diploma or a bachelor's degree, accounting for 44.8% and 43.1% of the group, respectively. Regarding professional roles, those serving as heads of community health centers or holding structural positions within the regional health office represent 8.6% and 19.0% of the sample.

Table 2. Characteristics of Health Personnel Based on Prior Training Participation in Karo and South Labuhanbatu Regencies, North Sumatra Province

Characteristics	Total	Percentage (%)
Head of Community Health Center	3	2.6
Division Head/Secretary/Section Head	5	4.3
Health Office Staff	13	11.2
Community Health Center Staff	14	12.1

Primary Data, 2024

Out of the total participants, only a small fraction have ever attended human resource development training. To illustrate, these opportunities were predominantly utilized by health office and community health center staff, at 11.2% and 12.1% respectively. In contrast, only 2.6% of health center heads and 4.3% of structural officials have participated in any training sessions over the last decade. The specific training attended by health center heads was limited to facility management. At the same time, much of the training received by structural officials and general staff did not align with their core duties and functions. For instance, personnel working in disease prevention and health services were occasionally assigned to sessions on goods procurement, internal auditing, or health facility applications. Among the 22 division and section heads and the 8 health center heads in South Labuhanbatu and Karo, a mere 3 health center heads and 5 officials have received training within the last 10 years.

Table 3. Frequency Distribution of Planning, Utilization, Development, and Personnel Motivation Variables in Health Planning within Karo and South Labuhanbatu Regencies, North Sumatra Province

Research Variables	Total	Percentage (%)
Planning		
Poor	40	35.5
Fair	65	56.0
Good	11	9.5
Utilization		
Poor	21	18.1
Fair	73	62.9
Good	22	19.0
Development		
Poor	34	29.3
Fair	73	62.9
Good	9	7.8
Personnel Motivation		
Poor	5	4.3
Fair	49	42.2

Research Variables	Total	Percentage (%)
Good	62	53.5
Total	116	100

Primary Data, 2024

Based on the data presented in Table 3, the planning variable shows that 40 respondents (35.5%) perceive planning as poor, 65 (56.0%) view it as fair, and only 11 (9.5%) categorize it as good. In like manner, the utilization variable reveals that 21 individuals (18.1%) find it poor, while the majority of 73 (62.9%) consider it fair, and 22 (19.0%) rate it as good. Moving on to the development variable, 34 respondents (29.3%) report poor development, whereas 73 (62.9%) see it as fair, and a mere 9 (7.8%) perceive it as good. With respect to work motivation, only a small group of 5 individuals (4.3%) fall into the poor category. By comparison, 49 respondents (42.2%) demonstrate fair motivation, and the largest group, consisting of 62 people (53.5%), exhibits good motivation levels.

2. Results of Bivariate Analysis

Table 4. Analysis of the Relationship Between Planning, Utilization, and Development with Personnel Motivation in Health Planning within Karo and South Labuhanbatu Regencies, North Sumatra

Variables	Personnel Motivation			p-Value	Significance
	Poor	Fair	Good		
Planning					
Poor	3 (7.5%)	23 (57.5%)	14 (35.0%)	0.063	Not Significant
Fair	2 (3.1%)	22 (33.8%)	41 (63.1%)		
Good	0 (0%)	4 (36.4%)	7 (63.6%)		
Utilization					
Poor	5 (23.8%)	10 (47.6%)	6 (28.6%)	0.000	Significant
Fair	0 (0%)	30 (41.1%)	43 (58.9%)		
Good	0 (0%)	9 (40.9%)	13 (59.1%)		
Development					
Poor	4 (11.8%)	22 (64.7%)	8 (23.5%)	0.000	Significant
Fair	1 (1.4%)	24 (32.9%)	48 (65.8%)		
Good	0 (0%)	3 (33.3%)	6 (66.7%)		

Primary Data, 2024; Chi-squared test, significant if $p < 0.05$

According to the analysis presented in Table 4, the data regarding the planning variable indicates that respondents who perceive planning as good also tend to report high levels of motivation at a rate of 63.6%. In comparison, those who view planning as poor or fair show high motivation rates of 35.0% and 63.1%, respectively. On the contrary, the utilization variable demonstrates a highly significant connection to motivation levels. Specifically, the percentage of individuals with high motivation is notably higher in the “good utilization” category at 59.1% and the “fair” category at 58.9%, whereas the “poor” category drops significantly to 28.6%. Moreover, the development variable shows a similarly strong statistical significance. Personnel who categorize development opportunities as good or fair report high motivation levels of 66.7% and 65.8%, respectively. Conversely, only 23.5% of those in the poor development category maintain high motivation.

The chi-squared test results for the planning variable yielded a p -value of 0.063, indicating a lack of statistical significance. In other words, no verifiable relationship exists between planning processes and the motivation levels of health personnel. Nevertheless, the data regarding utilization and professional development tells a much different story. Both of these variables returned a p -value of 0.000, which confirms a statistically significant connection.

3. Results of Multivariate Analysis

Multivariate analysis was conducted to determine which among the associated variables exerts the most significant influence on work motivation. The statistical test utilized was logistic regression, incorporating the variables of planning, utilization, and health personnel development alongside the dependent variable of motivation.

Table 5. Multivariate Analysis Results of Determinants Associated with Personnel Motivation in Health Planning within Karo and South Labuhanbatu Regencies, North Sumatra

No.	Variables	B-Value	p-Value	Exp(B)
1	Utilization	0.125	0.069	0.187
2	Planning	-0.206	0.082	-0.215
3	Development	0.686	0.000	0.551

Primary Data, 2024; Logistic regression, significant if $p < 0.25$

Based on the regression results detailed in Table 5, the personnel utilization variable yielded a p -value of 0.125 with an Exp(B) of 0.187. Strictly speaking, this indicates that effective utilization provides a 0.18-fold opportunity to drive health personnel motivation within the planning process. The planning variable resulted in a p -value of 0.082 and an Exp(B) of -0.215, suggesting that planning alone offers a negative probability of -0.215 in relation to motivation. In contrast, the personnel development variable produced a p -value of 0.000 and an Exp(B) of 0.551. To put it another way, these figures mean that professional development opportunities offer a 0.55-fold chance of becoming a motivational driver for health resources in the planning sector. Specifically, when comparing the three factors based on their respective p -values, personnel development emerges as the most dominant determinant of motivation. As a result, this factor carries far more weight than either utilization or planning in influencing the morale of the workforce.

Discussion

1. Relationship Between Planning and Personnel Motivation in Health Planning

The chi-squared test for the planning variable resulted in a p -value of 0.063, indicating that the relationship is not statistically significant. Accordingly, it can be inferred that general planning processes do not serve as a direct driver for work motivation. Furthermore, the logistic regression analysis yielded a p -value of 0.082 with an Exp(B) value of -0.215. This suggests that the current approach to health workforce planning offers a negligible or even slightly negative probability of enhancing staff morale. In light of these findings, similar issues have been documented in other regions. For example, a study by Gunawan and Rahmani (2022) concerning “*An Analysis of the Human Resources Planning System at the Health Office of Deli Serdang Regency*” revealed that the placement and assignment of personnel often fail to align with their actual roles (Gunawan, D. I. & Rahmani, 2022). Similarly, research by Adam (2018) entitled “*An Analysis of the Human Resources Planning System at the Health Office of Gorontalo Regency*” found that while some staff possess the appropriate educational backgrounds, their specific work placements frequently remain inconsistent with their expertise (Adam, 2018). On a broader scale, these results align with various studies emphasizing that employee performance is shaped by a complex array of factors beyond simple logistics. Specifically, motivation and output are heavily influenced by leadership styles, career advancement paths, workplace facilities, and financial incentives. Moreover, elements such as organizational culture, social norms, and individual employee values play a substantial role in determining engagement levels (Widianti, 2022; Roos, M., Reale, J., & Banning, 2021; Norwati, S., Syarifudin, S., & Tamrin, 2023).

Human resources stand as a cornerstone of any organization, functioning as the primary thinkers, drivers, and planners essential for reaching specific goals. To that end, effective workforce planning is vital for reducing uncertainty and fostering higher levels of job satisfaction. According to Nawawi (2017), this type of planning involves a strategic process of acquiring, utilizing, developing, and retaining personnel to meet the unique needs of an institution (Nawawi, 2017). Building on this idea, Hasibuan (2017) notes that comprehensive human resource management encompasses recruitment, skill development, compensation, maintenance, and even termination procedures. Viewed in this light, planning for staff needs is a long-term investment, as capable employees possess the skills to solve complex problems, drive innovation, and boost overall organizational performance. Work motivation is a critical stimulus that encourages staff to perform with enthusiasm and support the growth of the agency. In a related sense, such a drive often stems from internal personal values and external leadership. Indeed, approaching one's duties with a sense of purpose, gratitude for employment, and a competitive mindset can significantly elevate morale and commitment to the mission (Hasibuan, 2018).

Workforce planning involves projecting the specific number and types of employees an organization will require in the future. For this reason, achieving a successful planning strategy requires careful attention to at least four fundamental aspects, namely forecasting the necessary number of employees, auditing the human resources currently available within the organization, conducting a thorough demand and supply analysis, and executing a targeted action program (Sari, 2023).

In view of this, accurate and efficient health workforce planning becomes a critical determinant of whether a government agency operates smoothly or faces systemic failure. This process encompasses a wide range of factors, including activity planning, personnel management, budget allocation, and the projection of desired future outcomes. Correspondingly, when all these elements are properly aligned and balanced to meet specific targets, the overall performance of the institution will inevitably improve.

2. Relationship Between Utilization and Personnel Motivation in Health Planning

Bivariate analysis regarding the utilization variable yielded a p -value of 0.000, indicating a statistically significant relationship with work motivation among health personnel. Furthermore, the logistic regression analysis produced a p -value of 0.125 with an Exp(B) value of 0.187. This suggests that effective utilization provides a 0.18-fold opportunity to enhance the drive of the workforce within the context of health planning. In this regard, placing health personnel in roles that align with their specific skills, competencies, and organizational communication abilities represents a highly efficient and effective management strategy. In much the same way, a study by Hermawati in 2022 demonstrated that professional competence significantly impacts work motivation. This finding implies that when health workers possess higher levels of relevant competence, they exhibit a corresponding increase in their enthusiasm and dedication to their tasks. Based on these findings, the significant benefits derived from effectively utilizing the capacity of health personnel become quite clear (Hermawati, 2022). Competence, in particular, has the power to elevate the work motivation of health practitioners. In light of this, such evidence aligns with the perspectives shared by Rosmaini and Tanjung (2019), who suggest that high levels of competence help establish a more focused and professional work atmosphere (Rosmaini, R., & Tanjung, 2019). Similarly, the advantages gained from collaborating with a highly motivated team include the assurance that tasks are completed according to the correct standards and within established

timeframes (Apridani, A., Mantikei, B., & Syamsudin, 2021).

Motivation is a natural inclination toward activity, originating from an internal drive and culminating in adjustments made to satisfy specific needs (Fatmasari, E., Al, M. M., & Wulida, 2018). In line with this, Hasibuan (2019) describes motivation as the application of a driving force that ignites professional enthusiasm, encouraging individuals to cooperate effectively to achieve mutual satisfaction. Generally speaking, this psychological phenomenon is classified into two distinct types, namely positive motivation and negative motivation. Furthermore, the intensity of this drive is shaped by a combination of intrinsic factors from within the individual and extrinsic factors from the surrounding environment. To be precise, elements such as personal competence, organizational communication, and various job-related conditions play a decisive role in determining overall engagement levels (Hasibuan, 2018).

From the researcher's perspective, government organizations can execute operational activities with much greater ease when the unique skills and capabilities of each health professional are fully utilized. In practice, however, the reality on the ground often tells a different story. Many cases reveal that health personnel are frequently placed in roles that do not align with their core functions or expertise. Consequently, such mismatches create significant hurdles because staff members often lack a clear understanding of the specific tasks assigned to them. To make matters worse, these individuals rarely receive the necessary training or educational support required to master their roles. The situation is further aggravated by a lack of adequate compensation and professional recognition, which inevitably dampens the drive to perform. As a result, many employees become disengaged and deliver only the minimum effort required. For this reason, the quality of health planning suffers, leading to outcomes that are often inaccurate or ineffective.

3. Relationship Between Development and Personnel Motivation in Health Planning

Bivariate analysis regarding the development variable yielded a p -value of 0.000, a result mirrored in the multivariate analysis with a p -value of 0.000 and an Exp(B) value of 0.551. In essence, these figures indicate that professional development provides a 0.55-fold opportunity to drive work motivation among health personnel. Furthermore, based on the comparative p -values of the three variables studied, development emerges as the most influential factor in determining overall morale. Indeed, these findings align with research conducted by Manu *et al.* (2022), which established that career advancement has a positive and crucial impact on motivation. By the same token, a well-structured career development plan implemented by human resource departments to boost productivity naturally results in higher levels of employee engagement. It is important to note, however, that work motivation does not depend entirely on career progression alone. In a similar vein, the study by Manu clarifies that job training plays a significant role in elevating morale, particularly when the training provided is highly relevant to the specific duties of the staff. Conversely, some researchers argue that training may not always have a substantial effect on motivation. Specifically, such a lack of impact often occurs if the material covered during the sessions is rarely applied in actual daily tasks. Additionally, the effectiveness of training can diminish if the instructor's delivery methods are difficult for participants to comprehend (Manu *et al.*, 2022).

The findings from this study align with research conducted by Raharja and Kusumawati in 2021, which utilized Spearman's rank test to identify a strong, positive correlation between job training and the motivation levels of non-civil servant health personnel, yielding a correlation coefficient of $r = 0.504$. In light of this, employees who receive professional training are significantly more likely to experience a boost in their work motivation (Raharja &

Kusumawati, 2021). Similarly, a study by Muhammad Nur and colleagues in 2021 demonstrated that advanced education ($p = 0.000$), training ($p = 0.024$), and job promotions ($p = 0.001$) all contribute substantially to the performance of health workers within the human resource development framework at the Health Office of Sidenreng Rappang Regency.

From a practical standpoint, on-the-job training is one of the most accessible options for employee development. Such training becomes essential when an organization faces recurring operational challenges, particularly when staff must determine the best methods for problem-solving. Specifically, the effectiveness of these programs is often measured through six key indicators, namely instructors, participants, materials, methods, goals, and targets. On that account, when these elements are well-executed, they exert a positive and significant influence on staff morale. Furthermore, training initiatives provided by management offer direct benefits that translate into a noticeable increase in employee engagement.

Human resource development is a vital component of any corporate or governmental management structure, focusing primarily on enhancing the performance and competence of the workforce. Employees represent a fundamental asset that requires continuous growth to boost efficiency, which in turn directly facilitates the achievement of organizational goals. In addition to this, professional development acts as a meaningful form of appreciation for individuals who have contributed their efforts to the institution. On that account, effective strategic planning allows developmental initiatives to refine employee skills and output. This alignment enables organizations to provide the recognition and rewards necessary to inspire personnel toward optimal contributions. By and large, the core purpose of HRD is to nurture, sharpen, and expand the existing competencies of every staff member. Ideally, employee growth programs should be executed on a regular, planned basis, beginning with a formal performance appraisal to identify specific developmental needs. Despite this ideal, the reality is often quite different in many organizations. Competency programs are frequently carried out without any prior planning or objective performance evaluations. Most notably, these initiatives often bypass the crucial step of conducting a formal training need analysis (TNA) before implementation (Zatira & Tumanggor, 2024).

Career development exerts a positive and crucial influence on work motivation. To substantiate this, a study by SD Sarasruti (2016) found that career progression was a vital driver of employee motivation at the Agency for Research and Development, Education and Training, and Information (Indonesia's Ministry of Villages, Development of Disadvantaged Regions, and Transmigration, Jakarta Office). Likewise, research by A. Akhmal, F Laia, and RA Sari (2018) clarifies that career advancement significantly impacts overall employee performance. Plainly put, strong motivation can trigger substantial growth and development within any organization. Various factors contribute to the improvement of performance, including the strict enforcement of work discipline. Indeed, the success of an organization is frequently measured by the level of discipline maintained by its staff. Discipline establishes a structured and functional corporate environment (Oesraini *et al.*, 2024). Moreover, motivation serves as an internal or external force that compels an individual to achieve specific, predetermined goals (Daulay *et al.*, 2024). In a broader sense, work motivation is closely linked to a variety of personal and professional elements. These include age, length of service, and job performance, as well as the need for recognition and the development of individual potential. Furthermore, perceptions regarding salary, working conditions, administrative policies, interpersonal relationships, and the quality of supervision all play a role in determining how driven an employee feels (Shah GH, Corso L, & Sotnikov S, 2019).

The researcher assumes that strategic, effective, and sustainable human resource development inevitably leads to a significant improvement in the capabilities of personnel tasked with health planning. By the same token, this commitment to professional growth ensures a consistent output of high-quality health strategies over the long term.

Conclusion

Health programs and budget allocations intended to strengthen personnel capacity in Karo and South Labuhanbatu Regencies currently lack optimization regarding planning, execution, monitoring, and evaluation. As a consequence, these systemic gaps hinder the overall effectiveness of public health initiatives in those regions. To address this, routine intervention measures such as dedicated mentoring and capacity-building workshops are essential to ensure that program integration and oversight function smoothly. In turn, these efforts will likely generate a positive ripple effect throughout the human resource development landscape of North Sumatra Province. Regarding local governance, there is a pressing need for a stronger commitment from regional authorities, community health centers, and health offices toward sustainable funding. More specifically, budget allocations should prioritize the socialization of performance indicators and the implementation of specialized training programs focused on administrative and operational oversight. In a similar fashion, such investments are necessary to equip staff with the tools required for better planning and evaluation.

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