Original Article

Relationship Between Work Motivation and Nurse Performance in the Hemodialysis Unit at RSPAU Dr. Suhardi Hardjolukito Yogyakarta

Retno Wulan Wateriri[1], Agnes Mahayanti[2], Christina Ririn Widianti[3]

[1]Program Studi sarjana Keperawatan, Sekolah Tinggi Ilmu Kesehatan Panti Rapih, Yogyakarta

Abstract

Background: Nurses play a pivotal role as the frontline human resources in delivering quality health services. Optimal nursing performance directly influences patient outcomes and organizational success. Motivation is a crucial internal drive that enhances nurse performance, yet its role in specialized settings like hemodialysis units remains underexplored.

Objective: This study aimed to examine the relationship between work motivation and nurse performance in the Hemodialysis Room at the Air Force Central Hospital (RSPAU) Dr. Suhardi Hardjolukito Yogyakarta.

Methods: A quantitative correlational design with a cross-sectional approach was employed. A total of 24 nurses working in the hemodialysis unit were recruited through total sampling. Data collection utilized validated questionnaires measuring work motivation (intrinsic and extrinsic factors) and performance dimensions. Spearman rank correlation analysis was used to examine the relationship between variables.

Results: The majority of nurses (83.3%) demonstrated good work motivation, and 95.8% exhibited good performance. Spearman rank analysis revealed a positive, moderate, and statistically significant relationship between work motivation and nurse performance (r = 0.466, p = 0.022).

Conclusion: There is a significant positive relationship between work motivation and nurse performance. Strengthening motivational factors could serve as a strategic lever to enhance nurse performance, particularly in high-demand clinical environments like hemodialysis units.

Keywords: Human resources, nurse motivation, nurse performance, hemodialysis care, hospital services

INTRODUCTION

Human resources are the engine of any organization, and in healthcare settings, the performance of nurses is a cornerstone of service quality. Nurses represent the largest workforce within hospitals and directly impact the continuity, quality, and safety of patient care (1–3). Their performance encompasses how effectively they execute clinical duties, decision-making, and collaboration, ultimately influencing organizational goals (4,5).

One critical factor influencing nurse performance is work motivation (6,7). Motivation can be conceptualized as the psychological energy that propels individuals toward achieving personal and organizational objectives. Highly motivated nurses tend to exhibit greater job satisfaction, commitment, and resilience in facing clinical challenges (8). Herzberg's Two-Factor Theory differentiates between intrinsic motivators, such as recognition and professional growth, and extrinsic factors, including salary, supervision,

and work conditions (9). Adequately managing both aspects is essential for cultivating job satisfaction and optimizing performance (10,11).

In Indonesia, the demand for hemodialysis services has consistently increased, as highlighted by the Indonesian Renal Registry (12). The growing patient load places significant pressure on hemodialysis units, necessitating highly motivated and high-performing nurses. Preliminary data from RSPAU Dr. Suhardi Hardjolukito Yogyakarta indicated generally good nurse performance scores; however, observations also revealed concerns about workload stress among staff, warranting a closer examination of motivational factors. Given the complex needs of hemodialysis patients, who often face emotional and physical challenges (14), ensuring high-quality nursing care is paramount. Therefore, this study aimed to investigate the relationship between work motivation and nurse performance in the Hemodialysis Room of RSPAU Dr. Suhardi Hardjolukito Yogyakarta.

METHODS

Study Design
This was a quantitative correlational study using a cross-sectional design to assess the relationship between work motivation and nurse performance.

Population and Sample
The study population comprised all 24 implementing nurses in the Hemodialysis Room of RSPAU Dr. Suhardi Hardjolukito Yogyakarta.

Total sampling was employed to maximize representativeness. Nurses on leave during data collection were excluded.

Data Collection
Data were collected between July 15 and July 22, 2021, using structured questionnaires:

- Respondent characteristics: age, gender, education level, and years of service.
- Work Motivation Questionnaire: 23 items covering intrinsic (11 items) and extrinsic (12 items) motivators. Responses used a four-point Likert scale (1 = strongly disagree to 4 = strongly agree).
- Nurse Performance Questionnaire: 15 items covering work quantity, quality, knowledge, cooperation, responsibility, and initiative, also rated on a four-point Likert scale.

Both instruments were pre-tested and validated, with Cronbach's alpha values of 0.728 and 0.729, respectively, indicating acceptable reliability.

Data Analysis
Data were analyzed using SPSS version 26.0. Descriptive statistics were used to summarize participant characteristics, motivation levels, and performance ratings. Spearman rank correlation was applied to test the relationship between work motivation and performance, considering $p < 0.05$ as statistically significant.

Ethical Considerations
This study received ethical approval from the Health Research Ethics Committee of STIKes Bethesda Yakkum Yogyakarta. Written informed consent was obtained from all participants.

RESULTS

Table 1. Characteristics of Nurses in the Hemodialysis Unit (n = 24)

Characteristics	Category	Frequency (n)	Percentage (%)
Gender	Male	8	33.3
	Female	16	66.7
Age	17–25 years	3	12.5
	26–35 years	13	54.2
	36–45 years	5	20.8
	46–55 years	3	12.5
Recent Education	D3 Nursing	20	83.3
	S1 Nursing	4	16.7
Length of Service	< 6 years	11	45.8
	6–10 years	7	29.2
	> 10 years	6	25.0

Table 1 shows that the majority of nurses (66.7%) were female. More than half (54.2%) were aged 26–35 years, with smaller proportions in the 17–25 years (12.5%) and 46–55 years (12.5%) age groups. Most nurses (83.3%) held a D3 Nursing degree, and a smaller proportion (16.7%) held an S1 Nursing degree. Regarding work experience, 45.8% had less than six years of service, 29.2% had 6–10 years, and 25% had more than 10 years of experience.

Table 2. Distribution of Nurse Work Motivation in the Hemodialysis Unit (n = 24)

Work Motivation Level	Frequency (n)	Percentage (%)
Good	20	83.3
Fair	4	16.7
Poor	0	0.0

Table 2 illustrates that the majority of nurses (83.3%) exhibited good work motivation, while 16.7% had fair work motivation. No respondents were categorized as having poor work motivation.

Table 3. Distribution of Nurse Performance in the Hemodialysis Unit (n = 24)

Nurse Performance Level	Frequency (n)	Percentage (%)
Good	23	95.8
Fair	1	4.2
Poor	0	0.0

Table 3 shows that almost all nurses (95.8%) demonstrated good performance, while only one nurse (4.2%) was rated as having fair performance. None of the respondents were categorized as having poor performance.

Table 4. Correlation Between Work Motivation and Nurse Performance in the Hemodialysis Unit

Variables	Correlation Coefficient (r)	Sig. (2-tailed)
Work Motivation – Nurse Performance	0.466	0.022

Table 4 presents the results of the Spearman rank correlation analysis, showing a correlation coefficient (r) of 0.466 with a p-value of 0.022. This indicates a positive, moderate, and statistically significant relationship between work motivation and nurse performance ($p < 0.05$). Higher work motivation was associated with better nurse performance.

DISCUSSION

Sex is a biological distinction that differentiates men and women from birth, based on immutable physiological functions (Hungu, 2014). In line with previous studies, there was no significant relationship found between gender and work motivation or nurse performance in this study [14]. Both male and female nurses demonstrated similar capacities in problem-solving, analytical ability, competitiveness, sociability, and learning aptitude.

Age has traditionally been associated with work outcomes, as emotional maturity, decision-making capabilities, and information processing skills tend to improve with age (Robbins & Judge, 2015). While younger employees may exhibit greater physical stamina and flexibility towards technological advances, older employees often offer superior ethical standards, responsibility, and professional judgment, qualities critical to delivering high-quality patient care [15,16].

Educational background is another critical factor influencing nurse productivity and performance. Formal nursing education equips practitioners with theoretical knowledge, clinical skills, and critical thinking abilities necessary for professional excellence. Consistent with Kumajas [4], a higher education level enhances competency and the ability to utilize clinical resources efficiently. Length of service similarly contributes by providing experience, dexterity,

and the ability to manage complex clinical situations calmly and effectively. Nevertheless, new employees bring fresh perspectives, innovative ideas, and enthusiasm for learning (17).

Based on the findings, most nurses working in the Hemodialysis Unit at RSPAU Dr. Suhardi Hardjolukito Yogyakarta exhibited high work motivation, driven by both intrinsic and extrinsic factors. This aligns with organizational behavior theories, highlighting that employee outcomes are shaped not only by their abilities but also by motivational drives (18,19).

According to Herzberg's Two-Factor Theory, intrinsic motivators such as achievement, responsibility, recognition, and the work itself enhance job satisfaction and drive performance, while extrinsic factors such as salary, supervision, and work environment act as hygiene factors to prevent dissatisfaction (9). Onidis (8) further corroborates that both types of factors contribute significantly to maintaining high levels of employee motivation and satisfaction.

The results of this study (Table 2) are consistent with prior research (20,21), demonstrating that intrinsic factors like achievement, recognition, and self-development opportunities, alongside extrinsic factors like compensation and organizational policies, directly impact employee motivation and performance.

Performance quality is fundamental to healthcare service excellence (22). As shown in Table 3, the high level of nurse performance in this study likely stems from strong work motivation, supporting the assumption that motivated nurses demonstrate greater commitment, energy, and output in their roles. This relationship was statistically confirmed through Spearman rank correlation analysis (Table 4), showing a moderate positive and significant correlation between motivation and performance (r = 0.466, p = 0.022).

These findings align with previous studies by Malinda, Librianty (5), Ariko (2), and Bachrudin (3), which similarly reported significant associations between work motivation and nurse performance in different clinical settings. Motivation, as emphasized by Andreas (7), directly affects an employee's willingness to work hard and pursue excellence, thereby improving institutional outcomes (24-26).

Thus, it can be concluded that strengthening both intrinsic and extrinsic motivational factors plays a pivotal role in enhancing nurse performance, especially in high-demand environments such as hemodialysis units.

Implication

The findings highlight the importance of developing comprehensive motivational strategies within hospital management frameworks. Investment in intrinsic motivators—such as opportunities for professional development, recognition programs, and autonomy in clinical decision-making—combined with strengthening extrinsic factors—such as salary adjustment, supportive leadership, and safe work environments—can significantly improve nurse performance. Ultimately, motivated nurses can better meet the complex needs of hemodialysis patients, improving service quality and patient outcomes.

Limitation

This study was conducted at a single center with a relatively small sample size (n = 24), potentially limiting the generalizability of findings to other healthcare settings. Furthermore, self-reported data may introduce social desirability bias. Future research should include larger, multi-center samples and consider triangulating findings with supervisor evaluations and patient satisfaction surveys.

CONCLUSION

This study concludes that most nurses in the Hemodialysis Unit at RSPAU Dr. Suhardi Hardjolukito Yogyakarta are women, predominantly aged between 26–35 years, with the majority holding D3 nursing qualifications and less than 10 years of work experience. Most nurses demonstrated good work motivation (83.3%) and good performance (95.8%). There is a moderate, positive, and statistically significant relationship between work motivation and nurse performance (r = 0.466, p = 0.022), indicating that higher work motivation correlates with better performance. Strengthening motivation—both intrinsic and extrinsic—is vital to enhance performance outcomes. For nursing management, it is recommended to continuously foster work motivation through recognition programs, professional development opportunities, fair rewards, and supportive work environments.

For future researchers, expanding the sample size, involving multi-site designs, and employing objective performance measures are encouraged to strengthen evidence reliability.

Author Contribution

RWW : Conceptualization and Study Design, Methodology, Data Curation, Writing – Original Draft, Writing – Review & Editing
AM : Methodology, Formal Analysis, Writing – Review & Editing
CRW : Data Curation, Writing – Review & Editing, Methodology, Formal Analysis

Conflict of Interest

The authors declare that they have no conflicts of interest in relation to this study.

Data Availability

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

REFERENCES

1. Legge K, Legge K. What is human resource management? Springer; 1995.
2. Gillies J. Shakespeare and the Geography of Difference. Vol. 4. Cambridge University Press; 1994.
3. Farisi S, Irnawati J, Fahmi M. Pengaruh Motivasi dan Disiplin Kerja Terhadap Kinerja Karyawan. Jurnal Humaniora: Jurnal Ilmu Sosial, Ekonomi Dan Hukum. 2020;4(1):15–33.
4. Armstrong SJ, Rispel LC, Penn-Kekana L. The activities of hospital nursing unit managers and quality of patient care in South African hospitals: a paradox? Glob Health Action. 2015;8(1):26243.
5. Hennessy D, Hicks C, Hilan A, Kawonal Y. The training and development needs of nurses in Indonesia: paper 3 of 3. Hum Resour Health. 2006;4:1–14.
6. Yunita KE, Yulianthini NN, SE MM, Bagia IW. Pengaruh Pengalaman Kerja Dan Penempatan Karyawan Terhadap Kinerja Karyawan. Jurnal Manajemen Indonesia. 2016;4(1).
7. Andreas D. EMPLOYEE PERFORMANCE: The Effect of Motivation And Job Satisfaction. PRODUKTIF: Jurnal Kepegawaian dan Organisasi. 2022;1(1):28–35.
8. Kuswati Y. The effect of motivation on employee performance. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). 2020;3(2):995–1002.
9. Salawangi GE, Kolibu FK, Wowor R. Hubungan motivasi kerja dengan kinerja perawat di instalasi rawat inap rsud liun kendage tahuna kabupaten sangihe. KESMAS: Jurnal Kesehatan Masyarakat Universitas Sam Ratulangi. 2018;7(5).
10. Zainaro MA, Isnainy UCAS, Furqoni PD, Wati K. Pengaruh motivasi kerja terhadap kinerja perawat pelaksana di ruang rawat inap rumah sakit umum daerah alimuddin umar kabupaten lampung barat tahun 2017. Holistik Jurnal Kesehatan. 2017;11(4):209–15.
11. Librianty N. Hubungan Motivasi Dengan Kinerja Perawat Pelaksana Di Uptd Kesehatan Tapung Kab. Kampar Tahun 2018. Jurnal Ners. 2018;2(2).
12. INDONESIAN RENAL REGISTRY. 1 th Report Of Indonesian Renal Registry 2018. 2018.
13. Longge E, Anindita R, Pamungkas RA. Indonesian Journal of Global Health Research. Indonesian Journal of Global Health Research. 2021;3(3):371–8.
14. Gomes K, Desbrow B, Irwin C, Roberts S. Patient and Staff Perceptions on Using Bioelectrical Impedance Analysis in an Outpatient Haemodialysis Setting: A Qualitative Descriptive Study. In: Healthcare. MDPI; 2022. p. 1205.
15. Hitka M, Kozubíková Ľ, Potkány M. Education and gender-based differences in employee motivation. Journal of

Business Economics and Management. 2018;19(1):80–95.

16. Librianty N. Hubungan Motivasi Dengan Kinerja Perawat Pelaksana Di Uptd Kesehatan Tapung Kab. Kampar Tahun 2018. Jurnal Ners. 2018;2(2).

17. Malinda R. Faktor-Faktor Yang Mempengaruhi Kinerja Karyawan Pada PT. Cahaya Timur Ogan Komering Ilir Sumatera Selatan. Jurnal Media Wahana Ekonomika. 2019;15(3):66–75.

18. Salsabilla A, Setiawan M, Juwita HAJ. The effect of workload and job stress on job satisfaction mediated by work motivation. International Journal of Research in Business and Social Science (2147-4478). 2022;11(9):97–106.

19. Mutmainnah M, Mekeama L, Ariyani T. Caring Behavior and Associated Factors Among Nurses in Jambi Teaching Hospital. In: The 3rd Green Development International Conference (GDIC 2020). Atlantis Press; 2021. p. 421–7.

20. Dyah LAS, Setiawan M, Irawanto DW, Rohman F, Nursalam N. Analysis Factors of Nursing Performance at the Mother and Child Hospital in East Java. Indian J Public Health Res Dev. 2020;11(3):2103–8.

21. Nirmalasari YF. Analisis Pengaruh Faktor Hygiene dan Faktor Motivator Terhadap Kepuasan Kerja Karyawan Pada PT Karya Guna Ekatama. Parsimonia-Jurnal Ekonomi dan Bisnis. 2018;5(2):199–210.

22. Santoni I, Mardjanto S. Relationship Between Work Motivation with Nurse Performance in Tegal Ampel Puskesmas Area Bondowoso District. Jurnal Kesehatan dr Soebandi. 2018;6(1).

23. Farisi S, Irnawati J, Fahmi M. Pengaruh Motivasi dan Disiplin Kerja Terhadap Kinerja Karyawan. Jurnal Humaniora: Jurnal Ilmu Sosial, Ekonomi Dan Hukum. 2020;4(1):15–33.

24. Gibson J, Ivancevich J, Donelly J. Fundamentos de dirección y administración de empresas. Colombia: McGraw Hill. 2001;

25. Yunita KE, Yulianthini NN, SE MM, Bagia IW. Pengaruh Pengalaman Kerja Dan Penempatan Karyawan Terhadap Kinerja Karyawan. Jurnal Manajemen Indonesia. 2016;4(1).

26. Fauzi A, Lindayani L, Mutiar A, Darmawati I. The Effect of Application-Based Exergames on Cognitive Function in Hemodialysis Patients. Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal). 2024;10(5):651–60.