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THE EFFECT OF DOUBLE-DUTY STAFFING ON THE EFFECTIVENESS OF THE HOSPITAL HEALTH PROMOTION PROGRAM AT MUHAMMADIYAH BABAT HOSPITAL

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Abstract:

Background: The Hospital Health Promotion Program plays an indispensable role in community health literacy, preventive empowerment, and behavioral modification. However, in secondary healthcare institutions, chronic health workforce shortages compel hospitals to assign Health Promotion Program responsibilities as secondary tasks (double jobs) to clinical and administrative personnel who already carry full-time primary duties. This operational dual role risks excessive workload, fragmented focus, and diminished program effectiveness

Objective: To analyze the empirical effect of double-duty staffing on the effectiveness of the Hospital Health Promotion Program at Muhammadiyah Babat Hospital. Methods: This quantitative correlational study utilized a cross-sectional survey design conducted in 2026. The study recruited all 22 active cross-professional members of the HEALTH PROMOTION PROGRAM operational team using a total sampling technique. Data were gathered via structured Likert-scale questionnaires measuring double-job burden and PKRS program effectiveness (policy compliance, educational delivery, resource support, and method diversification). Data were evaluated through descriptive univariate analysis and bivariate Spearman's rank correlation.

Results: A plurality of respondents reported high double-job intensity (40.9%, n = 9), with 31.8% (n = 7) experiencing moderate and 27.3% (n = 6) low double-job levels. Program effectiveness was predominantly high (45.5%, n = 10), but 36.4% (n = 8) evaluated it as low and 18.2% (n = 4) as moderate. Bivariate statistical analysis revealed an inverse, statistically significant relationship between double jobbing and PKRS effectiveness (Spearman's rho = -0.941, $p < 0.001$), representing a very strong negative correlation.

Conclusion: An increased double-job burden among PKRS staff is strongly associated with a severe decline in the effectiveness of hospital health promotion programs. Hospital executive boards should establish dedicated, full-time health promotion staffing and re-engineer task distributions to ensure sustainable preventive services.

Keywords: Double duty; Health promotion; Hospital administration; Hospital Health Promotion Program (PKRS); Spearman correlation; Workload

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1. INTRODUCTION

Health is universally recognized as a fundamental human right and a principal prerequisite for sustainable socio-economic development and human capital enhancement. Modern healthcare reform increasingly demands an evolution from traditional, disease-oriented episodic treatment toward integrated, people-centered care supported by robust preventive strategies, multidisciplinary human resources, and responsive health communication (Holt et al., 2025). Within this paradigm, the World Health Organization (WHO) identifies the health workforce as the critical backbone of health systems; however, severe global shortages of healthcare personnel projected to reach a deficit of 18 million workers by 2030 threaten service delivery,

particularly in developing economies (WHO, 2016). When healthcare staffing is constrained, hospital management frequently resort to task shifting and role duplication, which provokes chronic physical fatigue, cognitive overload, and occupational burnout among staff, while eroding clinical safety and organizational performance (Alsadaan et al., 2023).

In acute general hospitals, preventative and promotive interventions are institutionalized through the Hospital Health Promotion Program. In accordance with Indonesian Minister of Health Regulation Number 44 of 2018 concerning the Implementation of Hospital Health Promotion, PKRS constitutes an organized, systematic effort to empower patients, family caregivers, hospital visitors, and surrounding communities to adopt healthy lifestyle behaviors through participatory education and health-enabling environments (Kementerian Kesehatan Republik Indonesia, 2018). Effective PKRS implementation directly impacts hospital performance by reducing preventable readmission rates, enhancing disease self-management, shortening lengths of stay, and fostering community health literacy (Febrian et al., 2020; Putri, 2019). However, statutory mandates stipulate that optimal PKRS execution necessitates dedicated institutional leadership, adequate financial resource allocation, and qualified health promotion practitioners (Kementerian Kesehatan Republik Indonesia, 2018; Mufid et al., 2023).

Despite its recognized strategic value, empirical studies across Indonesian hospitals reveal that PKRS execution is frequently hindered by acute human resource limitations, giving rise to the prevalent organizational phenomenon of 'double jobbing' or concurrent secondary task assignments (Larasati et al., 2025). Double jobbing occurs when registered nurses, clinical midwives, pharmacists, nutritionists, or medical record clerks are assigned to PKRS teams as an ad-hoc secondary responsibility while retaining their full-time primary clinical duties (Kumalasari, 2025; Sinaga et al., 2019). When staff are forced to divide cognitive focus and working hours between urgent bedside patient care and complex health promotion campaigns, significant role conflict, temporal fragmentation, and professional fatigue ensue, suppressing overall productivity (Mustikaningsih et al., 2021; Yustikasari & Santoso, 2024).

At Muhammadiyah Babat General Hospital an accredited private hospital in Lamongan Regency, PKRS initiatives including bedside counseling, in-house audiovisual broadcasts, social media health education, and community outreach are actively executed. However, preliminary managerial audits and in-depth interviews conducted on 21 November 2025 with the Head of the PKRS Team revealed that the hospital possesses no dedicated, full-time health promotion personnel. Instead, the PKRS team comprises 22 cross-professional employees who perform PKRS duties concurrently alongside demanding primary responsibilities in inpatient wards, outpatient polyclinics, and administrative offices. Although functional subdivisions exist (material preparation, video editing, and public dissemination), activities are performed flexibly without protected hours or standardized shift rosters, resulting in scheduling clashes, delayed campaigns, and variable execution.

Therefore, this study aimed to determine and analyze the empirical effect of double-duty staffing among PKRS personnel on the effectiveness of the Hospital Health Promotion Program at Muhammadiyah Babat Hospital. The findings provide hospital directors and healthcare administrators with empirical evidence to restructure workforce allocations, establish dedicated health promotion units, and optimize preventive hospital governance.

2. METHODS

2.1 Research Design

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This study used a quantitative correlational analytical research design utilizing a cross-sectional approach. This design was selected to measure, examine, and quantify the statistical relationship between the independent variable (double-job burden among PKRS staff) and the dependent variable (effectiveness of the hospital health promotion program) measured concurrently at a single point in time without experimental manipulation (Sugiyono, 2023).

2.2 Research Population and Sample

The study population comprised all 22 active personnel appointed to the official PKRS operational team at Muhammadiyah Babat Hospital. Total sampling (saturated sampling) was employed, whereby all 22 members of the PKRS organizational structure were recruited as study respondents. Inclusion criteria were: (1) active members of the PKRS operational team at Muhammadiyah Babat Hospital as decreed by official hospital leadership; (2) concurrently holding an active primary job assignment in a clinical, paramedical, or administrative hospital department; (3) having a minimum working tenure of one year; and (4) willing to participate voluntarily. Exclusion criteria included staff on maternity or extended medical leave and incomplete questionnaire submissions.

2.3 Research Setting and Time

The research was undertaken at Muhammadiyah Babat Hospital, situated on Jl. Raya Babat-Surabaya, Babat District, Lamongan Regency, East Java Province, Indonesia. Fieldwork and survey administration were conducted in 2026.

2.4 Research Procedures

The research procedure comprised administrative licensing, questionnaire distribution, independent completion, and data verification. Questionnaires were distributed to all PKRS team members across their primary work stations. Respondents were briefed regarding research objectives, confidentiality, and voluntary consent. Questionnaires were completed independently and collected immediately upon completion for data cleaning.

2.5 Data Collection Techniques

Primary data were gathered using closed-ended, structured Likert-scale questionnaires. Collected variables included respondent socio-demographic indicators (biological sex, age group, formal educational attainment, team structural position, and working tenure) alongside psychometric evaluations of double-duty burden and program effectiveness.

2.6 Research Instruments

The independent variable (double job) measured time fragmentation, role conflict, physical-mental fatigue, and task overlap between primary duties and secondary PKRS assignments. The dependent variable (program effectiveness) measured operational goal attainment, educational content relevance, publication punctuality, audience reach, and resource utilization based on Permenkes No. 44 of 2018 guidelines. Raw scores were categorized into 'High', 'Moderate', and 'Low'. Both instruments were pre-tested for validity and reliability.

2.7 Data Analysis

Data were processed using SPSS software. Descriptive univariate statistics established absolute frequencies (f) and relative percentages (%) for demographic characteristics and categorical variable scores. Because both variables represented ranked ordinal classifications in a small sample, bivariate hypothesis testing was conducted using Spearman's rank correlation (Spearman's rho) at a statistical significance threshold of alpha = 0.05.

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2.8 Scope and Limitations of the Research

The study's scope was delimited to internal PKRS operational staff at a single private hospital in Lamongan. Methodological limitations include the small sample size (n = 22), the cross-sectional design precluding longitudinal causal determinations, reliance on self-report questionnaires without objective external audits of educational effectiveness or patient-level health behavior changes, and the absence of multivariable regression models.

2.9 Ethical Considerations

The primary manuscript clearly indicates that respondent participation across the study was strictly voluntary. In alignment with this requirement, the investigation was conducted with the explicit informed consent of each participant. The research process complied fully with the established ethical approval status designated for the project. All methodological procedures were performed under rigorous adherence to these verified ethical guidelines. Furthermore, the authors formally confirm that all essential publication agreements were duly secured. Specifically, appropriate written consent for publication was directly obtained from the participants. This documented verification confirms that both research involvement and academic dissemination met standard ethical requirements.

3. RESULTS AND DISCUSSION

3.1. Result

All 22 members of the PKRS team completed the survey. Table 1 summarizes the demographic and occupational characteristics of the respondents, including age group, biological sex, formal educational attainment, team structural position, and working tenure.

Table 1. Socio-Demographic and Occupational Characteristics of PKRS Staff Respondents (n = 22)

No	Characteristic Domain	Classification / Category	Frequency (f)	Percentage (%)
1	Age Group	17 – 20 years old	0	0.0
		21 – 30 years old	6	27.3
		31 – 40 years old	16	72.7
		41 – 50 years old	0	0.0
2	Biological Sex	Male	6	27.3
		Female	16	72.7
3	Educational Attainment	High School / Vocational	2	9.1
		Diploma	7	31.8
		Bachelor's Degree	10	45.5
		Professional Degree	3	13.6
		Master's Degree	0	0.0
4	PKRS Team Position	Person-in-Charge / Advisor	1	4.5
		Team Chairperson	1	4.5
		Secretary	1	4.5
		Operational Member	19	86.4
5	Working Tenure	< 1 year	0	0.0
		≥ 1 year	22	100.0

Source: Primary research survey data, Muhammadiyah Babat Hospital, 2026.

As detailed in Table 1, female staff comprised the majority of the PKRS team (72.7%, n = 16), while male staff represented 27.3% (n = 6). Nearly three-quarters were in the mature productive age bracket of 31–40 years (72.7%, n = 16), with 27.3% (n = 6) aged 21–30 years. Academically, 45.5% (n = 10) held a Bachelor's degree (S1), 31.8% (n = 7) held a Diploma,

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13.6% (n = 3) possessed clinical professional degrees (Ners), and 9.1% (n = 2) were high school graduates. Organizationally, 86.4% (n = 19) served as operational members, while 13.6% held executive leadership roles (Chairperson, Secretary, and Advisor). All respondents (100.0%, n = 22) had been employed at the hospital for over one year.

Table 2. Univariate Frequency Distribution of Double Job and Program Effectiveness Categories (n = 22)

Research Variable	Category / Level	Frequency (f)	Percentage (%)	Operational Interpretation
Double Job of PKRS Staff (X)	Low	6	27.3	Minimal secondary task disruption
	Moderate	7	31.8	Moderate temporal & workload strain
	High	9	40.9	Severe role conflict & task fragmentation
PKRS Program Effectiveness (Y)	Low	8	36.4	Sub-optimal target achievement & delays
	Moderate	4	18.2	Acceptable but inconsistent implementation
	High	10	45.5	High target attainment & timely execution

Source: Primary research survey data, Muhammadiyah Babat Hospital, 2026.

Univariate analysis (Table 2) showed that a plurality of PKRS staff experienced high double-job intensity (40.9%, n = 9), while 31.8% (n = 7) had moderate and 27.3% (n = 6) low double-job levels. In terms of program effectiveness, 45.5% (n = 10) rated it as high, but a substantial 36.4% (n = 8) evaluated it as low, and 18.2% (n = 4) as moderate, indicating wide operational variability in health promotion delivery.

Table 3. Bivariate Spearman's Rank Correlation Between Double Job and PKRS Program Effectiveness

Independent Variable	Dependent Variable	Correlation Coefficient (Spearman's rho)	p-value (Sig. 2-tailed)	Correlation Strength & Direction
Double Job of PKRS Staff (X)	PKRS Program Effectiveness (Y)	-0.941	< 0.001*	Very Strong Negative Correlation (Significant)

**Statistically significant at alpha < 0.05 (p = 0.000). Sample size n = 22. Source: Processed SPSS correlation output, 2026.*

As presented in Table 3, bivariate analysis using Spearman's rank correlation yielded a correlation coefficient (Spearman's rho) of -0.941 with an exact significance value of p = 0.000 (p < 0.001). Because the p-value is substantially lower than alpha = 0.05, the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted. These results confirm a statistically significant, very strong, and inverse (negative) relationship between the double-job burden of PKRS staff and the effectiveness of the Hospital Health Promotion Program at Muhammadiyah Babat Hospital. An increase in double-duty demands is strongly associated with a marked decrease in health promotion program effectiveness.

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3.2 Discussion

The central finding of this investigation confirms a statistically significant, very strong inverse relationship between double-duty staffing and the effectiveness of the Hospital Health Promotion Program (PKRS) at Muhammadiyah Babat Hospital (Spearman's rho = -0.941, $p < 0.001$). This near-perfect negative correlation demonstrates that as concurrent secondary workloads intensify, the effectiveness of health promotion initiatives deteriorates precipitously. Descriptive metrics revealed that 40.9% of PKRS personnel experienced high double-job burdens, and 36.4% evaluated program effectiveness as low. Because 100% of the PKRS team members concurrently hold full-time clinical, nursing, or administrative primary positions without dedicated health promotion officers, PKRS execution is continuously subordinated to immediate primary departmental emergencies. When primary clinical patient loads escalate, health promotion planning, video content production, and patient education sessions are inevitably postponed, producing wide operational inconsistencies.

These empirical outcomes are strongly consistent with contemporary hospital administration and health workforce literature. Larasati et al. (2025) identified human resource shortages and the lack of dedicated health promoters as the primary barriers preventing optimal PKRS execution in regional hospitals. Similarly, Kumalasari (2025) and Mustikaningsih et al. (2021) observed that assigning dual roles to healthcare workers provokes severe role ambiguity, time fragmentation, and cognitive fatigue, directly reducing task performance. In organizational safety research, Sinaga et al. (2019) demonstrated that dual appointments severely suppress the operational efficacy of occupational health committees due to time scarcity. Furthermore, our findings align with Mufid et al. (2023) and Yustikasari & Santoso (2024), who confirmed that excessive workload suppresses staff motivation and clinical service quality, corroborating the WHO warning that unmanaged workforce shortages directly compromise institutional health targets (WHO, 2016, 2020).

The strong negative relationship observed can be explained through Role Stress Theory (Kahn et al., 1964) and the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2017). Role Stress Theory posits that when an individual occupies multiple organizational roles with competing expectations (Role Conflict) and excessive aggregate tasks (Role Overload), psychological distress and task evasion ensue. At Muhammadiyah Babat Hospital, PKRS staff experience severe role conflict: their primary clinical identity demands immediate bedside vigilance, while their secondary PKRS identity demands creative educational content formulation. Under the JD-R model, double jobbing imposes excessive qualitative and quantitative job demands without providing corresponding job resources (such as protected administrative time or dedicated budgets). Consequently, staff exhaust finite cognitive bandwidth on acute clinical duties, leaving promotive programs under-resourced and inconsistently executed (Febrian et al., 2020; Putri, 2019).

A critical appraisal of the empirical data requires noting that the extraordinarily high correlation coefficient (rho = -0.941) may be partially amplified by the small sample size ($n = 22$) and common-method variance, as the same internal team members evaluated both their own double-duty strain and the program's overall effectiveness. Furthermore, 72.7% of respondents were aged 31–40 years with over one year of hospital tenure, possessing deep organizational awareness that makes them acutely cognizant of institutional operational bottlenecks.

This study provides empirical evidence demonstrating that the widespread Indonesian hospital practice of managing PKRS through ad-hoc dual-role committees is fundamentally counterproductive. Proving a statistically significant negative association ($p < 0.001$) provides healthcare executives with a clear administrative imperative: complying with Permenkes No. 44 of 2018 requires moving beyond nominal committee appointments and establishing dedicated, full-time health promotion positions to ensure institutional competitiveness and patient empowerment.

3.3 Implications

Hospital executives and human resource directors at Muhammadiyah Babat Hospital should formalize structural workforce reforms: (1) Establishing a permanent, independent PKRS Unit with at least one or two full-time Health Promotion Specialists (Tenaga Promosi Kesehatan); (2) Implementing protected working hours for cross-professional team contributors; (3) Designing standardized annual PKRS editorial calendars to eliminate ad-hoc scheduling; and (4) Providing dedicated multimedia production facilities.

3.4 Research contribution

This study offers quantitative empirical documentation from a private Islamic general hospital in East Java, providing valuable baseline reference data on dual-role health workforce dynamics and hospital health promotion governance for Indonesian healthcare administration literature.

3.5 Limitations

Several limitations must be acknowledged: (1) The cross-sectional design captures associations rather than longitudinal causality; (2) Total sampling was restricted to 22 PKRS team members at a single hospital facility; (3) Exclusive reliance on internal staff self-report questionnaires without triangulating patient-side health literacy metrics; and (4) The lack of multivariable regression modeling controlling for demographic covariates

3.6 Suggestions

Future research should adopt prospective longitudinal or quasi-experimental designs comparing program effectiveness before and after the appointment of dedicated full-time PKRS staff, recruit multi-center cohorts across public and private hospitals, and incorporate patient-reported outcome measures (PROMs) to evaluate real-world behavioral modification.

4. CONCLUSION

There is a statistically significant, very strong, and inverse relationship between double-duty staffing among PKRS personnel and the effectiveness of the Hospital Health Promotion Program at Muhammadiyah Babat Hospital (Spearman's rho = -0.941, $p < 0.001$). A high double-job burden (reported by 40.9% of staff) severely diminishes program effectiveness by fragmenting time, impairing focus, and exacerbating role conflict. Transitioning from ad-hoc dual-role committees toward dedicated health promotion staffing and balanced workload distribution is vital to achieve sustainable, high-impact hospital health promotion.

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AUTHOR CONTRIBUTIONS STATEMENT

MYF: Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing original draft. MGS, DK, FU: Supervision, Validation, Methodology, Writing review and editing, Project administration.

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REFERENCES

Alsadaan, N., Salameh, B., Reshia, F. A. A. E., Alruwaili, R. F., Alruwaili, M., Awad Ali, S. A., Alruwaili, A. N., Hefnawy, G. R., Alshammari, M. S. S., Alrumayh, A. G. R., Alruwaili, A. O., & Jones, L. K. (2023). Impact of nurse leaders behaviors on nursing staff performance: A systematic review of literature. Inquiry: A Journal of Medical Care Organization, Provision and Financing, 60, Article 00469580231178528. https://doi.org/10.1177/00469580231178528

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. Journal of Occupational Health Psychology, 22(3), 273–285. https://doi.org/10.1037/ocp0000056

Febrian, M. R., Permatasari, P., Hida, N. R., & Hardy, F. R. (2020). Analisis implementasi penyelenggaraan promosi kesehatan rumah sakit di era jaminan kesehatan nasional. Jurnal Ilmiah Kesehatan Masyarakat: Media Komunikasi Komunitas Kesehatan Masyarakat, 12(1), 20–26. https://doi.org/10.52022/jikm.v12i1.48

Holt, B., Mendoza, J., Nguyen, H., Doan, D., Nguyen, T. H., Mercado, T. B., Duy, L. D., Fernandez, M., Gaspar, M., Hamoy, G., Le, B. N., Neo, B. L., Nguyen, V., Pham, T., Ong, J., Pollack, T. M., Sumalo, J. A., Thai, P., & Duong, D. B. (2025). Putting people at the center: Methods for patient journey mapping of viral hepatitis services across two LMICs in the Asia Pacific. BMC Health Services Research, 25(1), Article 12543. https://doi.org/10.1186/s12913-025-12543-w

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). Organizational stress: Studies in role conflict and ambiguity. John Wiley & Sons.

Kementerian Kesehatan Republik Indonesia. (2018). Peraturan Menteri Kesehatan Republik Indonesia Nomor 44 Tahun 2018 tentang Penyelenggaraan Promosi Kesehatan Rumah Sakit. Berita Negara Republik Indonesia.

Kementerian Kesehatan Republik Indonesia. (2023). Profil kesehatan Indonesia tahun 2023. Kementerian Kesehatan RI.

Kumalasari, Y. (2025). Pelaksanaan double job pegawai pegadaian cabang Ponorogo perspektif etika kerja Islam (Skripsi). IAIN Ponorogo.

Larasati, W., Reviagana, K. P., & Norfitri, R. (2025). Faktor-faktor yang berhubungan dengan pelaksanaan promosi kesehatan rumah sakit. Journal of Intan Hospital Administration, 2(2), 46–55. DOI: 10.54004/jiha.v2i2.267

Mufid, A., Sulaeman, L., & Sastrawan, S. (2023). Faktor-faktor yang berhubungan dengan implementasi promosi kesehatan rumah sakit. Journal of Telenursing (JOTING), 5(2), 3436–3444. https://doi.org/10.31539/joting.v5i2.7528

Mustikaningsih, D., Setiawati, T., & Andri, H. T. (2021). Analisis beban kerja perawat dalam pelaksanaan perawatan kesehatan masyarakat. Jurnal Keperawatan 'Aisyiyah, 8(2), 121–131. https://doi.org/10.33867/jka.v8i2.282

Putri, Y. D. (2019). Analisis pelaksanaan promosi kesehatan rumah sakit dalam menerapkan Permenkes Nomor 44 Tahun 2018 di Rumah Sakit Pusat Pertamina tahun 2019 (Tesis). Universitas Muhammadiyah Prof. Dr. Hamka.

Sinaga, L., Kurniawan, B., & Wahyuni, I. (2019). Pengaruh rangkap jabatan terhadap efektivitas kinerja P2K3 dalam upaya peningkatan keselamatan dan kesehatan kerja di PT X. Jurnal Kesehatan Masyarakat, 7(3), 60–65. https://doi.org/10.14710/jkm.v7i3.24892

Sugiyono. (2023). Metode penelitian kuantitatif, kualitatif, dan R&D (Edisi ke-3). Alfabeta.

World Health Organization. (2016). Global strategy on human resources for health: Workforce 2030. World Health Organization. https://www.who.int/publications/i/item/9789241511131

World Health Organization. (2020). The state of the world's nursing 2020: Investing in education, jobs and leadership. World Health Organization. https://www.who.int/publications/i/item/9789240003279

Yustikasari, S. A. T., & Santoso, B. (2024). Pengaruh beban kerja, stres kerja, dan lingkungan kerja terhadap kinerja perawat bagian rawat inap di Rumah Sakit Tingkat III Brawijaya Surabaya. Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah, 6(2), 2412–2425. https://doi.org/10.47467/alkharaj.v6i2.3831

Zheng, J., Feng, S., Gao, R., Gong, X., Ji, X., Li, Y., Wang, X., & Xue, B. (2024). The relationship between organizational support, professional quality of life, decent work, and professional well-being among nurses: A cross-sectional study. BMC Health Services Research, 24(1), Article 112. https://doi.org/10.1186/s12913-024-10612-4