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Motivation and leadership style influence the implementation of nursing care standards at Udayana University Hospital, Bali, Indonesia

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ABSTRACT

Background and purpose: Leadership style, work environment and motivation of nurses are related to the implementation of nursing care standards. This study aims to determine factors associated with the implementation of nursing care standards in the hospital's inpatient services.

Methods: A cross-sectional study was conducted with all of the total 65 nurses working in the inpatient wards of the Udayana University Hospital, Bali in December 2022. Data were collected with a structured questionnaire covering nurses' characteristics, leadership style, work environment, motivation and implementation of nursing care standards. Data were analyzed descriptively and analytically through path analysis assisted by a statistical software.

Results: Of the 65 nurses, 69.2% were aged 26-30 years, 64.5% were female, 75.5% have worked under 3 years, and 75.4% have a bachelor's degree in nursing. There is a relationship between motivation (with a path coefficient of 0.603, $p < 0.001$) and supportive leadership style (with a path coefficient of 0.615, $p = 0.028$) with the implementation of standard nursing care. In addition, supportive leadership style (path coefficient 0.554, $p = 0.002$), participative leadership style (path coefficient -0.353, $p = 0.061$) and achievement-oriented leadership style (path coefficient 0.426, $p = 0.002$) were associated with work motivation.

Conclusion: Nurse motivation is directly associated, while supportive leadership style is indirectly related to the implementation of nursing care standards through increasing nurse motivation. Supportive, participatory leadership styles and achievement orientation are also directly related to nursing motivation. The hospital leaders and room manager must maintain and strengthen the participatory leadership style which will improve motivation and nursing care standard.

Keywords: leadership style, work environment, nurse motivation, nursing care standards

INTRODUCTION

Nurses have essential roles in the hospital service and care. In performing their roles, nurses required to have adequate physical energy, emotional and social capacity. Working in a hospital environment with cross-cultural diversity and increasing demand to adapt to the evolving technology in health care can become a source of stress for nurses.¹

Nursing services determine a hospital's quality and image, so nursing standards must be maintained and improved according to health service industry standards. The standards include quality of care namely patient safety, clinical effectiveness and patient experience (compassion, dignity and respect). Healthcare quality-specific research identified as various attributes which include technical performance, management of interpersonal relationships, amenities of care, and responsiveness to patient's preferences, efficiency and cost effectiveness.²

These standards can be used as a benchmark for the success of nursing services and patient care quality. Nurses performance is influenced by work environment which include internal and external factor.¹ Workplace arrangements that can provide a comfortable working atmosphere can be an effective way to improve performance. In addition, relationship between people within the company, including supervisor or officials, subordinates, and colleagues.¹ Development of human resources also need to be considered through individual characteristics because this can increase morale and productivity. Individual factors, such as age, gender, educational level, and years of service, are said to be the basis for discrimination against the working class.³

At the hospital, registered nurses carry out nursing practice in a particular nursing service known as nursing care. Inpatient services are activities carried out in inpatient wards to improve health through prevention, treatment and rehabilitation. If the quality of service and care in a hospital is low, then a very important question is what kind of leadership model is it, then how far is the leader's intervention in managing care. Hospitals need to improve the quality of their human resources through education, training and increasing benefits to fulfil their vision and mission to become quality and affordable health referrals.

Nursing leadership is constantly evolving in search of better approaches. In dealing with various nursing staff and care delivery issues, nurse management must employ a particular leadership style or a combination of different styles to be effective. It is very important to motivate nurses because when they are motivated, they will work hard and with a passion for achieving greater performance levels. Individual desire to satisfy needs and ambitions is the main factor influencing and stimulating their drives. Sources of stimulation can be found both internally and externally. Self-driven usually show high energy and excitement for what they do regularly, and they actively seek more positions and responsibilities.⁴

Research shows that positive, proactive leaders who lead by example are perceived as more effective leaders and led to better staff performance.⁵ Research conducted at Fak-Fak Hospital in 2008 found three factors that influence the implementation of nursing standards: knowledge, motivation, and leadership of the head of the room. Research conducted at the Sunan Kalijaga Demak Hospital in 2017 also found that knowledge greatly influences nurses' work, and to support performance, according to nurses, sufficient knowledge is needed.⁶

Udayana University Hospital was established to support education of doctors and other health workers within Udayana University under the auspices of the Ministry of Research, Technology and Higher Education

and also to provide services to the public. There is a gap between treatment rooms at Udayana University Hospital in the implementation of nursing care standard, only 60% filled out the correct nursing medical record and complaints submitted by patients in several rooms. The inpatient service satisfaction at Udayana University Hospital was below 70%. The hospital is under ongoing improvement for all department including the Nursing Department. Therefore, we aim to explore factors which influence the implementation of nursing care standards.

METHOD

This is an analytic observational study using a cross-sectional design at the inpatients services of the Udayana University Hospital in November-December 2022. In 2022, there were a total of 149 nurses across all department, and 65 nurses in the inpatient services. The study involved all 65 nurses serving at the inpatient services of the hospital. Based on the rule of thumb for Path Analysis, the sample size must be at least 5 times larger than the parameters under study so that the minimum sample size was 55 people.

The variables measured in the study was based on the theoretical framework of the Path-Goal Leadership Model, which emphasizes leadership style as the main factor influencing the implementation of nursing care standards in addition to the work environment and nurse motivation. In addition, there are characteristics of nurses which acts as external factors that are thought to influence the implementation of nursing care standards so that these aspects are interrelated and influence one another.

Hence, the variables collected in the study include characteristics of nurses; age, gender, education, length of working period, work environment, leadership style, motivation and implementation of nursing care standards. The work environment included physical condition of workplace, supporting equipment and work methods.⁷ The leadership style was categorised as directive leadership style, supportive leadership style, participative leadership style and achievement-oriented leadership style.⁸ While the implementation of nursing care standards was measured by several aspects: a) knowledge and clinical skills about basic principles of nursing; b) values, moral sensitivity, and skills; c) managerial capability and capacity.⁹

Data were collected using an online questionnaire (google form) with a self-administered technique. The link of the google form was distributed directly to nurses. When filling out the questionnaire, the researcher emphasized self-administered questionnaires to explain the essence of the questionnaire so that errors can be minimized. Before answering the questionnaire, respondents received an explanation of informed consent. Respondents answered the questionnaire independently using their respective devices to ensure confidentiality.

In order to minimize social desirability bias, the researchers did not accompany the respondents during the data collection. Respondents filled out questionnaires in the discussion room of each ward, and when in doubt about the questions they could contact the researcher. Completion of the questionnaire took approximately 45 minutes.

Data analysis was carried out descriptively to describe each variable, and inferential analysis was also conducted to assess the relationship between variables with path analysis. The association size is the β (path) coefficient, and the inference process uses a significant p-value.

The study has been approved by the Ethics Committee of Faculty of Medicine, Udayana University with grant number:2909/UN14.2.2VII.14/LT/2022, dated: November 15, 2022.

RESULT

Most of the nurses (69.2%) were aged 26-30 years, female (64.5%), and have worked under 3 years (75.4%). The shortest length of work is 6 months and the longest working period is 10 years with an average length of work is 2.5 years. The majority (75.4%) have a Bachelor degree in Nursing (Table 1).

Table 1. Nurses' characteristics at Udayana University Hospital

Characteristics (n=65)	f (%)
Age (years)	
20-25	8 (12.3)
26-30	45 (69.2)
31-36	12 (18.5)
Gender	
Man	23 (35.4)
Woman	42 (64.5)
Working period (years)	
Mean (min-max)	2.5 (0.5-10.0)
<3	49 (75.4)
≥3	16 (24.6)
Education	
D III Nursing	16 (24.6)
S1 Nursing	49 (75.4)

There is a positive relationship between supportive leadership style and motivation with a path coefficient of 0.55 and a p-value of 0.002, while in the participatory leadership style dimension, there is a negative relationship with motivation with a path coefficient of -0.35 and a p-value of 0.061. Furthermore, on the dimensions of achievement-oriented leadership style, a positive relationship was found between achievement-oriented leadership style and motivation with a path coefficient of 0.42 and a p-value of 0.002. In the intermediate variable, namely motivation, a positive relationship was found with the implementation of nursing care standard with a path coefficient of 0.60 and a p-value of <0.001. In the analysis of the characteristics of nurses, which include age, gender, length of work and education, it was found that there is no relationship with the implementation of nursing care standards (Table 2).

Figure 1 shows the relationship between variables. The motivational variable shows a direct relationship with implementation of nursing care standards, while a supportive leadership style has an indirect relationship with the nursing care standards. Then the supportive leadership style with motivation, participative leadership style with motivation and achievement orientation leadership style with motivation also obtained a direct relationship.

Table 2. The relationship between leadership style, work environment, motivation and implementation of nursing care standards

Relationship between variables	Direct		Indirect		Total	
	coef β	p	coef β	p	coef β	p
Motivation → Implementation of nursing care standards	0.603	<0.001	-	-	0.603	<0.001
Work environment → Implementation of nursing care standards	-0.009	0.948	0.078	0.679	0.078	0.678
Directive leadership style → Implementation of nursing care standards	0.021	0.844	0.203	0.218	0.203	0.217
Supportive leadership style → Implementation of nursing care standards	0.325	0.109	0.615	0.028	0.615	0.027
Participative leadership style → Implementation of nursing care standards	0.027	0.899	-0.058	0.835	-0.060	0.831
Achievement-oriented leadership style → Implementation of nursing care standards	0.175	0.105	0.207	0.423	0.361	0.451
Directive leadership style → Motivation	0.142	0.138	-	-	0.142	0.138
Supportive leadership style → Motivation	0.554	0.002	-	-	0.554	0.002
Participative leadership style → Motivation	-0.353	0.061	-	-	-0.353	0.061
Achievement-oriented leadership style → Motivation	0.426	0.002	-	-	0.426	0.002
Work environment → Motivation	0.113	0.357	-	-	0.113	0.357
Age → Implementation of nursing care standards	0.037	0.804	-	-	0.037	0.804
Gender → Implementation of nursing care standards	-0.092	0.506	-	-	-0.092	0.506
Length of working → Implementation of nursing care standards	-0.144	0.313	-	-	-0.144	0.313
Education → Implementation of nursing care standards	0.068	0.645	-	-	0.068	0.645

bold value = statistically significant parameters

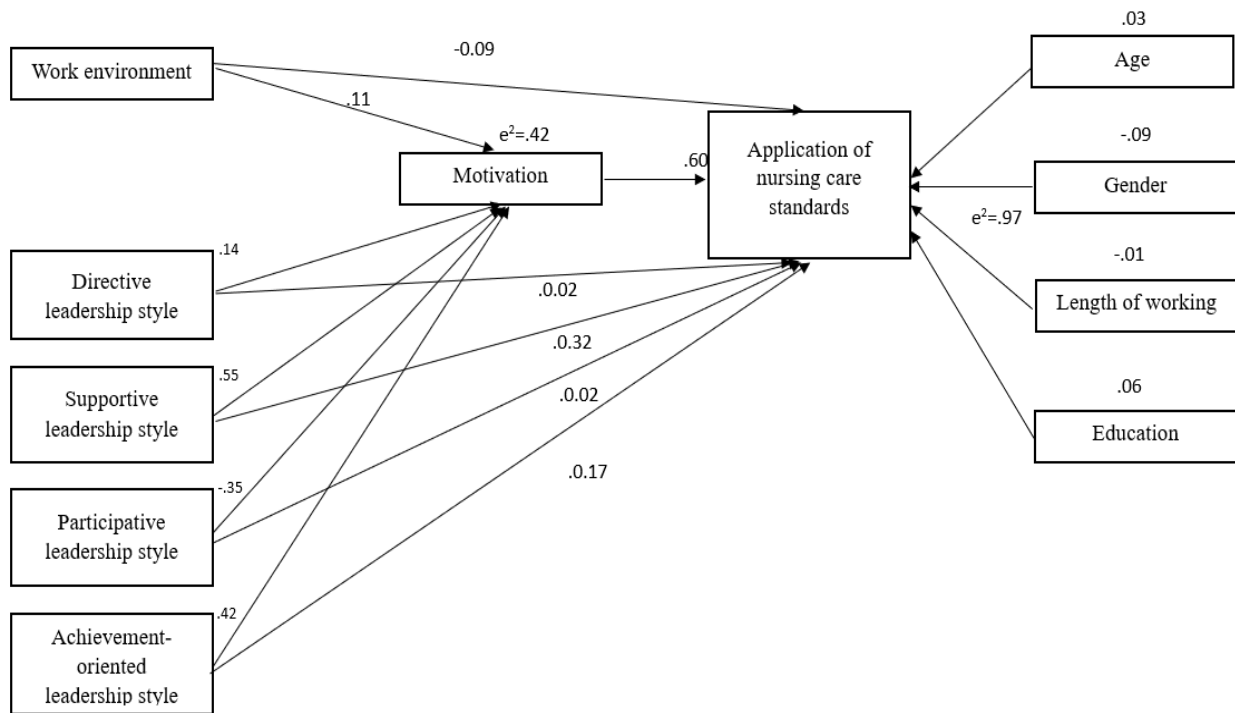


Figure 1. Path Diagram of association between variables

DISCUSSION

Nurses are staff at the forefront of the hospital in providing health services who have the task of providing holistic nursing care, including assessing patient needs, determining patient nursing diagnoses, planning nursing actions, implementing action plans, evaluating care outcomes and documenting nursing care. Our study found association between motivation and leadership style with the implementation of nursing care standards. Supportive leadership style has an indirect relationship with the nursing care standards through motivation.

Literatures suggest motivation can influence the implementation of nursing care standards by improving nurse performance. The high performance of nurses in providing nursing care can support the standardized implementation of nursing care. The results of this study are also corroborated by the research conducted by Khamida and Fadillah¹⁰ that work motivation is significantly related to performance. The results of other studies also show that motivation does affect nurse performance.¹¹ Optimal motivation will improve nurses' performance which shall impact the implementation of standardized nursing care.¹²

A leadership style that is carried out wisely can influence the staffs' motivation to provide quality nursing care to the patients. We found the supportive leadership style is related to the implementation of nursing care due to increased motivation. This study also found a relationship between various dimensions of leadership style applied by the head of the wards, including supportive, participative and achievement-oriented leadership styles, with nurse motivation.⁸

We found a 55% increase of the one level of motivation when the score of supportive leadership style increased. The dimensions of achievement orientation leadership style also show that the better the achievement

of orientation leadership style, nurse motivation increased by 42%. However, the participatory leadership style dimension reduces nurses' motivation by up to 35%. The results of this study are align with studies conducted by Daria et al¹³ and Check¹⁴, which show no direct relationship between the leadership style of the head of the room and the implementation of nursing care standards, but it is mediated by the motivation of nurses in implementing nursing care. The dominant leadership style is related to the performance and motivation of nurses in providing nursing care.¹⁵⁻¹⁷

These results are also the same as the research conducted by De Haan et.al and Janur et.al, that subordinates prefer a participative leadership style because leaders usually involve the staff on making a decision.^{18,19} It is also aligned with previous studies which found significant relationship between leadership style and the motivation of nurses in providing nursing care.^{18,20,21} There are other leadership styles that yet to be scrutinized regarding its association with implementation of standard care and motivation.²² Leadership style is an aspect of behaviour that is very important to note to achieve personal and organizational targets in an integrated manner to realize the vision and mission.¹⁸ Re-assessing and evaluating leadership style can be one of the measures that can be improved to boost motivation and implementation of standard care.

We found no significant association between sociodemographic characteristics with the implementation of standard nursing care. However, previous study shows that young nurses tend to work well. The majority of our samples were aged 26-30 years, which was similar to research conducted by Pangemanan, et al²³ based on sex, the majority of nurses in our study were female which is similar to other setting.²³ The length of work experience can affect a person's skills. The longer a person has worked at an organisation, the higher their skills tend to be. This study found that most nurses had length of working experiences of under 3 years which can be categorized as a new worker. This result follows research conducted by Samaran & Petrus Nifanngelyau²⁴, who also found that most nurses had a length of working experiences of under 3 years. Capacity building to new staff regarding standard care and appropriate leadership style are important to improve understanding, skill and implementation of nursing care standard.

The main limitation that occurs in this study is the data collection process. There is a potency of social desirability bias since the respondents know the researchers, however, we try to minimize the bias by reducing contact between researcher and respondents during data collection and using anonymous data collection forms.

CONCLUSION

Nurse motivation shows a direct relationship with the implementation of nursing care standards, and a supportive leadership style indicates an indirect relationship with the implementation of nursing care standards through increasing nurse motivation. It is hoped that hospital management will improve the quality of the supportive leadership style because, in this study, this dimension can increase motivation and is indirectly related to the implementation of nursing care standards.

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AUTHOR CONTRIBUTION

NPK designed the studies and data collection tools, conducted data analysis and drafted 1st draft of the manuscripts. IKS and CBJL critically reviewed all aspects of the research and assisted in drafting the manuscript. All authors have approved the final manuscript.

CONFLICT OF INTEREST

The authors declare that they have no potential conflict of interest concerning this research, authorship or publication of this manuscript.

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REFERENCES

1. Wibowo. Manajemen kinerja [Performance management]. 3rd ed. Jakarta: PT Raja Grafindo Persada; 2011.
2. Upadhyai R, Jain AK, Roy H, Pant V. A review of healthcare service quality dimensions and their measurement. *Journal of Health Management*. 2019; 21(1): 102-127.
3. Robin SP, Judge TA. Perilaku organisasi [Organizational behavior]. Jakarta: Salemba Empat; 2015.
4. Widayanti LP, Triaryati N, Abundanti N. Pengaruh profitabilitas, tingkat pertumbuhan perusahaan, likuiditas, dan pajak terhadap struktur modal pada sektor pariwisata [The influence of profitability, corporate growth rate, liquidity, and taxes on capital structure in the tourism sector] [Dissertation]. Denpasar: Udayana University; 2016.
5. Al-Hawary SI, Banat NA. Impact of motivation on job performance of nursing staff in private hospitals in Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*. 2017; 7(2): 54–63.
6. Hadi MF. Meningkatkan loyalitas pasien berbasis kualitas pelayanan dan kepercayaan melalui citra perusahaan (Studi pada RSUD Sunan Kalijaga Demak) [Improving patient loyalty based on service quality and trust through corporate image (A study at Sunan Kalijaga Regional Hospital, Demak)] [Dissertation]. Semarang: Sultan Agung Islamic University; 2017.
7. Sugiarti E. The influence of training, work environment and career development on work motivation that has an impact on employee performance at PT. Suryamas Elsindo Primatama In West Jakarta. *International Journal of Artificial Intelligence Research*. 2022; 6(1): 1–11.

8. Harahap DA. Hubungan motivasi perawat dengan pelaksanaan dokumentasi asuhan keperawatan [The relationship between nurse motivation and the implementation of nursing care documentation] [Internet]. 2020. Available from: <http://dx.doi.org/10.31219/osf.io/tpxez>
9. Tønnessen S, Scott A, Nortvedt P. Safe and competent nursing care: An argument for a minimum standard?. *Nursing Ethics*. 2020; 27(6): 1396-1407.
10. Khamida N, Fadilah A. Hubungan motivasi kerja dengan kinerja perawat pelaksana di ruang rawat inap RSUD Kayen [The relationship between work motivation and the performance of executive nurses in the inpatient room of Kayen Hospital]. In: Prosiding HEFA (Health Events for All); 2019.
11. Henniwati H, Eliza E. Hubungan motivasi dengan kinerja perawat pelaksana di ruangan rawat inap RSUD Padang Pariaman [The relationship between motivation and performance of implementing nurses in the inpatient room of Padang Pariaman Hospital]. *Jurnal Kesehatan Medika Sainatika*. 2020; 11(2): 123–140.
12. Dewi ES. Faktor-faktor yang berhubungan dengan motivasi perawat dalam menerapkan standar operasional prosedur (SOP) asuhan keperawatan di RSJD Atma Husada Mahakam Samarinda tahun 2016 [Factors associated with nurse motivation in implementing standard operating procedures for nursing care at the Atma Husada Mahakam Samarinda Regional Mental Hospital in 2016] [Undergraduate Thesis]. Samarinda: Sekolah Tinggi Ilmu Kesehatan Muhammadiyah; 2016.
13. Daria W, Maurissa A, Yullyzar Y, Putra A, Aklima A. Hubungan gaya kepemimpinan kepala ruang dengan pelaksanaan asuhan keperawatan [The relationship between the leadership style of the head of space and the implementation of nursing care]. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*. 2021; 5(3): 102–110.
14. Perceka AL. Pengaruh gaya kepemimpinan kepala ruangan terhadap kinerja perawat pelaksana di ruang rawat inap RSUD dr. Slamet Garut [The influence of head of room leadership style on the performance of implementing nurses in the inpatient room of dr. Slamet Garut Hospital]. *Journal Medika Cendikia*. 2018; 5(1): 57–67.
15. Suni S, Suratmi S, Qowi NH. Hubungan gaya kepemimpinan dan karakteristik individu dengan kinerja perawat [Relationship between leadership style and individual characteristics with nurse performance]. *Indonesian Journal of Global Health Research*. 2020; 3(2): 11–17.
16. Trevia R, Arifin H, Putri DE. Hubungan gaya kepemimpinan kepala ruangan dengan kinerja perawat pelaksana dalam menerapkan asuhan keperawatan di ruang rawat inap Rumah Sakit Umum Mayjenn HA Thalib Kerinci [Relationship between head of room leadership style and performance of implementing nurses in implementing nursing care in the inpatient room of the Mayjenn HA Thalib General Hospital, Kerinci]. *Jurnal Kesehatan Medika Sainatika*. 2019; 10(2): 23–32.
17. Ahmad SNA, Haryanto F, Habibi A. Hubungan gaya kepemimpinan kepala ruangan dengan kinerja perawat pelaksana di rumah sakit swasta [The relationship between head of room leadership style and performance of implementing nurses in private hospitals]. In: Prosiding Simposium Nasional Mutlidisiplin; 2021. 3(1): 2–8.
18. de Haan PLM, Bidjuni H, Kundre R. Gaya kepemimpinan dengan motivasi kerja perawat di rumah sakit jiwa [Leadership style with nurse work motivation in mental hospitals]. *Jurnal Keperawatan*. 2019; 7(2): 1–7.

19. Janur Y, Hidayat W, Lindriani. Hubungan gaya kepemimpinan dengan motivasi kerja perawat di RSUD Batara Guru Belopa, Luwu [Relationship between leadership style and nurse work motivation at Batara Guru Belopa Hospital, Luwu]. *Jurnal Ilmiah Kedokteran dan Kesehatan*. 2022; 1(1): 22–28.
20. Rusmitasari H, Mudayana AA. Kepemimpinan dan motivasi kerja tenaga kesehatan di Puskesmas Kota Yogyakarta [Leadership and work motivation of health workers at the Yogyakarta City Primary Health Care]. *Jurnal Kesehatan Masyarakat Indonesia*. 2020; 15(1): 47–51.
21. Pujiastuti M. Hubungan gaya kepemimpinan kepala ruangan dengan motivasi kerja perawat di Rumah Sakit Santa Elisabeth Medan tahun 2020 [Relationship between room head leadership style and nurse work motivation at Santa Elisabeth Hospital Medan in 2020]. *Jurnal Darma Agung Husada*. 2021; 8(1): 69–77.
22. Silitonga TR. Pengetahuan kepemimpinan dalam motivasi perawat dalam hal penugasan dan pelatihan di rumah sakit [Knowledge of leadership in nurse motivation in terms of assignment and hospital training] [Thesis]. Medan: Universitas Sumatera Utara; 2019.
23. Pangemanan WR, Bidjuni H, Kallo V. Gambaran motivasi perawat dalam melakukan asuhan keperawatan di Rumah Sakit Bhayangkara Manado [Description of nurses' motivation in carrying out nursing care at Bhayangkara Hospital, Manado]. *Jurnal Keperawatan*. 2019; 7(1): 7–9.
24. Samaran E, Nifanggelyau FP. Hubungan tingkat pendidikan perawat dan lama kerja dengan penerapan asuhan keperawatan post operatif di ruang perawatan Rumah Sakit Umum Kabupaten Sorong [Relationship between nurse education level and years of service with the implementation of post operative nursing care in the treatment room of the General Hospital in Sorong Regency]. *Nursing Arts*. 2020; 14(1): 52–57.

