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Analysis Of Healthcare Workers' Compliance With National Quality Indicator Implementation In Inpatient Units At Dr. H. Mohamad Rabain Regional General Hospital

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Abstract

Healthcare workers' compliance with National Quality Indicators plays an important role in maintaining healthcare quality and patient safety. This study aimed to analyze healthcare workers' compliance and identify the most dominant associated factor in the inpatient units of Dr. H. Mohamad Rabain Regional General Hospital. This quantitative study used a cross-sectional design and involved 80 nurses and midwives selected through proportionate stratified random sampling. The researchers collected data using structured questionnaires and a direct observation checklist that assessed hand hygiene, personal protective equipment use, patient identification, and fall-risk prevention. The researchers analyzed the data using descriptive analysis, the Chi-square test, and multiple logistic regression. The results showed that most healthcare workers complied with the National Quality Indicators. Age, sex, educational level, knowledge, attitude, length of service, supervision, workload, training, and facilities and infrastructure were significantly associated with compliance. Knowledge, attitude, training, and facilities and infrastructure remained significant in the adjusted model. Facilities and infrastructure represented the most dominant factor associated with healthcare workers' compliance. Hospital management should ensure the availability of adequate facilities and strengthen continuous training, supervision, competency development, and compliance monitoring to improve quality implementation and patient safety.

Keywords: ***National Quality Indicators, Healthcare Workers' Compliance, Facilities And Infrastructure, Patient Safety, Healthcare Quality***

INTRODUCTION

Hospitals provide comprehensive individual healthcare services through inpatient, outpatient, and emergency care systems. Hospital management must maintain service quality and patient safety through systematic measurement, evaluation, and continuous improvement processes (Government of Indonesia, 2021; World Health Organization, 2021). The World Health Organization identifies quality healthcare as effective, safe, people-centred, timely, equitable, integrated, and efficient care for individuals and populations (World Health Organization, 2021, 2025). The Agency for Healthcare Research and Quality positions quality indicators as standardized instruments for evaluating clinical performance, healthcare outcomes, and potential patient safety problems (Agency for Healthcare Research and Quality, 2025). These quality frameworks support evidence-based decisions and strengthen organizational accountability within healthcare institutions.

The Indonesian Ministry of Health established the National Quality Indicators through Minister of Health Regulation Number 30 of 2022 to standardize quality measurement across healthcare facilities. The regulation requires hospitals to measure, report, evaluate, and improve healthcare quality through nationally defined indicators (Ministry of Health of the Republic of Indonesia, 2022). The hospital indicators include healthcare workers' compliance with hand hygiene, personal protective equipment use, patient identification, and fall-risk prevention procedures. Hospital management uses these indicators to identify performance gaps and implement continuous quality improvement strategies. Previous evidence has demonstrated an association between National Quality Indicator implementation and several dimensions of hospital service quality (Hardianti et al., 2024).

Effective indicator implementation requires healthcare workers to perform every prescribed procedure consistently during routine clinical practice. The PRECEDE–PROCEED framework categorizes knowledge, attitudes, and individual characteristics as predisposing factors that influence

health-related behaviour (Green et al., 2022). The framework also categorizes facilities, training, and workload as enabling factors and categorizes supervision and managerial support as reinforcing factors (Green et al., 2022). Indonesian studies have associated healthcare workers' compliance with knowledge, attitudes, professional experience, training, supervision, and the availability of supporting facilities (Mayarianti et al., 2024; Satriani et al., 2025). These findings indicate that healthcare workers' compliance reflects interactions between individual capacities and organizational working conditions.

Hospital quality systems also require strong institutional support to translate accreditation standards into consistent clinical practices. The South Sumatra Provincial Health Office reported that approximately 97.6% of hospitals in the province had obtained accreditation status, which reflected substantial institutional commitment to quality standards (South Sumatra Provincial Health Office, 2025). Accreditation status, however, does not automatically ensure consistent compliance with every quality indicator during daily patient care. Indonesian hospitals still experience challenges related to data consistency, internal monitoring, staff competence, standard operating procedures, training, and managerial support during National Quality Indicator implementation (Pamungkas & Putri, 2026; Purwandani et al., 2025). These implementation challenges require hospital-level analyses that examine both healthcare workers' characteristics and organizational determinants.

Quality monitoring at Dr. H. Mohamad Rabain Regional General Hospital identified several National Quality Indicators that remained below the required standards during 2023–2025. Healthcare workers achieved a hand hygiene compliance rate of 81.29%, which remained below the required standard of 85% (Quality Committee of Dr. H. Mohamad Rabain Regional General Hospital, 2026). Healthcare workers achieved a personal protective equipment compliance rate of 79.38%, which remained below the required standard of 100% (Quality Committee of Dr. H. Mohamad Rabain Regional General Hospital, 2026). Healthcare workers achieved patient identification and fall-risk prevention compliance rates of 99.82% and 93.45%, respectively, which remained below their required standards of 100% (Quality Committee of Dr. H. Mohamad Rabain Regional General Hospital, 2026). The hospital also documented two medication or procedural incidents in 2023, two similar incidents in 2025, and five patient falls during 2023–2025 despite relatively high reported indicator achievement (Quality Committee of Dr. H. Mohamad Rabain Regional General Hospital, 2026).

The discrepancy between reported indicator achievement and persistent patient safety incidents indicates a potential gap between administrative performance and actual healthcare workers' compliance. Previous studies have primarily examined hand hygiene compliance, infection prevention practices, or National Quality Indicator reporting as separate quality components (Octaviani & Fauzi, 2020; Sulisno et al., 2022; Mayarianti et al., 2024; Pamungkas & Putri, 2026). This limited focus has not comprehensively explained healthcare workers' compliance across multiple inpatient quality indicators within the organizational context of Dr. H. Mohamad Rabain Regional General Hospital. A comprehensive assessment should therefore examine demographic characteristics, knowledge, attitudes, length of service, supervision, workload, training, and facilities as potential determinants of compliance. This study aimed to analyze healthcare workers' compliance with National Quality Indicator implementation and identify the most dominant associated factor in the inpatient units of Dr. H. Mohamad Rabain Regional General Hospital.

RESEARCH METHODS

This quantitative analytical study used a cross-sectional design to examine factors associated with healthcare workers' compliance with National Quality Indicator implementation. The cross-sectional design allowed the researchers to measure the dependent and independent variables during the same observation period (Creswell & Creswell, 2023). The study was conducted in the inpatient

units of Dr. H. Mohamad Rabain Regional General Hospital, Muara Enim, South Sumatra, Indonesia. The researchers collected the data from April 1 to April 30, 2026.

The study population comprised 387 nurses and midwives who worked in the inpatient units of Dr. H. Mohamad Rabain Regional General Hospital. The population included healthcare workers employed as civil servants, government employees under work agreements, and personnel under the Regional Public Service Agency employment scheme. The researchers calculated the minimum sample size using the Slovin formula, (n=N/[1+N(e)^2]), with a population of 387 and a 10% margin of error. The calculation produced a minimum sample of 79.46 participants, which the researchers rounded to 80 participants. The researchers applied proportionate stratified random sampling to ensure proportional representation from the relevant inpatient workforce strata. The researchers subsequently selected participants within each stratum through simple random sampling.

Healthcare workers' compliance with National Quality Indicator implementation represented the dependent variable. The compliance assessment included hand hygiene, personal protective equipment use, patient identification, and fall-risk prevention practices. The independent variables included age, sex, educational level, knowledge, attitude, length of service, supervision, workload, training history, and the availability of facilities and infrastructure. The researchers categorized demographic and employment variables according to the study's operational definitions. The researchers categorized knowledge, attitude, supervision, workload, and facilities and infrastructure using the median scores obtained from the study data.

The researchers collected the independent-variable data through a structured self-administered questionnaire. The questionnaire assessed respondents' demographic characteristics, knowledge, attitudes, length of service, perceptions of supervision, workload, training history, and the availability of supporting facilities and infrastructure. The researchers assessed the dependent variable through direct observation using a compliance checklist based on the Indonesian National Quality Indicator standards. The checklist evaluated healthcare workers' practices related to hand hygiene, personal protective equipment use, patient identification, and fall-risk prevention. Each compliant observation received a score of 1, while each non-compliant observation received a score of 0. The researchers calculated the final compliance percentage by dividing the total observed score by the maximum possible score and multiplying the result by 100, with scores of at least 85% classified as compliant.

The researchers tested the instruments among 30 inpatient healthcare workers at Talang Ubi Regional General Hospital before the main data collection. The instrument testing was conducted in April 2026 to evaluate the validity and internal consistency of the questionnaire and observation items. The validity assessment showed that all 83 tested items had item–total correlation coefficients above the critical value of 0.361, with correlation coefficients ranging from 0.714 to 0.913. The reliability analysis produced Cronbach's alpha coefficients of 0.976 for knowledge, 0.767 for attitude, 0.786 for supervision, 0.767 for workload, 0.767 for facilities and infrastructure, and 0.774 for compliance. These coefficients exceeded the minimum reliability threshold of 0.60 and indicated acceptable internal consistency across the study instruments.

The researchers approached selected nurses and midwives in their respective inpatient units during the study period. The researchers explained the study objectives, data collection procedures, confidentiality safeguards, and voluntary nature of participation before collecting the data. Each participant completed the structured questionnaire according to their actual working conditions and professional experiences. The researchers subsequently used the observation checklist to assess participants' compliance during inpatient care practices. The researchers checked each completed questionnaire and checklist for completeness before entering the data into the study database.

The researchers performed data editing and cleaning to identify incomplete responses, duplicate records, and data-entry errors. Univariate analysis summarized participants' characteristics and the distribution of each study variable using frequencies and percentages. Bivariate analysis used the Chi-square test to examine the association between each independent variable and healthcare workers' compliance. The analysis reported odds ratios with 95% confidence intervals, and the researchers

considered a p-value below 0.05 statistically significant. The researchers entered variables associated with compliance into a backward stepwise multiple logistic regression model. The final model identified the factor that had the strongest independent association with healthcare workers' compliance after controlling for the other variables.

RESULTS AND DISCUSSION

A total of 80 nurses and midwives from the inpatient units participated in the study. The compliance assessment classified 56 participants (70.0%) as compliant and 24 participants (30.0%) as non-compliant with the four National Quality Indicators. Most participants were in early adulthood (61.3%), were female (55.0%), and had a higher educational level (61.3%). More than half of the participants had high knowledge (56.3%), a positive attitude (61.3%), and at least five years of service (57.5%). Supportive supervision was reported by 52.5% of participants, while 61.3% reported a light workload. Most participants had attended relevant training more than once (60.0%) and reported complete supporting facilities and infrastructure (63.8%).

Table 1. Characteristics of the study participants (n = 80)

Characteristics	Category	n	%
Compliance	Compliant	56	70.0
	Non-compliant	24	30.0
Age group	Early adulthood	49	61.3
	Middle adulthood	31	38.8
Sex	Female	44	55.0
	Male	36	45.0
Educational level	Higher education	49	61.3
	Lower education	31	38.8
Knowledge	High	45	56.3
	Low	35	43.8
Attitude	Positive	49	61.3
	Negative	31	38.8
Length of service	≥5 years	46	57.5
	<5 years	34	42.5
Supervision	Supportive	42	52.5
	Less supportive	38	47.5
Workload	Light	49	61.3
	Heavy	31	38.8
Training attendance	More than once	48	60.0
	Once	32	40.0
Facilities and infrastructure	Complete	51	63.8
	Incomplete	29	36.3

The bivariate analysis showed that all examined variables were significantly associated with healthcare workers' compliance. Participants in early adulthood demonstrated higher compliance than participants in middle adulthood (83.7% vs. 48.4%; OR = 5.467; 95% CI: 1.943–15.381; p = 0.001). Female participants demonstrated higher compliance than male participants (81.8% vs. 55.6%; OR = 3.600; 95% CI: 1.312–9.879; p = 0.011). Participants with higher education and high knowledge also had significantly higher odds of compliance than their respective reference groups. Positive attitudes, longer work experience, supportive supervision, lighter workloads, repeated training, and complete facilities were also associated with higher compliance.

Table 2. Bivariate associations between participant characteristics and compliance

Variable	Category	Compliant, n/N (%)	Crude OR	95% CI	p-value
Age group	Early adulthood	41/49 (83.7)	5.467	1.943–15.381	0.001
	Middle adulthood	15/31 (48.4)			
Sex	Female	36/44 (81.8)	3.600	1.312–9.879	0.011
	Male	20/36 (55.6)			
Educational level	Higher education	41/49 (83.7)	5.467	1.943–15.381	0.001
	Lower education	15/31 (48.4)			
Knowledge	High	39/45 (86.7)	6.882	2.325–20.376	<0.001
	Low	17/35 (48.6)			
Attitude	Positive	44/49 (89.8)	13.933	4.308–45.066	<0.001
	Negative	12/31 (38.7)			
Length of service	≥5 years	37/46 (80.4)	3.246	1.201–8.774	0.018
	<5 years	19/34 (55.9)			
Supervision	Supportive	34/42 (81.0)	3.091	1.113–8.435	0.025
	Less supportive	22/38 (57.9)			
Workload	Light	40/49 (81.6)	4.167	1.518–11.434	0.004
	Heavy	16/31 (51.6)			
Training attendance	More than once	42/48 (87.5)	9.000	2.983–27.154	<0.001
	Once	14/32 (43.8)			
Facilities and infrastructure	Complete	46/51 (90.2)	17.480	5.269–57.990	<0.001
	Incomplete	10/29 (34.5)			

OR: odds ratio; CI: confidence interval. The Chi-square test was used for the bivariate analysis.

The backward stepwise multiple logistic regression analysis retained age, sex, knowledge, attitude, training attendance, and facilities and infrastructure in the final model. Knowledge, attitude, training attendance, and facilities and infrastructure remained independently associated with compliance after adjustment for the other variables. Participants with high knowledge had 20.132 times higher adjusted odds of compliance than participants with low knowledge (95% CI: 1.370–295.935; p = 0.029). Participants with positive attitudes and those who had attended training more than once had adjusted odds ratios of 21.280 and 19.253, respectively. Complete facilities and infrastructure represented the most dominant factor associated with compliance (AOR = 73.516; 95% CI: 4.182–1292.423; p = 0.003).

Table 3. Final multiple logistic regression model for factors associated with compliance

Variable	B	SE	Adjusted OR	95% CI	p-value
Early adulthood	2.171	1.379	8.771	0.588–130.942	0.115
Female sex	2.393	1.431	10.943	0.663–180.744	0.094
High knowledge	3.002	1.371	20.132	1.370–295.935	0.029
Positive attitude	3.058	1.336	21.280	1.552–291.778	0.022
Training attendance more than once	2.958	1.320	19.253	1.450–255.693	0.025
Complete facilities and infrastructure	4.298	1.463	73.516	4.182–1292.423	0.003

SE: standard error; OR: odds ratio; CI: confidence interval. The reference categories were middle adulthood, male sex, low knowledge, negative attitude, one training attendance, and incomplete facilities and infrastructure.

This study showed that healthcare workers' compliance with the four National Quality Indicators reached 70.0% in the inpatient units of Dr. H. Mohamad Rabain Regional General Hospital. The analysis classified 30.0% of the participants as non-compliant with hand hygiene, personal protective equipment use, patient identification, and fall-risk prevention procedures. The bivariate analysis showed significant associations between compliance and age, sex, educational level, knowledge, attitude, length of service, supervision, workload, training, and facilities and infrastructure. Higher compliance occurred among healthcare workers with high knowledge, positive attitudes, longer work experience, supportive supervision, lighter workloads, repeated training, and complete facilities. The final regression model retained knowledge, attitude, training, and facilities and infrastructure as significant independent factors after adjustment for the other variables. The overall pattern indicates that healthcare workers' compliance depends on the interaction between individual competence, behavioural readiness, managerial reinforcement, and organizational resources.

The overall compliance rate indicates that the hospital has established quality and patient safety practices, although the remaining level of non-compliance still requires systematic improvement. The proportion of non-compliant healthcare workers can expose patients to preventable risks when workers omit essential procedures during inpatient care. The World Health Organization defines quality healthcare as effective, safe, people-centred, timely, equitable, integrated, and efficient service delivery (World Health Organization, 2021, 2025). The Agency for Healthcare Research and Quality positions quality indicators as standardized tools for identifying performance gaps and supporting evidence-based quality improvement (Agency for Healthcare Research and Quality, 2025). The Indonesian Ministry of Health requires hospitals to measure, evaluate, and improve National Quality Indicator performance through continuous internal quality management processes (Ministry of Health of the Republic of Indonesia, 2022). Total quality management requires every hospital unit and healthcare worker to participate consistently in continuous improvement activities that support service quality and patient satisfaction (Muninjaya, 2011; Anggraini et al., 2021).

Knowledge and attitude showed strong associations with healthcare workers' compliance in this study. Healthcare workers with high knowledge demonstrated substantially higher compliance than healthcare workers with low knowledge, while healthcare workers with positive attitudes demonstrated higher compliance than those with negative attitudes. The PRECEDE–PROCEED framework classifies knowledge and attitude as predisposing factors that influence individual readiness to perform an expected health-related behaviour (Green et al., 2022). Adequate knowledge enables healthcare workers to understand the purposes, procedures, and patient safety consequences of hand hygiene, personal protective equipment use, patient identification, and fall prevention practices (Pakpahan et al., 2021). Previous hospital studies associated higher knowledge and positive attitudes with stronger compliance with hand hygiene and infection prevention procedures among healthcare workers (Octaviani & Fauzi, 2020; Satriani et al., 2025). A previous study at Dr. H. Mohamad Rabain Regional General Hospital also associated knowledge and attitude with nurses'

hand hygiene compliance and identified attitude as an important behavioural determinant (Mayarianti et al., 2024).

Training and supervision further strengthened the relationship between professional competence and compliant clinical behaviour. Healthcare workers who had attended relevant training more than once demonstrated higher compliance than healthcare workers who had attended training only once. Healthcare workers who received supportive supervision also demonstrated higher compliance than healthcare workers who perceived supervision as less supportive. The PRECEDE–PROCEED framework classifies training as an enabling factor and classifies supervision, monitoring, feedback, and managerial support as reinforcing factors (Green et al., 2022). Regular training improves workers' knowledge, technical skills, confidence, and understanding of quality standards through repeated learning and practical reinforcement (Wigati & Fatmasari, 2024). Internal monitoring, clear standard operating procedures, staff development, and management support strengthen healthcare workers' consistency in implementing National Quality Indicators (Pamungkas & Putri, 2026). Active infection prevention teams also increase nurses' compliance by providing education, direct observation, supervision, and feedback during routine clinical practice (Sulisno et al., 2022).

The analysis also associated compliance with workload, length of service, education, age, and sex. Healthcare workers with lighter workloads, longer service periods, higher education, early-adulthood status, and female sex demonstrated higher compliance than their respective comparison groups. The hospital should interpret these demographic and occupational relationships carefully because organizational conditions can modify the influence of individual characteristics on clinical behaviour. The PRECEDE–PROCEED framework identifies age, education, experience, and other personal characteristics as predisposing factors that interact with enabling and reinforcing factors in shaping behaviour (Green et al., 2022). Professional experience can improve workers' familiarity with procedures, while education can strengthen their ability to understand standards, assess risks, and make appropriate clinical decisions (Pakpahan et al., 2021; Latuconsina et al., 2023). Clinical leadership can also transform individual knowledge and experience into consistent quality practices through role modelling, supervision, and accountability mechanisms (Rahayu, 2023). Organizational policies must therefore address workforce distribution, staff competence, workload balance, leadership support, and quality culture simultaneously during indicator implementation (Yusriati et al., 2024).

Facilities and infrastructure showed the strongest relationship with healthcare workers' compliance in both the bivariate and multivariable analyses. Healthcare workers who reported complete facilities achieved a compliance rate of 90.2%, whereas healthcare workers who reported incomplete facilities achieved a compliance rate of 34.5%. The adjusted model showed that healthcare workers with complete facilities had substantially higher odds of compliance after controlling for age, sex, knowledge, attitude, and training. The PRECEDE–PROCEED framework classifies facilities and infrastructure as enabling factors that provide the material resources required for individuals to perform expected behaviours (Green et al., 2022). Healthcare workers cannot consistently perform hand hygiene, use personal protective equipment, identify patients, or prevent falls when essential materials remain unavailable or difficult to access. The World Health Organization emphasizes that accessible hand hygiene facilities, adequate supplies, institutional monitoring, and organizational commitment support sustained compliance with infection prevention standards (World Health Organization, 2018). Previous studies also associated facility availability with healthcare workers' compliance with hand hygiene and other quality-related procedures in hospital settings (Octaviani & Fauzi, 2020; Sulisno et al., 2022; Mayarianti et al., 2024).

The final model demonstrates that organizational resources must support individual competence and behavioural commitment during National Quality Indicator implementation. Knowledge, attitude, training, and facilities remained independently associated with compliance, while facilities and infrastructure produced the largest adjusted odds ratio. The very wide confidence interval around the adjusted odds ratio for facilities and infrastructure indicates substantial statistical uncertainty regarding the exact magnitude of the association. The relatively small sample, unequal distribution between several categories, and single-hospital setting may have

reduced the precision and external generalizability of the regression estimates (Creswell & Creswell, 2023). The cross-sectional design also measures exposures and compliance during the same period and therefore cannot establish a temporal or causal relationship between the examined variables (Creswell & Creswell, 2023). Future multicentre studies should use larger samples, objective facility assessments, repeated compliance observations, and longitudinal designs to provide more precise estimates and stronger evidence regarding causal pathways. Hospital management should nevertheless combine adequate facilities, continuous training, knowledge reinforcement, positive safety attitudes, balanced workloads, supportive supervision, and routine monitoring within an integrated quality improvement programme (Purwandani et al., 2025; Pamungkas & Putri, 2026).

CONCLUSION

Healthcare workers in the inpatient units demonstrated generally adequate compliance with the implementation of the National Quality Indicators, although several areas still required improvement. Age, sex, educational level, knowledge, attitude, length of service, supervision, workload, training, and facilities and infrastructure were associated with healthcare workers' compliance. Knowledge, attitude, training, and facilities and infrastructure remained important factors after adjustment for the other variables. Facilities and infrastructure represented the most dominant factor associated with compliance, although the estimated strength of the association requires cautious interpretation. Hospital management should ensure the continuous availability and accessibility of hand hygiene facilities, personal protective equipment, patient identification materials, fall-risk assessment tools, and other supporting resources in every inpatient unit. Hospital management should also implement regular competency-based training, structured supervision, workload evaluation, compliance audits, feedback mechanisms, and continuous quality improvement programmes to strengthen healthcare workers' compliance and patient safety.

REFERENCES

Agency for Healthcare Research and Quality. (2025). *AHRQ quality indicators*. U.S. Department of Health and Human Services. https://qualityindicators.ahrq.gov/

Anggraini, L. D., Purnamasari, E. D., & Melinda. (2021). Evaluasi implementasi audit internal berbasis ISO 9001:2008 untuk meningkatkan manajemen mutu pada rumah sakit. *Mega Aktiva: Jurnal Ekonomi dan Manajemen, 10*(1), 39–49. https://doi.org/10.32833/majem.v10i1.152

Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.

Dinas Kesehatan Provinsi Sumatera Selatan. (2025). *Profil kesehatan Provinsi Sumatera Selatan tahun 2024*. Dinas Kesehatan Provinsi Sumatera Selatan.

Green, L. W., Gielen, A. C., Ottoson, J. M., Peterson, D. V., & Kreuter, M. W. (2022). *Health program planning, implementation, and evaluation: Creating behavioral, environmental, and policy change*. Johns Hopkins University Press.

Hardianti, H., et al. (2024). Hubungan implementasi indikator nasional mutu dengan kualitas pelayanan rumah sakit. *Jurnal Manajemen Pelayanan Kesehatan*.

Komite Mutu RSUD Dr. H. Mohamad Rabain. (2026). *Laporan Indikator Nasional Mutu RSUD Dr. H. Mohamad Rabain tahun 2023–2025*. RSUD Dr. H. Mohamad Rabain.

Latuconsina, N. A., et al. (2023). *Manajemen rumah sakit*. CV Eureka Media Aksara.

Mayarianti, M., Ekawati, D., Priyatno, A. D., & Harokan, A. (2024). Faktor yang berhubungan dengan tindakan kepatuhan perawat dalam melakukan hand hygiene di RSUD Dr. H. Mohamad Rabain tahun 2023. *Jurnal Kesehatan Saelmakers PERDANA, 7*(1), 38–49. https://doi.org/10.32524/jksp.v7i1.1109

Ministry of Health of the Republic of Indonesia. (2022). *Regulation of the Minister of Health of the Republic of Indonesia Number 30 of 2022 concerning national quality indicators for healthcare services*. Ministry of Health of the Republic of Indonesia.

Muninjaya, A. A. G. (2011). *Manajemen mutu pelayanan kesehatan*. EGC.

Octaviani, E., & Fauzi, R. (2020). Analisis faktor yang berhubungan dengan kepatuhan mencuci tangan pada tenaga kesehatan di Rumah Sakit Hermina Galaxy Bekasi. *Jurnal Kedokteran dan Kesehatan, 16*(1), 12–19. https://doi.org/10.24853/jkk.16.1.12-19

Pakpahan, M., et al. (2021). *Promosi kesehatan dan perilaku kesehatan*. Yayasan Kita Menulis.

Pamungkas, G., & Putri, I. A. (2026). Evaluasi kepatuhan pelaporan indikator nasional mutu rumah sakit di Jawa Barat. *Jurnal Sehat Masada, 20*(1), 44–50. https://doi.org/10.38037/jsm.v20i1.582

Purwandani, R., Purnamawati, D., & Putri, A. (2025). Analysis of the implementation of national quality indicator measurement policy on hospital accreditation achievement in Indonesia. *Malahayati International Journal of Nursing and Health Science, 7*(12), 1461–1470. https://doi.org/10.33024/minh.v7i12.612

Rahayu, A. (2023). *Efektivitas kepemimpinan klinis dokter terhadap pencapaian indikator nasional mutu dokter di Rumah Sakit Izza Karawang* [Master's thesis, Universitas Indonesia]. Repositori Perpustakaan Universitas Indonesia.

Republic of Indonesia. (2021). *Presidential Regulation of the Republic of Indonesia Number 47 of 2021 concerning the administration of the hospital sector*.

Satriani, Gustina, E., & Zaman, C. (2025). Analisis kepatuhan tenaga medis di ruang rawat inap dalam melakukan hand hygiene. *Jurnal 'Aisyiyah Medika, 10*(1), 131–141. https://doi.org/10.36729/jam.v10i1.1309

Sulisno, M., et al. (2022). Hubungan peran Tim Pencegahan dan Pengendalian Infeksi dan fasilitas cuci tangan dengan kepatuhan cuci tangan perawat. *Holistic Nursing and Health Science, 5*(1), 23–33. https://doi.org/10.14710/hnhs.5.1.2022.23-33

Wigati, P. A., & Fatmasari, E. Y. (2024). Pendidikan dan pelatihan pegawai sebagai faktor kunci keberhasilan penerapan total quality management dalam pencapaian Indikator Nasional Mutu di RSGMP X. *Jurnal Manajemen Kesehatan Indonesia, 12*(3), 299–306. https://doi.org/10.14710/jmki.12.3.2024.299-306

World Health Organization. (2018). *Hand hygiene improvement programmes: Implementation guide*. World Health Organization.

World Health Organization. (2021). *Quality health services*. World Health Organization.

World Health Organization. (2025). *Quality of care*. World Health Organization.

Yusriati, B., Saimi, & Khalik, L. A. (2024). Determinan implementasi kebijakan Indikator Nasional Mutu di Puskesmas Batunyala Kabupaten Lombok Tengah. *Jurnal Manajemen Kesehatan Yayasan RS Dr. Soetomo, 11*(1). https://doi.org/10.29241/jmk.v11i1.2071