Kesmas

Volume 20
Issue 3 *August 2025*

Article 1

8-29-2025

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Recommended Citation

Basabih M , Widhakuswara I . Has Regional Hospital Autonomy Achieved Its Goals? Lessons Learned from Indonesia: A Systematic Review. *Kesmas*. 2025; 20(3): 174-184
DOI: 10.7454/kesmas.v20i3.2248
Available at: https://scholarhub.ui.ac.id/kesmas/vol20/iss3/1

Basabih *et al. Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)*. 2025; 20 (3): 174-184
DOI: 10.7454/kesmas.v20i2.2248

Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)

Has Regional Hospital Autonomy Achieved Its Goals? Lessons Learned from Indonesia: A Systematic Review

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Abstract

This study examined the impact of hospital autonomy implementation on the performance of regional public hospitals in Indonesia, particularly in terms of efficiency, effectiveness, and governance. A systematic review of 32 peer-reviewed studies published between June 12 and September 6, 2023, was conducted using *Garba Rujukan Digital* and Google Scholar, following PRISMA guidelines. Studies addressing financial performance, service outcomes, and challenges related to implementing autonomy were included. The findings indicated that while autonomy led to improvements in infrastructure, service types, visit volumes, and hospital revenues, it had only a marginal impact on improving key health performance outcomes, such as service efficiency, effectiveness, and overall quality, suggesting the core goals of autonomy had not yet been fully achieved. Key barriers included weak policy capacity, inadequate governance structures, and limited human resources. Unlike centrally managed hospitals, the success of regional hospital autonomy is significantly shaped by local institutional arrangements and the broader decentralization framework, which together influence hospitals' capacity to manage their operations effectively.

Keywords: decentralized health system, healthcare reform, hospital reform, regional hospital, regional government

Introduction

As early as the 1980s, high health expenditure in government hospitals was attributed to inefficient resource use and managerial challenges within complex systems.[1] In later decades, longer life expectancy, chronic diseases, cancer, and technological advances further intensified demands on health systems.[2] Inefficiency, low productivity, poor service quality, and slow community response drove the need for health system reform.[3,4] While developed countries such as the United Kingdom (with its single-payer system), Austria, Norway, and Poland have successfully restructured primary and outpatient care, developing countries often struggle due to limited resources and capacity, failing to meet basic needs such as health.[4,5] Despite adopting decentralized systems, Ghana, Kenya, and the Philippines still face issues in resource distribution and governance.[3,4] Aligning roles with capabilities, which is central to the New Public Management paradigm and based on theories such as principal-agent and transaction cost economics, can enhance the success of reforms.[3]

Reforms should address efficiency in financing, service provision, resource generation, and governance.[5] A core component is organizational reform, such as granting autonomy to government hospitals to improve performance, quality, and efficiency.[3] In Indonesia, Law No. 22 of 1999 initiated decentralization, and since 2007, regional hospitals have been required to implement Regional Public Service Agencies (RPSA),[6] providing them greater operational flexibility. However, from 2007 to 2023, no comprehensive government evaluation has assessed the success of RPSA.

De Geyndt's study in developing countries shows limited success in hospital autonomy due to restricted authority over human resources and finance, weak governance, and inadequate performance data.[7] While De Geyndt's study examined central government hospitals, especially in Iran, reviews focusing on regional public hospitals are lacking. This study addresses this gap by evaluating the impact of autonomy on regional hospital performance in Indonesia, particularly in terms of efficiency, effectiveness, and governance within a decentralized health system.

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Received : December 20, 2024
Accepted : July 25, 2025
Published: August 29, 2025

Method

This study used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to support systematic observation.[8] Literature published within 2007–2023 was explored using two databases, *Garba Rujukan Digital* (Garuda) and Google Scholar, from June to September 2023. Garuda was selected because it is the primary Indonesian journal database managed by the Ministry of Higher Education, Science, and Technology, providing access to academic journals, conference papers, theses, and dissertations. Garuda serves as a standardized and integrated gateway to various Indonesian library applications and platforms.[9] Additional relevant articles not indexed in Garuda were accessed using Google Scholar. The search employed different keywords for each database due to limitations in Boolean operator usage. The following keywords (*"badan layanan umum daerah"* OR "*BLUD*" OR "autonomy" AND *"rumah sakit daerah"* OR *"rumah sakit umum daerah"* OR "*RSUD*;" "Regional General Hospital" AND "Local Public Service Agency" OR "Financial Independence Regional Public Service Agency" OR "Regional Public Service Board" OR "public sector agency" OR "autonomy" for Google Scholar database and *Regional General Hospital Regional Public Service Agency* for Garuda database) were used in this study.

The search employed different keywords for each database due to limitations in Boolean operator usage. Articles from both databases were screened using Mendeley software to remove duplicates. The Science and Technology Index (SINTA), a web-based system that evaluates journals based on national accreditation standards and citation metrics, was used to assess the quality of Indonesian journals. Screening involved title and abstract review, followed by full-text reading to assess the inclusion criteria: published within 2007–2023 and related to hospital reform in Indonesia, written in Indonesian language and/or English, addressing the financial performance and services of regional public hospitals operating under the RPSA, and discussing the challenges in implementing autonomy in regional hospitals. Studies were excluded if they did not focus on financial or service outcomes, implementation challenges, or were not peer-reviewed. However, relevant gray literature was included to enrich the discussion.[10] A comprehensive multiple-review approach was used for study selection, ensuring rigorous screening, cross-checking, and consistency.[11] The first and second authors independently reviewed the articles to prevent unintentional exclusion.

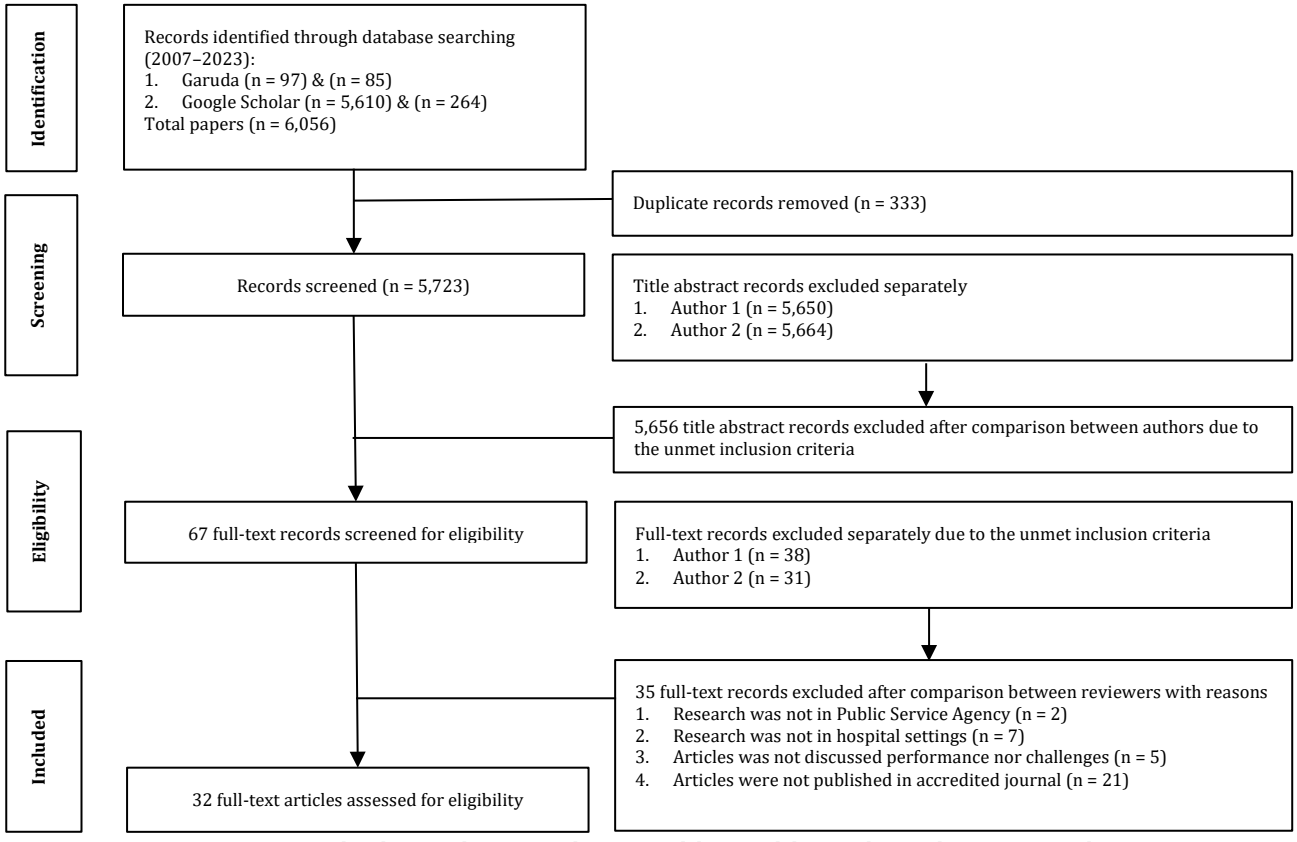

Figure 1. Study Selection Scheme Using the 2020 Guidelines[8] and the Complete Dual Review Approach[11]

A total of 6,056 articles were identified using Garuda and Google Scholar (2007–2023). After removing 333 duplicates, 5,723 records were screened. The first and second authors independently excluded 5,656 records at the title and abstract level due to unmet inclusion criteria. Of the 67 full-text articles assessed, 35 were excluded for not being published in public service agencies (n=2), not being published in hospital settings (n=7), lacking discussion of performance or challenges (n=5), or not being published in accredited journals (n=21). Ultimately, 32 articles met all the criteria and were included in the final review.

Only peer-reviewed articles, especially those indexed in SINTA for Indonesian publications, were included to maintain quality.[12] SINTA ranks journals based on accreditation and citation scores, highlighting quality through its National Journal Accreditation-based evaluation system.[9] Articles were further evaluated using the 2018 Mixed Methods Appraisal Tool (MMAT), assessing the methodological quality of empirical studies, including research question clarity, sampling relevance, and research design.[13] While several articles did not fully meet the MMAT standards, none were excluded because deviations were not deemed critical. Ultimately, 32 studies were included in the final synthesis and analysis.

Results

The article search process resulted in 32 articles that met the inclusion and exclusion criteria, and they were grouped based on the characteristics of their results.

Table 1. Profile Articles Included

Study	Index Type	Research Locus Based on INA-CBGs[14]	Hospital Class[15]	Research Method	Research Goals
Andi & Trisnantoro, 2014[16]	Sinta 3	Region II (South Sumatera)	B	Qualitative	To assess the effectiveness of the supervisory board's supervision on the hospital RSPA's performance.
Andri *et al.*, 2018[17]	Sinta 4	Region III (Aceh)	B	Qualitative	To get an overview of the implementation of RSPA at General Hospitals in Banda Aceh and the obstacles encountered during its implementation.
Tama, 2018[18]	Sinta 5	Region I (Central Java)	B	Quantitative	To evaluate the service and financial performance of RSPA, and to determine the correlation between service and finance using correlated component regression and independence.
Candrasari *et al.*, 2018[19]	Sinta 4	Region I (East Java)	C	Quantitative	To analyze the financial performance and services of a hospital which has implemented the RSPA since 2009.
Tama, 2020[20]	Sinta 5	Region I (Central Java)	C	Quantitative	To conduct an analysis and assessment of factors that influence financial independence after being designated as an RSPA.
Syahril, 2013[21]	Sinta 4	Region I (East Java)	C	Qualitative	To determine the financial management pattern of public service agencies at a Regional General Hospital, based on the regulation of the Minister of Home Affairs Regulation No. 61 of 2007
Wijayanti & Sriyanto, 2015[22]	Sinta 5	Region I (Central Java)	More than one hospital	Quantitative	To evaluate the service and financial performance of regional hospitals in Surakarta, Boyolali, Sukoharjo, Karanganyar, Wonogiri, Sragen, and Klaten from 2012.
Sutrini, 2017[23]	Sinta 5	Region III (Central Sulawesi)	B	Qualitative	To study, analyze, and describe in depth the implementation of the RSPA budget at a Regional Hospital, Palu City.
Putri *et al.*, 2017[24]	Sinta 4	Region I (Central Java)	C	Qualitative	To describe the performance measurement of a Regional General Hospital, Semarang City, Central Java.
Heriasman *et al.*, 2022[25]	Sinta 5	Region II (Riau)	C	Quantitative	To analyze and test the influence of financial performance (Liquidity Ratio - Current Ratio, Solvency Ratio, Profitability Ratio) on the level of financial independence of RSPA in the regional hospital
Chrishartoyo *et al.*, 2017[26]	Sinta 5	Region I (Central Java)	A	Quantitative	To see the differences in the financial and non-financial performance of a Regional Hospital before and after RSPA status.
Susandi *et al.*, 2017[27]	Sinta 3	Region II (Bali)	B	Quantitative	To examine the differences in performance of Klungkung District Hospital before and after becoming an RSPA.
Asfiah, 2017[28]	Sinta 5	Region III (Central Sulawesi)	B	Qualitative	1) To identify and analyze the accounting system of the RSPA at a General Hospital in Parigi Moutong District. 2) To identify and analyze the financial reports of the public service agency at a Regional General Hospital in Parigi Moutong District. 3) To identify the inhibiting and supporting factors of the accounting system of the public service agency at a Regional General Hospital in Parigi Moutong District.
Farwitawati, 2020[29]	Sinta 6	Region II (Riau)	B	Quantitative	To measure and analyze financial performance at Bengkalis Regional General Hospital before and after the implementation of the RSPA Financial Management Pattern in 2013-2018.
Korneles *et al.*, 2019[30]	Sinta 5	Region III (North Sulawesi)	C	Qualitative	To analyze the performance of Liun Kendage Tahuna Regional General Hospital after the implementation of the RSPA financial management pattern, analyze what obstacles hinder hospital management after the implementation of RSPA, and analyze efforts to resolve obstacles in hospital management after the implementation of RSPA.
Nuryanawati,	Sinta 5	Region I (East Java)	B	Qualitative	To analyze the performance evaluation of Dr. Soegiri Lamongan Regional

Study	Index Type	Research Locus Based on INA-CBGs[14]	Hospital Class[15]	Research Method	Research Goals
2019[31]					General Hospital, which implements RSPA.
Iskandar & Mutiarin, 2014[32]	Sinta 2	Region V (North Kalimantan)	C	Qualitative	To describe the implementation of the RSPA policy at Tanjung Selor Regional Hospital.
Larashati, 2016[33]	Sinta 4	Region I (East Java)	B	Qualitative	To analyze the financial performance and services of a hospital which has implemented the RSPA system since 2009.
Wahyuni & Artini, 2018[34]	Sinta 3	Region II (Bali)	B	Qualitative	To comprehensively assess the performance of a Regional General Hospital in Denpasar City using the Balanced Scorecard method over a three-year period, from 2014 to 2016.
Fahlevi, 2016[35]	International	Region I (Jakarta)	More than one hospital	Qualitative	To understand why the expected increase in the role of accounting in public hospitals in Indonesia has not occurred, despite a series of organizational changes and reforms to the hospital payment system.
Maharani *et al.*, 2015[36]	International	Region I (East Java)	Unidentified	Qualitative	To investigate the consequences of decentralization on the cost recovery rates of public hospitals at the district level.
Jumiati *et al.*, 2017[37]	Sinta 5	Region III (Southeast Sulawesi)	B	Qualitative	To obtain more in-depth information about the 2016 RSPA financial management study at a General Hospital, reviewed from the aspects of planning and budgeting, budget implementation, regional income and expenditure, and goods management.
Andiyanto *et al.*, 2016[38]	Sinta 3	Region III (Jambi)	C	Qualitative	To analyze the subsidy policy at a Regional Hospital after becoming an RSPA in 2015.
Hasna, 2016[39]	Sinta 5	Region III (Central Sulawesi)	B	Qualitative	To understand the implementation of the RSPA policy at a Regional Hospital in Central Sulawesi Province.
Rosnidah *et al.*, 2016[40]	Sinta 3	Region I (West Java)	C	Qualitative	To identify the accounting system, especially the preparation of accrual-based financial reports, in connection with the establishment of the Cirebon District Hospital, which has implemented RSPA.
Tama, 2019[41]	Sinta 5	Region I (West Java)	B	Quantitative	To conduct a study on financial independence after being designated as an RSPA and to examine its impact on service quality.
Slamet & Supeno, 2022[42]	Sinta 4	Region II (Riau)	C	Qualitative	To analyze the financial management compliance of RSPA against the Independence Level of a Regional General Hospital, which has been designated as an RSPA since 2012.
Silalahi *et al.*, 2021[43]	Sinta 5	Region III (North Sumatera)	B	Qualitative	To find out and analyze how the RSPA policy is implemented at a Regional Hospital in terms of improving the quality and standard of public services, especially health services to the people of Binjai City.
Trisnantoro, 2013[44]	Sinta 3	Region III (Central Sulawesi)	B	Qualitative	To evaluate the implementation of RSPA at a Regional Hospital.
Farwitawati *et al.*, 2021[45]	Sinta 6	Region II (Riau)	B	Quantitative	To see the difference in the service performance of Bengkalis Regional Hospital before and after the RSPA status.
Lesmana *et al.*, 2020[46]	Sinta 3	Region I (West Java)	C	Qualitative	To analyze the factors influencing the performance of accounting information systems focused on information technology, with management support and human resource competencies at a General Hospital.
Widodo *et al.*, 2022[47]	Sinta 4	Region I (East Java)	C	Quantitative	To analyze the financial performance of a Regional General Hospital before and after implementing the RSPA.

Notes: INA-CBG = Indonesian-Case Based Group, RSPA = Regional Public Service Agency

Table 2. Performance Indicators of Regional Hospital Service Quality

Study	Implementation Year	BOR 60%–%–85% (Standard)		LOS 6–9 Days (Standard)		GDR ≤45‰ (Standard)		NDR ≤25‰ (Standard)	
		Before	After	Before	After	Before	After	Before	After
Chrishartoyo *et al.*, 2017[26]	2009	68.68–77.71		6.65	4.71	88.19	76.95	50.64	43.56
		No Difference		Lower standard (better quality)		Above standard		Above standard	
Susandi *et al.*, 2017[27]	2012	58.19		61.64	3.79	4.19		-	
Tama, 2018[18]	2009	-	75.26 (increase)	-	3.97 (decrease)	-	31.5 (increase)	-	20.25 (increase)
Wahyuni, 2018[34]	2009	-	83.39 (increase)	-	4.28 (increase)	-	41.14 (decrease)	-	25.36 (decrease)
Farwitawati, 2021[45]	2016	56.80	57.10	3.53	3.52	19.00	26.82	5.38	13.97
		No difference		Lower than the standard (better)		Better		Better quality	
Wijayanti, 2018[22]	2009	-	77.93	-	3.84	-	2.76	-	1.43
		Correlations between CCR and independence were not significant		The correlation with CCR was not significant; however, significant independence		Correlations between CCR and independence were not significant		Correlations between CCR and independence were not significant	
Candrasari, 2018[19]	2012	-	76.50	-	3.95	-	52.16	-	22.16
		Correlations between CCR and independence were not significant		Correlations between CCR and independence were not significant		Correlations between CCR and independence were not significant		Correlations between CCR and independence were not significant	

Notes: BOR: bed occupancy rate; LOS: length of stay; GDR: gross death rate; NDR: net death rate; CCR: correlated component regression.

The implementation of RPSA in hospitals has led to infrastructure improvements[26] and increased patient numbers.[15-

[17] It also positively influenced efforts to meet service standards,[45] but did not impact patient satisfaction or retention.[34] Indonesia uses key performance indicators to measure hospital service performance, utilization, quality, and efficiency. These indicators are regulated by the Ministry of Health and form the basis for assessing regional hospitals' service achievements (Table 2).[48]

Several studies have shown the impact of the RPSA implementation on financial performance, as measured by income, financial ratios, and financial independence regulated by the Indonesian Ministry of Home Affairs.[49] Most studies report an increase in income.[18,26,27,38,47] Despite this trend, the t-test found different results.[47] Widodo demonstrated a significant increase in income after the implementation of RPSA,[47] while Susandi *et al.* reported the opposite.[27] The findings of this review were consistent with previous studies, which stated that autonomy can increase hospital income.[3,50]

Table 3. Financial Performance Indicators of Regional Hospitals

Study	Implementation Year	Profitability ROE >8%; ROA >6% (Standard)		Liquidity Current Ratio >600%; Cash Ratio 240%<x<300% (Standard)		Activity Fixed Asset Turnover >20%; Inventory Turnover 30<x<35 Days; Collection Period <30 Days (Standard)		Solvency Proportion of Debt to Capital and Total Assets <200% (Standard)	
		Before	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**
Chrishartoyo *et al.*, 2017[26]	2009	ROI 0.49	ROI 1.41	34.01	2.69	8.96	10.60	0.99	0.88
		Post-autonomy, equity became more effective in generating profits		Improvement occurred when the previous ratios exceeded the standard limits		No significant difference between before and after		Regional hospitals financed all assets independently, showing improvement	
Susandi *et al.*, 2017[27]	-	-	-	-	Current ratio: 709.27% (increase) Cash ratio of 433.03% (increase)	-	-	-	-
Wahyuni *et al.*, 2018[34]	2009	-	Achieved 100% profit	-	Achieved 40% liquidity	-	-	-	-
		-	ROE 19% (decrease) ROA 18% (decrease)	-	Current ratio of 315% (decrease) Cash ratio: 125%	-	-	-	-
Wijayanti, 2015[22]	2012	-	26.03	-	5.13	-	-	-	4.13
Candrasari, 2018[19]	2009	-	0.94	-	4.93	-	-	-	0.04
Widodo, 2022[47]	2021	ROE 13.37% ROA 13.32%	ROE 17.11% ROA 17.03%	Current ratio = 1,085.00%	Current ratio = 1,507.00%	-	-	0.34%	0.42%
		Increased trend with positive changes		Increased trend with positive changes		-	-	-	-
Farwitawati, 2020[29]	2016	ROE −36.33% ROA −43.00%	ROE −52.67% ROA −62.00%	Current ratio = 117,949.33%	Current ratio = 317.33%	Fixed asset turnover of 19.00%	Fixed asset turnover of 34.67%	-	-
		Downward trend with negative changes		Downward trend with negative changes		Increased trend with positive changes		-	-
		-	-	Cash ratio of 37.67%	Cash ratio 56.67%	Inventory turnover of 41 days	Inventory turnover 38 days	-	-
		-	-	Increased trend with positive changes		Downward trend with positive changes		-	-
Nuryanawati, 2019[31]	2009	-	Achieved 80.00% of ROE, 100.00% of ROA	-	Achieved 20.00% of current ratio, 12.50% cash ratio	-	Fixed asset achievements turnover of 100.00% Inventory turnover of 25.00% Collection period 25.00%	-	-

Notes: ROI = return on investment, ROE = return on equity, ROA = return on assets, CRR = cost recovery rate.

Governance challenges in regional hospital autonomy arose from the absence of essential regulations,[31,51] such as regional-level minimum service standards, despite their role as prerequisites for autonomy. The regional government, as the hospital owner, played a key role,[38] yet poor communication and coordination with hospitals resulted in differing perceptions of autonomy due to unclear roles and varying understanding of the public service agency model.[30,32,52–54] Supervision was also problematic,[44] as some hospitals lacked a functioning supervisory board, and in some cases, the hospital director served as a supervisor, undermining internal oversight.[27,29,31,51] Human resources were another critical issue, categorized into shortages in quantity[27,30,32,52] and gaps in quality.[27,28,32,35,36,43,52,55] Several hospitals lacked sufficient medical and non-medical personnel, including specialists and accounting staff.[27,30] However, the main challenge lay in limited technical and managerial competencies and a poor grasp of the public service agency concept.[27–29,35,36,55] Fear of error,[16] rigid mindsets,[32] weak leadership,[36] and low commitment further hinder performance.[28,52] These limitations reduced operational efficiency and the ability to generate revenue.[17,27,29,56] Efforts to enhance staff capacity, motivation, and discipline remain suboptimal in translating into improved performance outcomes.[51,57]

Discussion

The implementation of autonomy succeeded in increasing bed occupancy rate (BOR) and meeting standards,[18,26,27,34,45] although changes before and after autonomy were not significant.[26,45] The average length ot stay (LOS) decreased[18,26,45] and remained below the standard[18,26,27,34,45] set by the Indonesian Ministry of Health.[58] Although the reduction in LOS might reflect greater efficiency, it could also signal rushed discharges or efforts to adapt to the Indonesian-Case Based Groups (INA-CBGs) payment system introduced in 2014,[59] incentivizing shorter stays. A previous study also showed that unnecessary hospital days increase healthcare costs.[60] These findings suggested that the flexibility afforded by autonomy policies enabled hospitals to increase access to care. While autonomy improved infrastructure, service variety, and patient visits, it has not conclusively improved service quality. Autonomy has enabled facility enhancement and service diversification, which has increased the number of patient visits and BOR.

Service quality is also reflected in mortality indicators. Several studies have indicated an increase in mortality rates following autonomy,[18,34,45] whereas others have shown the opposite.[26] T-tests revealed no significant differences in gross death rate (GDR) and net death rate (NDR) before and after autonomy.[26,45] Hospital status changes did not always make services more responsive, especially in handling complaints.[32] This may be explained by Indonesia's tiered referral system, where tertiary hospitals (Class A and B) receive critically ill patients.[61] Previous studies confirmed that high referral volume and delays in receiving initial treatment result in higher mortality rates, as many patients die en route or upon hospital arrival before receiving care.[62,63] These findings highlighted that autonomy may improve inputs and outputs, but not necessarily outcomes, particularly in patient survival and safety.

Similar patterns are observed internationally. Autonomy improves infrastructure, equipment, and patient volumes, but not necessarily outcomes such as mortality.[3] This mirrors global trends in which decentralization enhances efficiency without consistently improving outcomes.[64] Service performance indicators did not significantly influence the cost recovery rate (CRR).[19,22] While LOS was found to significantly affect financial independence,[22] others found no such relationship. Thus, the evidence on the impact of autonomy remains mixed and context-dependent.[19] These inconsistencies suggested that broader system factors, including regulation, financing, and referral mechanisms, played a crucial role in determining autonomy's effectiveness.

Financial performance was also evaluated using the following ratios: profitability, liquidity, activity, and solvency. Profitability measures the ability of hospital assets to generate income. Several studies reported improved profitability ratios after autonomy;[26,47] however, other studies reported the opposite.[29,34] Similar discrepancies appear in liquidity ratios; four studies found improved hospital capacity to meet short-term obligations,[18,26,27,47] while two found deterioration.[29,34] Several hospitals' liquidity remained poor even after eight years, reflecting financial strain.[31] Activity ratios generally improved post-autonomy, and regional hospitals became better at meeting long-term obligations using internal and external resources.[26,47] These mixed results suggested that the financial benefits of autonomy were not guaranteed and heavily depend on hospital-specific management practices and local government support. This highlights the need for stronger capacity building and regulatory compliance to ensure the realization of the intended financial improvements from autonomy.

The ratio of independence measures a hospital's ability to finance its operations and investments through functional income. A good performance is indicated by an independence ratio of over 70%.[65] This review found that several studies reported an increase in independence levels after autonomy.[18,42] The independence had already reached 65-66% just one

year after implementation.[19,22] For CRR, the findings varied. While several studies reported values above one, another study found that hospitals in Java still had CRRs below one.[36] A study in Semarang City revealed declining income, rising expenditures, and reduced financial ratios.[24] Two studies' t-tests revealed no significant difference in financial performance before and after autonomy.[27,29] These mixed results suggest that while autonomy can offer greater financial flexibility, its success largely depends on local management capacity and contextual conditions, highlighting that autonomy alone does not guarantee improved financial performance.

A weakness in financial management practices and system implementation is one of the main barriers to achieving the expected financial outcomes of hospital autonomy. These variations in financial performance across hospitals are largely attributed to inadequate attention and weak financial management capacities. Studies point to poor compliance with established regulations,[27,29] including financial reports not being accrual-based,[29,40] non-adherence to financial accounting standards,[16] and financial records that do not follow standard accounting cycles.[28] Additionally, unused funds have been returned to regional treasuries, despite regulations allowing them to be carried forward into the next fiscal year.[23] Another major issue is the continued reliance on manual financial reporting through Microsoft Excel instead of digital financial management systems.[30] Furthermore, issues such as tariff setting not based on unit costs, outdated tariff models, and underutilized sources of revenue were found to limit financial performance.[27,29]

A major barrier to the success of hospital autonomy is weak institutional capacity, particularly the lack of integrated service and financial information systems, undermining governance and decision-making. Most selected articles identified service and financial information systems that have not been integrated as challenges in implementing autonomy.[27–29,32,57] The obstacle experienced by the hospital's RPSA in developing the hospital is limited facilities.[27,30] This challenge was also found in other developing countries where resources are limited and governance structures may be weak.[3] This reflects global experiences, emphasizing a shared vision between regional hospitals and local governments positively influencing service implementation,[66] where successful healthcare reforms often rely on strong governance, well-defined roles, and transparent accountability structures.[67]

Regional hospital autonomy was intended to improve service quality for communities more effectively, efficiently, economically, transparently, and rationally, while upholding the principles of justice, propriety, and public benefit in alignment with sound business practices.[49] However, this systematic review showed that autonomy had yet to achieve these goals. The failure of autonomy to fulfill its goals was caused by incomplete policies, weak accountability mechanisms, and minimal supervision.[3] Although hospitals were granted flexibility under autonomy, this could not be fully leveraged because governance remains hierarchical, and human resource capacity is limited.[3] Autonomy often struggles to thrive, as regional governments continue to assert power over personnel and finances.[68] This was supported by the policies of the Indonesian Ministry of Home Affairs, which provided regional heads full authority over human resources and finance within RPSA.[49] This review emphasized that hospital autonomy will remain limited in its impact on service delivery unless these structural constraints are addressed, particularly the imbalance of power and weak institutional support.

These findings were consistent with a previous study identifying human resources and financial constraints as the two main barriers to successful delegation of autonomy.[7] Hospitals also face difficulty balancing the need to meet performance indicators with compliance with hierarchical controls, especially in budgeting and management.[69] Consequently, they tend to prioritize rule-following over outcomes. True autonomy must be balanced with public accountability,[3] yet hospitals often face trade-offs between autonomy and control, creating tension among competing goals such as equity, efficiency, quality, and financial viability. For example, increasing political oversight and managerial freedom may support equity but reduce efficiency.[3]

The international literature outlines several success factors for hospital autonomy. These included a comprehensive policy framework that situates autonomy within broader national and regional health agendas with consistent, long-term goals;[66] internal and external accountability systems;[67] and adequate funding to support the transition from traditional to autonomous operations.[70] Autonomy cannot succeed in isolation; it requires structural alignment, adequate capacity, and clarity in governance roles. Hospital autonomy may result in partial reforms that improve financial indicators but fail to enhance service quality or responsiveness without these systemic enablers.

Hospital autonomy introduces competition that can drive performance improvements.[70] Hospitals must not only deliver efficient and patient-centered services but also ensure that they are politically and socially acceptable.[69] Regulatory frameworks are essential for balancing hospital autonomy and public accountability to avoid serving the interests of specific stakeholders.[70] Hospital social functions, including reducing mortality and serving vulnerable populations, should be explicitly stated in autonomy policies.[3] Misaligned interpretations of autonomy policies among

different stakeholders have created inconsistencies in implementation, undermining the effectiveness of autonomy. Therefore, aligning institutional, political, and governance capacities is essential to realize the autonomy benefits.

Meanwhile, decentralization contributes to variability in hospital service procedures due to differing interpretations of autonomy policies.[64] A systematic review found inconsistencies in the understanding of the RPSA concept between regional governments and hospitals.[54] This inconsistency also appears among regional heads, who interpret national regulations differently.[53] These discrepancies impact governance, managerial effectiveness, and resource use, ultimately affecting hospital performance.[64] Furthermore, the relationship between regional hospitals and regional governments also impacts autonomy. Regulations and funding from regional governments affect the extent to which regional hospitals can utilize their flexibility.[3,67] Variability in service procedures, driven by inconsistent interpretations of autonomy policies among key stakeholders, is a key challenge in implementing hospital autonomy under decentralization. The lack of shared understanding and commitment to reform undermines decentralization's potential benefits. Additionally, discrepancies in the application of regulations across regions weaken governance and the uniformity of managerial practices.

A limitation of this study were the potential publication bias, the exclusion of gray literature, and the review protocol that had not been registered in the PROSPERO database yet. However, not all reviewed studies compared hospital performance before and after autonomy. Future study should investigate how institutional arrangements, regional government capacity, hospital classification, and autonomy duration affect performance, particularly in decentralized developing countries. The environmental dynamics should also be considered.

Conclusion

After 15 years of regional hospital autonomy, improvements are mostly seen in infrastructure and patient visits, but not in service quality or financial performance. High mortality rates and inconsistent financial ratios indicate limited gains in effectiveness and efficiency. This condition suggests that while autonomy has enhanced access to healthcare services, it has not yet translated into better service quality or financial performance. Achieving autonomy goals requires aligning performance targets, strengthening governance and managerial capacity, and ensuring financial flexibility within supportive decentralization frameworks.

Abbreviations

RPSA: Regional Public Service Agency; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses; Garuda: *Garba Rujukan Digital;* SINTA: Science and Technology Index; MMAT: Mixed Methods Appraisal Tool; BOR: Bed Occupancy Rate; LOS: Length of Stay; GDR: Gross Death Rate; NDR: Net Death Rate.

Ethics Approval and Consent to Participate

This review article does not require ethics approval or consent from participants because the data were collected from previously published studies and do not involve direct human or animal subjects.

Competing Interest

There are no conflicts of interest in this review article.

Availability of Data and Materials

All data sources were publicly available and appropriately cited by academic standards.

Authors' Contribution

MB conceptualized the study, created the methodology, and supervised the project; MB and IW conducted the formal analysis, investigation, and data curation, and wrote the original draft, reviewed, and edited the manuscript.

Acknowledgment

The authors express a sincere gratitude to the Faculty of Public Health, Universitas Indonesia, for the academic guidance, support, and facilities provided throughout the preparation of this manuscript.

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