

SYSTEMATIC LITERATURE REVIEW ON HEALTH HUMAN RESOURCE MANAGEMENT STRATEGIES IN IMPROVING HEALTH WORKER PERFORMANCE

**Salianto *, Widia Lestari, Herlia Nur Laspita, Meillah Salsabilla, Muthia Riswani,
Riska Rahmadianti, Fiola Syifa Azura Nasution**

Program Studi Ilmu Kesehatan Masyarakat, Fakultas Kesehatan Masyarakat,

Universitas Islam Negeri Sumatera Utara

Jl. Lapangan Golf, Kampung Tengah, Kec. Pancur Batu, Kabupaten Deli Serdang, Sumatera Utara 20353,

Indonesia

Email: salianto_86@uinsu.ac.id

Abstract

The performance of healthcare workers is a crucial factor in determining the quality of healthcare services. However, healthcare worker performance in Indonesia still faces various challenges. Data shows that productive working time for healthcare workers at Community Health Centers (Puskesmas) is only 53.2%, with only 13.3% of that time spent on direct healthcare services. Furthermore, approximately 56% of the 175,000 healthcare workers complain about low incentives, while Indonesia is among the five countries with the lowest levels of healthcare worker motivation in the world. These conditions highlight the importance of implementing effective healthcare human resource (HR) management strategies to improve healthcare worker performance. This study aims to systematically analyze various healthcare HR management strategies for improving healthcare worker performance. The method used was a Systematic Literature Review (SLR) following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. The literature search was conducted through Google Scholar, the Garuda Portal, and SINTA databases, covering publications from 2021–2026. Fifteen articles meeting the inclusion criteria were analyzed using a thematic synthesis approach. The research results indicate that there are six main strategies that are effective in improving the performance of healthcare workers, namely: (1) needs-based HR planning using the Workload Indicators of Staffing Need (WISN) and Workload Analysis (ABK) methods; (2) competency-based recruitment and selection; (3) ongoing education and training; (4) a transparent performance appraisal system using Key Performance Indicators (KPIs); (5) fair compensation and integrated HR welfare programs; and (6) supportive leadership supported by a positive organizational culture. However, the implementation of these strategies still faces obstacles in the form of budget constraints, maldistribution of healthcare workers, minimal training, and inadequate work facilities. Therefore, commitment and collaboration between the government, hospitals, and community health centers are needed to strengthen HR management policies in healthcare to continuously improve the quality of healthcare services.

Keywords: HR Management in Healthcare, Healthcare Worker Performance, Systematic Literature Review, HR Strategy, Healthcare Services

INTRODUCTION

Health human resources (HR) are a key component in health development because they play a role in increasing public awareness, willingness, and ability to live healthily, thereby achieving optimal health. The strategic role of HR in health has become increasingly important with the implementation of the National Social Security System through the National Health Insurance program since January 1, 2014, which requires the availability of healthcare workers in sufficient numbers, types, and quality, as well as equitable distribution.

However, despite the increase in the number and quality of HR in health care, their distribution remains uneven, particularly in remote, border, and island areas. This unequal distribution impacts the public's limited access to quality healthcare services, potentially hampering the achievement of national health development goals (Attriani, 2022).

Although the performance of healthcare workers plays a crucial role in improving the quality of healthcare services, in reality, the performance of healthcare workers in various healthcare facilities remains suboptimal. This is demonstrated by the mismatch between the workload and the number of healthcare workers, low work motivation, and limited competency in some regions. This situation has resulted in a decline in the quality of healthcare services and patient satisfaction (Ida Ayu Laksmi Arnita Utari & Dety Mulyanti, 2023).

According to (Mutmainah et al., 2023), Indonesia is among the five countries with low levels of work motivation among healthcare workers, along with Vietnam, Argentina, Nigeria, and India. This low work motivation is partly influenced by the suboptimal fulfillment of healthcare worker welfare. Furthermore, data shows that of approximately 175,000 healthcare workers, 56% complain about the low incentives they receive from their employers.

This situation is further reinforced by findings in Indonesia, which show that the productive working time of healthcare workers in community health centers (Puskesmas) is only 53.2%, while the remaining 46.8% is spent on non-productive activities. Of this total productive time, only 13.3% is spent on direct healthcare services, while 39.9% is spent on support activities. This situation indicates that healthcare workers' working time is not being utilized optimally, which can ultimately impact individual performance and the overall performance of healthcare institutions (Sulaiman Sulaiman et al., 2024).

These healthcare worker performance issues highlight the need for effective human resource management in the healthcare sector. Human resource management in the healthcare sector plays a crucial role in planning, recruiting, developing, and retaining both medical and non-medical personnel to ensure quality services.

Although various studies have discussed human resource management strategies for improving healthcare worker performance, the results obtained vary and do not provide a comprehensive picture of the most effective strategies. Furthermore, few studies have systematically summarized and analyzed these strategies in the context of healthcare services.

Therefore, this study aims to conduct a Systematic Literature Review of various health human resource management strategies in improving the performance of health workers, so

that it can provide a comprehensive picture and become a basis for policy making in the health sector and the development of more effective HR management strategies.

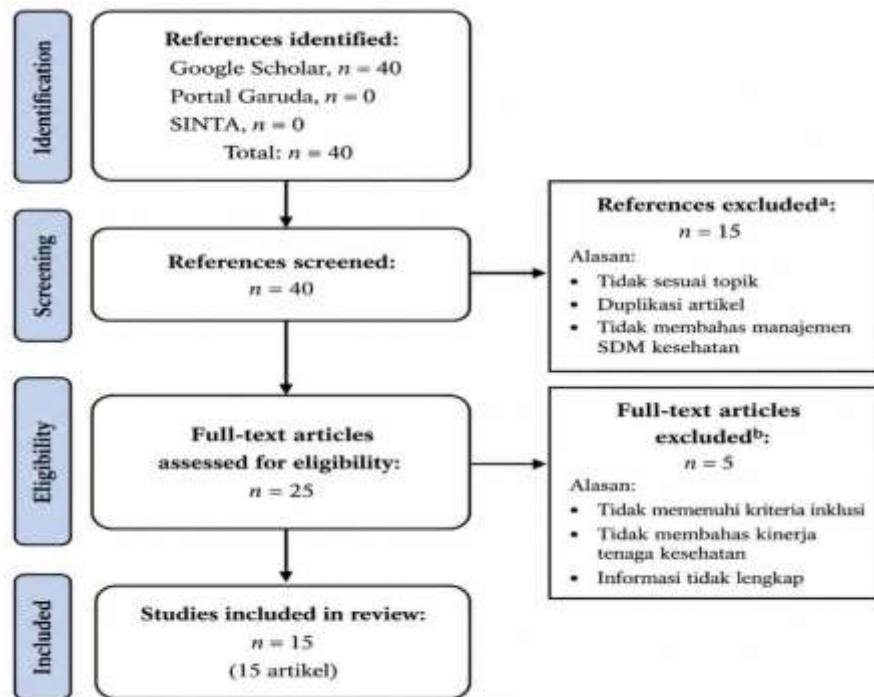
IMPLEMENTATION METHOD

This study employed a Systematic Literature Review (SLR) design to comprehensively identify and evaluate human resource management strategies in health care to improve the performance of healthcare workers. This method aims to summarize the findings of various previous studies, which have varied results, to provide an overview of the most effective strategies in the context of healthcare services. Through a systematic approach, this study seeks to address human resource management challenges such as workload mismatch and low motivation, which impact the quality of public services.

The literature search strategy was conducted through electronic databases such as Google Scholar, the Garuda Portal, and SINTA using the keywords "Human Resource Management Strategy," "Healthcare Worker Performance," and "Human Resource Management in Health Care." According to Setyani & Pradana (2024), selecting specific keywords in Indonesian is crucial for accurately mapping management dynamics in community health centers and hospitals. The inclusion criteria included Indonesian-language journal articles published within the last five years (2021-2026), focusing on both medical and non-medical personnel, and discussing variables related to the fulfillment of healthcare worker welfare and incentives.

The article selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol, which consists of identification, screening, eligibility, and inclusion. Ardiansyah et al. (2023) emphasized that implementing the PRISMA protocol is crucial for minimizing bias in hospital management literature reviews. This process ensures that only high-quality articles with complete manuscripts are analyzed, thus providing concrete solutions to the problem of healthcare workers' productive work time efficiency, which is currently reported to be suboptimal.

The collected data was then analyzed using thematic analysis, extracting information based on variables contributing to low performance and management strategies. The analysis focused on aspects of planning, recruitment, development, and maintenance of medical personnel to ensure quality services. As stated by Octaviani et al. (2024), an effective human resource planning strategy is key to meeting the need for quality healthcare workers and ensuring equitable distribution throughout Indonesia.



RESULTS

Author	Design	Research Focus	Key Findings	Implications
Suryandartiwi et al. (2024)	Descriptive	HR medical records staff	Lack of manpower, training, rewards and work facilities	Need to strengthen human resources and work facilities
Dianingsih et al. (2026)	Evaluation	Welfare of health workers	Human resource planning, training, and evaluation are important	Improved service quality
Wasiyem et al. (2024)	Literature Review	Quality of hospital services	Competence, motivation and leadership improve performance	Sustainable HR development
Saragih (2024)	SLR	HR planning and placement	Placement does not match competency	HR distribution needs to be improved
Purwadhi et al. (2024)	Literature Review	Performance of medical personnel	Effective recruitment, training, compensation	Productivity increases
Sirajuddin (2024)	Literature Review	Retention of health workers	Leadership and compensation improve retention	Organizational sustainability
Prawira et al. (2024)	Literature Review	Hospital competitiveness	Strategic leadership increases competitiveness	Service quality increases
Aifu & Mokodompit (2024)	Literature Review	Human resources in underdeveloped areas	Maldistribution of human resources still occurs	Equal distribution of health workers
Darus (2024)	SLR	Health center human resource planning	Planning is still top-down	Needs-based approach
Hasibuan et al. (2024)	SLR	Implementation of SIMRS	SIMRS improves service efficiency	Digital transformation of health
Purwadhi et al. (2024)	Narrative Review	Human Resource Management	HRM improves service quality	Strengthening HRM strategy
Utari & Mulyanti (2023)	Theoretical Review	Health worker performance factors	Individual and environmental factors have an influence	Improved work environment

Priyono et al. (2024)	Literature Review	HR performance management	KPI and evaluation improve services	Performance appraisal is more effective
Octaviani et al. (2024)	Literature Review	Health HR planning	WISN and ABK effective	Equal distribution of health human resources
Lukmansyah (2024)	SLR	Human Resources Welfare	Well-being improves organizational performance	Integrated HR approach

Based on the results of a synthesis of 15 analyzed articles, it was found that the health human resource management strategies most influential in improving the performance of health workers include needs-based human resource planning, competency-based recruitment, ongoing training, a transparent performance appraisal system, fair compensation, and supportive leadership. Furthermore, the use of information technology and adequate work environment support also contribute to improving the quality of health services. However, several studies still indicate obstacles such as limited health workers, unequal distribution of human resources, minimal training, and limited work facilities. The results of the synthesis are then discussed based on the main themes found in the literature.

DISCUSSION

Based on the results of a Systematic Literature Review of 15 analyzed articles, it was found that health human resource (HRM) management strategies play a crucial role in improving the performance of healthcare workers in various healthcare facilities, both hospitals and community health centers (Purwadhi et al., 2024). Healthcare worker performance is influenced not only by individual abilities but also by organizational systems, the work environment, leadership patterns, reward systems, and the HR management strategies implemented by healthcare institutions.

The study's findings indicate that one of the key strategies for improving healthcare worker performance is needs-based HR planning. Good HR planning can help healthcare organizations determine the number, type, and competency of healthcare workers that align with service needs. Research by Putri Octaviani et al. confirms that health HR planning must be conducted through workforce needs analysis and appropriate workload management to ensure equitable and efficient distribution of healthcare workers (Octaviani et al., 2024). The use of data-driven methods such as Workload Indicators of Staffing Need (WISN) and Workload Analysis (ABK) is considered effective in accurately determining healthcare workforce needs.

These findings align with Novita Saragih's research, which states that human resource planning and placement at the Bangko Jaya Community Health Center are still suboptimal due to a mismatch between the placement of health workers and their educational backgrounds and competencies. This condition results in an unbalanced workload, which impacts the quality of health services. A similar finding was found in Yena Bt Darus's research, which showed that the top-down human resource planning system and lack of coordination resulted in suboptimal performance of health center staff. Therefore, systematic human resource planning based on actual needs in the field is a crucial factor in improving the effectiveness of health services.

In addition to planning, competency-based recruitment and selection of healthcare workers is also a crucial strategy for improving healthcare worker performance. An appropriate recruitment process can help organizations acquire healthcare workers with the abilities, skills, and work readiness that align with service needs. Research by Purwadhi et al. explains that rigorous recruitment and selection can increase medical worker productivity and the quality of healthcare services in hospitals (Purwadhi et al., 2024). Competency-based recruitment also plays a role in reducing work errors and enhancing healthcare worker professionalism.

However, the implementation of recruitment strategies in various healthcare facilities still faces several obstacles. Research by Wiwik Suryandartiwi et al. showed that the shortage of medical records staff and the lack of pre-employment training resulted in suboptimal performance of medical records staff at Arifin Achmad Regional General Hospital. This situation suggests that the healthcare worker recruitment process should not only focus on quantity but also consider competency readiness before healthcare workers begin work.

Competency development through continuing education and training is also a dominant strategy identified in journal reviews. Continuous training is needed to improve the technical and non-technical skills of healthcare workers to keep pace with developments in science, technology, and the increasingly complex demands of healthcare services. Research by Wasiyem et al. explains that continuing education and training can improve the competency of healthcare workers, thus positively impacting the quality of healthcare services.

Research by Purwadhi et al. also shows that continuous training and human resource development can increase medical personnel productivity and patient satisfaction. This finding is reinforced by research by Afifah Thaliah Putri Priyono et al., which states that human resource development through education, training, regular evaluation, and professional development significantly impacts the quality of healthcare services and professionalism of healthcare workers.

However, several studies indicate that training implementation remains suboptimal due to budget constraints and limited training opportunities for healthcare workers. Research by Wahyuni Dwi Dianingsih et al. found that the lack of ongoing training is one of the obstacles to improving healthcare worker performance. A similar finding was found in the study "The Role of Human Resource Management (HRM) Strategy in Hospital Performance," which stated that a suboptimal training system results in suboptimal healthcare worker competency development.

Work motivation and compensation systems are also important aspects of healthcare human resource management. Healthcare workers who receive fair rewards, incentives, and compensation tend to have higher work motivation, which impacts productivity and the quality of healthcare services. Research by Purwadhi et al. found that fair compensation and incentives are key factors in improving the performance of medical personnel in hospitals.

Research by Wawan Lukmansyah also explained that integrated HR welfare practices can significantly improve employee well-being and organizational performance. Healthcare worker well-being plays a key role in improving work quality and organizational loyalty. Furthermore, burnout is a crucial factor to consider, as it can reduce healthcare worker motivation and performance.

The results of this study also show that leadership and organizational culture have a

significant influence on healthcare worker performance. Supportive leadership can create a conducive work environment, improve organizational communication, and encourage healthcare workers to work more professionally. Research by Inayyah Nur Fitry Sirajuddin explains that a positive organizational culture and supportive leadership influence healthcare worker retention and employee job satisfaction.

Research by I Gusti Ngurah Gede Swarga Prawira et al. also shows that strategic leadership and an adaptive organizational culture are important factors in increasing hospital competitiveness. Consistent implementation of organizational strategies can help improve the quality of healthcare services and strengthen the effectiveness of healthcare human resource management.

In addition to leadership factors, the work environment and supporting facilities also influence healthcare worker performance. A safe, comfortable work environment supported by adequate facilities will increase healthcare worker effectiveness. Conversely, limited facilities can hinder the healthcare service process. Research by Wiwik Suryandartiwi et al. showed that inadequate work facilities, such as computers and supporting infrastructure, and the lack of regular machine maintenance, resulted in suboptimal performance of medical records personnel.

A similar finding was found in research by Ida Ayu Laksmi Arnita Utari and Dety Mulyanti, who stated that the physical condition of the work environment, equipment availability, and time management are environmental factors that significantly influence healthcare worker performance. Therefore, healthcare organizations need to consider the availability of work facilities as part of their HR quality improvement strategy.

Developments in information technology are also a strategy that supports improving healthcare worker performance. Implementing a Hospital Management Information System (SIMRS) has been proven to improve operational efficiency, accelerate service processes, and support data-driven decision-making. Research by Astrid Novitri Rahmadhani Hasibuan et al. found that SIMRS can reduce administrative errors, accelerate service flows, and increase patient satisfaction.

However, the success of SIMRS implementation is greatly influenced by the quality of human resources, the readiness of the technological infrastructure, and the implementation of clear standard operating procedures (SOPs). Without the support of competent human resources and a well-integrated system, technology implementation will not run optimally.

The results of this study also indicate that a transparent and sustainable performance appraisal system plays a crucial role in maintaining the quality of healthcare services. A clear evaluation system can help organizations assess healthcare worker productivity, identify weaknesses, and develop appropriate HR development strategies. Research by Afifah Thaliah Putri Priyono et al. explains that the implementation of Key Performance Indicators (KPIs), work discipline, continuous feedback, and service quality-based evaluations are crucial factors in healthcare worker performance management.

Furthermore, indicators of successful healthcare worker performance are not only measured by work productivity but also by service quality and patient satisfaction levels. Therefore, performance evaluation must be conducted objectively, transparently, and continuously to optimally improve healthcare worker professionalism.

Overall, the results of this Systematic Literature Review demonstrate that effective

healthcare HR management strategies must be implemented comprehensively and sustainably. These strategies include needs-based HR planning, competency-based recruitment, ongoing training, a transparent performance appraisal system, fair compensation, supportive leadership, provision of adequate work facilities, and the use of information technology in health services.

However, the implementation of these strategies still faces challenges such as budget constraints, a shortage of healthcare workers, unequal distribution of healthcare workers, limited training opportunities, and suboptimal facilities and organizational reward systems. Therefore, a commitment from the government, hospitals, and community health centers is needed to strengthen human resource management policies in healthcare to create a professional, productive, and high-quality workforce to support improvements in the quality of healthcare services in Indonesia.

CONCLUSION

Based on the results of a Systematic Literature Review of 15 articles, it can be concluded that human resource (HR) management in health plays a crucial role in improving the performance of healthcare workers in hospitals and community health centers. Effective strategies include needs-based HR planning, competency-based recruitment, ongoing training, a transparent performance appraisal system, fair compensation, leadership support, and a conducive work environment. Furthermore, the use of technology such as the Hospital Management Information System (SIMRS) also helps improve the efficiency and quality of healthcare services.

The implementation of these strategies still faces several obstacles, such as budget constraints, a shortage of healthcare workers, unequal distribution of HR, inadequate training, and inadequate work facilities. Therefore, sustainable strengthening of HR policies and management is necessary to improve healthcare worker performance and optimize the quality of healthcare services in Indonesia.

REFERENCES

- Attriani, A. N. (2022). Tantangan Dan Isu Strategis Sumber Daya Kesehatan Manusia Kesehatan Pada Puskesmas Di Indonesia. *Jurnal Kesehatan Tambusai*, 3(3), 363–368. <https://doi.org/10.31004/jkt.v3i3.6102>
- Ardiansyah, M., Rahayu, S., & Fitriani, A. (2023). Penerapan Protokol PRISMA dalam Systematic Literature Review Manajemen Rumah Sakit di Indonesia. *Jurnal Administrasi Kesehatan Indonesia*, 11(2), 145-160
- Hasibuan, A. N. R., Harahap, J. W., Agustina, D., Hasibuan, S. R., Nurmairani, A., & Khairiah, M. (2024). Analisis Strategi dalam Optimalisasi Pelayanan Kesehatan melalui Implementasi Sistem Informasi Manajemen Rumah Sakit (SIMRS): Systematic Literature Review.
- Ida Ayu Laksmi Arnita Utari & Dety Mulyanti. (2023). Faktor-Faktor Yang Mempengaruhi Kinerja Tenaga Kesehatan Di Rumah Sakit: Tinjauan Teoritis. *Jurnal Kesehatan Amanah*, 7(1), 51–60. <https://doi.org/10.57214/jka.v7i1.264>
- Kementerian Kesehatan Republik Indonesia. (2013). SDM kesehatan kunci pembangunan kesehatan. <https://kemkes.go.id/id/sdm-kesehatan-kunci-pembangunan-kesehatan>
- Lukmansyah, W. (2024). Praktik Kesejahteraan Terintegrasi dalam Manajemen SDM: A Systematic Literature Review tentang Pengaruhnya terhadap Kesejahteraan Karyawan dan Kinerja Organisasi di Indonesia.
- Mutmainah, M., Vanchapo, A. R., Lewar, E. S. B., Tusi, J. S., Wang, Y., & Zou, G. (2023). Relationship Between Work Motivation and Health Worker Performance at Kronjo Health Center. *Journal of World Future Medicine, Health and Nursing*, 1(2), 102–113. <https://doi.org/10.55849/health.v1i2.450>
- Octaviani, P., Fitri, T. A., Kurnia, I. P., Wasir, R., & Arbitera, C. (2024). Perencanaan SDM kesehatan: Mewujudkan kebutuhan tenaga kesehatan melalui strategi yang efektif. *Indonesian Journal of Health Science*, 4(6s), 953–960. <https://doi.org/10.54957/ijhs.v4i6s.1275>
- Sulaiman Sulaiman, Ismail Efendy, & Tri Niswati Utami. (2024). Faktor Yang Memengaruhi Kinerja Tenaga Kesehatan Di Puskesmas Tangan-Tangan Kabupaten Aceh Barat Daya. *Jurnal Ventilator*, 2(1), 86–101. <https://doi.org/10.59680/ventilator.v2i1.979>
- Setyani, D. A., & Pradana, G. W. (2024). Strategi Pengembangan Kompetensi SDM dalam Meningkatkan Kualitas Pelayanan Publik di Sektor Kesehatan. *Jurnal Tata Kelola dan Kebijakan Publik*, 6(1), 22-35
- Priyono, A. T. P., Alba, A. M., Wasir, R., & Arbitera, C. (2024). Manajemen Kinerja SDM Kesehatan: Menjaga Kualitas melalui Sistem Penilaian yang Efektif.
- Purwadhi, Widjaja, Y. R., Irawati, I., & Lestari, N. D. P. (2024). Analisis Manajemen Sumber Daya Manusia dalam Meningkatkan Kinerja Tenaga Medis di Rumah Sakit.
- Saragih, N. (2024). Manajemen Perencanaan dan Penempatan Sumber Daya Manusia di Puskesmas Bangko Jaya Kabupaten Rokan Hilir (Systematic Literature Review).
- Sirajuddin, I. N. F. (2024). Peran Manajemen SDM dalam Meningkatkan Kinerja dan Retensi Tenaga Kesehatan: Kajian Literatur.
- Suryandartiwi, W., Firdaus, M., Mutiara, S., Yuliana, A. S., & Fitrah, A. D. (2024). Analisis Strategi Manajemen Sumber Daya Manusia (MSDM) dalam Meningkatkan Kinerja Tenaga Rekam Medis di RSUD Arifin Achmad.
- Wasiyem, Dwika, A., Sari, W. D. C., Ritonga, F. R., Sumpeno, S. J., Ramadhani, R., Zahra, M., Rezeki Kandau, R. S., & Andini, Z. (2024). Analisis Strategi Manajemen Kesehatan dalam Memaksimalkan Mutu Pelayanan di Rumah Sakit: Literature Review.