

Impact of transformational leadership intervention of head nurses among front-line soldiers (staff nurses) working in government hospital

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Abstract

Objective: To assess the impact of transformational leadership intervention among head nurses on staff nurses in improving job performance.

Method: The quasi-experimental study was conducted from December 2020 to August 2021 at the public-sector Services Hospital, Lahore, Pakistan, and comprised head nurses and staff nurses enrolled through multistage cluster random sampling technique. Sixteen weeks of transformational leadership interventions were organised in morning and evening shifts. Pre- and post-intervention assessments were done. Data was analysed using SPSS 25.

Results: Of the 576 subjects, 480(83.3%) were staff nurses and 96(16.6%) were head nurses. Transformational leadership intervention caused a significant improvement in staff nurses' job performance owing to improvement in the behaviour of the head nurses behaviour ($p < 0.05$).

Conclusion: The study showed that staff nurses' performance significantly improved after transformational leadership intervention related to the head nurses.

Keywords: Transformational leadership, Head nurses, Frontline soldiers, Hospital, Job performance. (JPMA 72: 1998; 2022) (DOI: <https://doi.org/10.47391/JPMA.4167>)

Introduction

Transformational leadership skills (TLSs) include Idealised Influence (II), Idealised Behaviour (IB), Individualised Consideration (IC), Intellectual Stimulation (IS) and Inspirational Motivation (IM). Head nurses apply TLSs as motivational and innovative approaches which enhance staff nurses' job performance. IS and IM are most effective in developing a vision of quality nursing care. Furthermore, TLSs have a great influence on staff nurses' behaviour to achieve healthcare organisation goals. Therefore, visionary leaders direct, motivate and stimulate their subordinates and engage them in the achievement of organisational goals. Regrettably, nurses lack the essential awareness about TLSs. There is a dire need to adopt different strategies to improve nurses' performance.

Transformational leadership (TL) is a leadership style which highlights passion, enthusiasm for vision and performing as the role model to earn the respect, trust and admiration of employees.¹ Nursing managers who establish TL behaviour in hospitals have the greatest possibilities to build create an environment that improves high-quality nursing care and promote professionalism.²

A nurse is a trained person who provides care to the sick and the wounded. Therefore, all health organisations

need qualified, experienced and efficient nurses who may provide quality care to patients efficiently and effectively, especially in public-sector hospitals. The hospital is an In hospitals, head nurses are team leaders supervising the clinical settings.³

Head nurses are the organisers, managers and primary administrators of a nursing team (NT). In Pakistan, all the nurses are registered with the Pakistan Nursing Council (PNC), but head nurses hold higher position, rank, more power and authority than registered nurses. TL knowledge among head nurses not only improves their own quality, work efficiency, and performance, but alleviates the level of the whole NT.⁴

A cross-sectional study noted that the knowledge and awareness levels of the head nurses about TL could affect the quality of nursing care in hospitals. Such changes can be effected through improved performance of the head nurses that can be made using TL knowledge.⁵

There is a dire need to provide specific training about leadership knowledge and skills.⁶ The motivational factor of TL and management not only reduces absenteeism rate, but also improves job satisfaction, job performance and patient progress.⁷ Therefore, TL knowledge and its implementation have the strongest relationship with job performance and a higher level of trust.⁸

TL focuses on actual problems and shapes the performance of employees to attain organisational goals efficiently and effectively.⁹ TL is one of best styles to

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improve the performance of individuals.¹⁰

The role of every manager is to be a leader instead of being just a manager.¹⁰ TL is an application of innovation and motivation.^{11,12} Evidence shows that the role of TL has great importance in the success of organisation and performance.¹³ Work performance of nurses depends on trustworthy transformational leaders.¹⁴

Performance is a prescribed level of success or outcomes of a person within a certain period of time in carrying out his/her responsibilities compared with various, such as work results or targets that have been strong-minded in advance and agreed upon.¹⁵ The performance of nurses is associated with TL knowledge and skills, and organisational performance depends on head nurses' TL knowledge. Therefore, TL learning is necessary for the improvement of quality nursing care.¹⁶

A randomised controlled intervention study was conducted at the Tehran University of Medical Sciences (TUMS) on head nurses (n=110) and 660 registered nurses working in teaching hospitals. After the TL intervention, a significant improvement in the score of the interventional group ($p < 0.0001$) was noted compared to the baseline.¹⁷

TL enhances motivation which results in significantly improving nurses' job performance as head nurses.¹⁸ Transformational nursing leaders are capable of improving organisational goals according to the patients' needs by individualised consideration and team development to achieve organisational goals.¹⁹

A study conducted in the telecommunication sector showed positive relationship of TL with IM.²⁰

According to international studies, the World Health Organisation (WHO) estimates that 3-16% patients treated in hospitals are affected by adverse procedures.²¹ Poor performance of team leaders, like head nurses, is an independent cause of failure of many systems alongside the performance of staff nurses.^{21,22} Staff nurses are frontline soldiers in a healthcare setting, but without TL knowledge and skills, they cannot perform effectively. Studies have shown that positive and innovative TL is associated with work performance significantly.^{4,23} TL knowledge and its implementation have positive results related to nursing performance.²⁴

The performance of employees is influenced by TL knowledge both directly and indirectly.²⁵

Deteriorating performance of healthcare providers require TL for improvement, especially among nurses working in a public-sector setting. The current study was planned to assess the impact of TL intervention among

head nurses on staff nurses in improving job performance.²⁶

Subjects and Methods

The quasi-experimental study was conducted from December 2020 to August 2021 at the public-sector Services Hospital, Lahore, Pakistan, after the approval from the ethics review committee of the University of Lahore. A multifactor leadership questionnaire having IM and IS domains was used for evaluating the behaviour of head nurses, whereas for the staff nurses, a TL nurses' job performance observational checklist.²⁷ Training programmes comprised presentations, role plays and scenarios that were prepared on the basis of literature and textbooks.²⁸

The sample size for head nurses was calculated with 96% confidence level and 9% margin of error. Expected prevalence of post-adequate was 71.8% among the head nurses.²⁹ A multistage cluster random sample of staff nurses working under the head nurses therefore one head nurse was responsible for the supervision of 5 staff nurses in one unit (Figure-1). Those included were female nurses aged 25-60 years doing both morning and evening shifts with a minimum experience of 5 years.

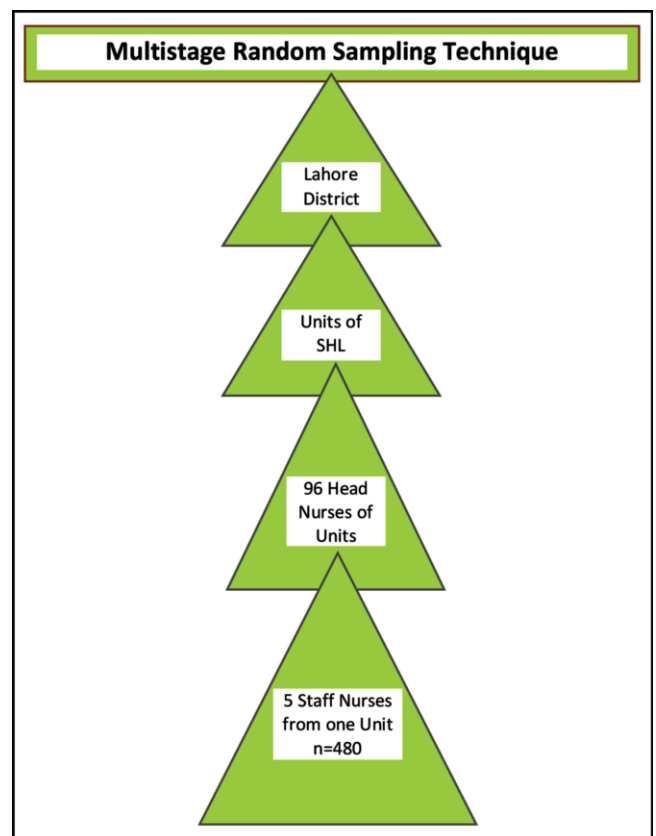


Figure-1: Multistage random sampling.

The job performance of staff nurses was measured with 41 items on a 3-point Likert scale ranging from 'incompetent', 'need improvement' and 'competent' options. The second questionnaire statement scored 1 mark for 'incompetent', 2 marks for 'need improvement', and 3 marks for 'competent'. The performance was considered competent if the scores were >68% and <68% scores were considered incompetent, and the mean score of each component was subsequently calculated by dividing the sum of all scores by the number of items.^{29,30} The reliability was checked using Cronbach's alpha coefficient test ($r=0.89$ and 0.96).

Baseline data was collected before the TL intervention, and after 16 weeks of intervention, data was collected again. The intervention comprised 6 sessions per week, with each session lasting one hour.

The principal researcher was given the intervention to the head nurses and the head nurses imparted TL education on the staff nurses for the improvement of job performance and quality of care. A total of 6 groups were made having 16 head nurses in one groups and a total of 30 groups were formed having 16 staff nurses in each group. All the subjects were given a code to maintain confidentiality and privacy.

Principal candidate organized training sessions for head nurses and then head nurses implemented their learned skills on staff nurses for the improvement of clinical performance. TL lectures were delivered in the class room of Surgical Unit 1 and the lectures were delivered by the principal researcher. The Principal researcher used different methods of teaching, such as lectures, group discussions, and brain-storming. Instructional media included handouts that were distributed to all the participants.

Data was analysed using SPSS 25. Descriptive statistics were reported as frequencies, percentages, mean and standard deviations. Paired sample t-test was used for inferential statistics. $P \leq 0.05$ was considered statistically significant.

Results

Of the 576 subjects, 480(83.3%) were staff nurses and

96(16.6%) were head nurses. Among the staff nurses, 303(64%) were aged 25-35 years, 418(87%) were married, 397(82%) had completed Bachelor of Science in Nursing, 363(76%) had 11-20 years of professional experience and 90(19%) were associated with operation theatres (OTs) (Table-1).

Table-1: Demographic characteristics of staff nurses (n=480).

Demographic	n	(%)
Age		
25-35 Y	303	64
36-45 Y	177	36
46-60 Y	0	0
Departments		
CCU	15	3
Medical unit	50	11
Surgical unit	50	11
Orthopaedic	20	4
Ophthalmology	20	4
Surgical emergency	20	4
Medical emergency	20	4
Paediatric ward	25	5
Operation theatre	90	19
Kangaroo Mother Unit	10	2
Surgical ICU	25	5
Medical ICU	15	3
VVIP	15	3
Neurology	5	1
Nephrology	5	1
Gynaecology Wards	74	16
Paediatric Emergency	11	2
Diabetic Centre	5	1
Government Officer Block	5	1
Educational Status		
General Nursing (Diploma nurses)	77	16
Bachelor of Science in Nursing	397	83
Master of Science in Nursing	6	1
Years of Experience		
5-10 years	57	12
11-20 years	363	76
21-30 years	60	13
31-40 years	0	0
Marital Status		
Single	60	12
Married	418	87
Widow	2	1

CCU: Coronary care unit, ICU: Intensive care unit.

Table-2: Mean values of head nurses' behaviour regarding transformational leadership (TL).

Transformational leadership components	Pre-intervention Mean±SD	Post-intervention Mean±SD	t	p	η^2
Inspirational Motivation	8.39±2.40	12.91±2.34	-13.17	.000	.64
Intellectual Stimulation	8.16±2.12	13.05±2.25	-14.99	.000	.70

A very highly statistical significant difference (***) $p \leq 0.001$, $df = 95$. SD: Standard deviation.

Table-3: Mean values of the job performance of staff nurses.

Job performance elements	Pre-intervention Mean±SD	Post-intervention Mean±SD	t	p	η ²
Hospital Behaviour	22.30±4.67	28.62±7.18	-23.97	.000	.54
Nursing Process	37.84±8.16	46.76±11.68	-22.33	.000	.51
Quality of care	23.98±5.21	28.78±7.17	-19.50	.000	.44

A highly statistical significant difference (***) $p \leq 0.001$. SD: Standard deviation.

The difference in mean IM and IS values post-intervention was significant compared to the baseline, and the effect size was found to be large (Table-2).

Also, the difference in terms of hospital behaviour expectation, nursing process and quality of care was significant with a large effect size (Table-3).

Discussion

TL is a visionary and modern leadership style which faces challenges with wisdom and insight. Therefore, the practice of this style could enhance nurses' performance. Hence, the organisational goals would be achieved effectively and efficiently.^{29,31}

With a study¹⁴ reported that IS and IB had significant improvement in job performance.

The current study indicated there was significant improvement in mean values related to IM and IS dimensions of TL style, which is in line with literature.³²

A study indicated that IM and IC had lower values than IS.³³

The present study found highly significant improvement related to staff nurses' job performance, nursing process and quality of care, showing that there was intrinsic motivation, intellectual stimulation, individual coaching, continued training, constructive feedback, and presence of follow-up for nurses' performance under the supervision of motivated head nurses. Similarly, a study³⁴ asserted that when the leaders provide support, motivation and a positive environment, the subordinates themselves perform with full devotion. Another study reported similar findings.³⁵

In terms of limitations, the current study was held at a public-sector health facility and comprised only female nurses. The situation might be different in private hospitals and among male nurses. The study can be replicated on a large and diverse sample for better generalisation.

In the light of the findings, however, it is recommended that TL training programmes for head nurses should be organised because a wide range of strategies can be

adopted and implemented in any healthcare organisation to support nurses grow as leaders at all levels.

Conclusion

TL-aware head nurses could influence staff nurses' job performance, nursing process and quality of nursing care.

Disclaimer: None.

Conflict of Interest: None.

Source of Funding: None.

References

1. Yavuz M. Transformational Leadership and Authentic Leadership as Practical Implications of Positive Organizational Psychology. Handbook of Research on Positive Organizational Behavior for Improved Workplace Performance. IGI Global. 2020; 11:122-39.
2. Boamah SA, Laschinger HKS, Wong C, Clarke S. Effect of transformational leadership on job satisfaction and patient safety outcomes. Nurs Outlook. 2018; 66:180-9.
3. Henen EBA, Abood SA, Nagib RM. Effect of Head Nurses' Leadership Styles on Their Nurses' Turnover Intention at Minia General Hospital. Minia Sci Nurs J. 2018; 4:37-42.
4. Wang YX, Yang YJ, Wang Y. The mediating role of inclusive leadership: Work engagement and innovative behaviour among Chinese head nurses. J Nurs Manag. 2019; 27:688-96.
5. Setiowati D. Analysis of Head Nurse on Transformational Leadership and Patients Safety Culture in Palang Merah Indonesia (PMI) Hospital at Bogor. Int J Nurs Health Ser. 2020; 3:471-6.
6. Rickard R. Challenges of the head nurse and how to lead your team effectively. BSAVA Congress Proceedings, 1st ed. Birmingham, UK: BSAVA Library, 2019; p-274-5.
7. Kanwal N, Riaz G, Riaz MS, Safdar S. Identify the causes of absenteeism in nurses Mayo Hospital Lahore Pakistan. Int J Soc Sci Manag. 2017; 4:110-4.
8. Afsar B, Masood M. Transformational leadership, creative self-efficacy, trust in supervisor, uncertainty avoidance, and innovative work behaviour of nurses. J Appl Behav Sci. 2018; 54:36-61.
9. Tian H, Shuja Iqbal SA, Qalati SA, Anwar F, Khan MAS. The Impact of Transformational Leadership on Employee Retention: Mediation and Moderation Through Organizational Citizenship Behavior and Communication. Front. Psychol 2020; 11: 1-11.
10. Arif S, Akram A. Transformational leadership and organizational performance: the mediating role of organizational innovation. Seisense J Manage. 2018; 1:59-75.
11. Abidakun A, Ganiyu RA. Linking Leadership Styles To Job Satisfaction: Perspective Of Employees In The Nigerian Breweries Industry. Ilorin J Hum Res Manage. 2020; 4:135-44.
12. Hall J, Johnson S, Wysocki A, Kepner K, Farnsworth D, Clark J. Transformational leadership: The transformation of managers and associates (HR020). Gainesville, FL: University of Florida, 2015.

13. Lin CHV, Sun JMJ. Chinese employees' leadership preferences and the relationship with power distance orientation and core self-evaluation. *Front Bus Res China*. 2018; 12:1-22.
14. Afsar B, Umrani WA. Does thriving and trust in the leader explain the link between transformational leadership and innovative work behaviour? A cross-sectional survey. *J Res Nurs*. 2020; 25:37-51.
15. Purwanto A, Bernarto I, Asbari M, Wijayanti LM, Hyun CC. Effect of transformational and transactional leadership style on public health centre performance. *J Bus Econ Manage*. 2020; 2:304-14.
16. Nguyen TT, Mia L, Winata L, Chong VK. Effect of transformational-leadership style and management control system on managerial performance. *J Bus Res*. 2017; 70:202-13.
17. Shirazi M, Emami AH, Mirmoosavi SJ. The effects of intervention based on supportive leadership behaviour on Iranian nursing leadership performance: a randomized controlled trial. *J Nurs Manage*. 2016; 24:400-8.
18. Cox AE, Ullrich-French S, Tylka TL, McMahon AK. The roles of self-compassion, body surveillance, and body appreciation in predicting intrinsic motivation for physical activity: Cross-sectional associations, and prospective changes within a yoga context. *Body Image*. 2019; 29:110-7.
19. Jensen UT, Bro LL. How transformational leadership supports intrinsic motivation and public service motivation: The mediating role of basic need satisfaction. *Am Rev Public Adm*. 2018; 48:535-49.
20. Khan H, Rehmat M, Butt TH, Farooqi S, Asim J. Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. *Futur Bus J*. 2020; 6:1-13.
21. Ballangrud R, Husebø SE, Aase K. "Teamwork in hospitals": a quasi-experimental study protocol applying a human factors approach. *BMC Nurs*. 2017; 16:34.
22. Källberg AS, Göransson KE, Florin J, Östergren J, Brixey JJ, Ehrenberg A. Contributing factors to errors in Swedish emergency departments *Int Emerg Nurs* 2015; 23:156-61.
23. Bagheri A, Akbari M. The impact of entrepreneurial leadership on nurses' innovation behaviour. *J Nurs Scholarsh*. 2018; 50:28-35.
24. Bednall TC, Rafferty AE, Shipton H, Sanders KJ, Jackson C. Innovative behaviour: how much transformational leadership do you need? *Br J Manage* 2018; 29:796-816.
25. Farahnak LR, Ehrhart MG, Torres EM, Aarons GA. The influence of transformational leadership and leader attitudes on subordinate attitudes and implementation success. *J Leadersh Organ*. 2020; 27: 98-111.
26. Kiran S, IkramKayani A. Transformational Leadership As Mediating Factor Influencing Conflict Management and Performance of Teaching Faculty at Higher Education Level: A Study in Punjab, Pakistan. *Pak Soc Sci Rev*. 2020; 4:272-84.
27. Ibrahim S, El Sayed RI, Attala M, Elmezin N. Relationship between head nurses' leadership styles and staff nurses' job performance. *Master Nurs Admin*. 2016; 5:66-74.
28. Broome ME, Marshall ES. Leading Across Systems of Care and in the Larger Community. In: Broome ME, Marshall ES, eds. *Transformational Leadership in Nursing: From Expert Clinician to Influential Leader*. USA: Springer, 2020; pp-319.
29. Abd-Elrhaman ESA, Abd-Allah NA. Transformational Leadership Educational Program for Head Nurses and its Effect on Nurses' Job Performance. *Am J Nurs Sci*. 2018; 7:127-36.
30. Nilwala N, Gunawardana K, Fernando R. Scale for Measuring Transformational Leadership in Public Sector Organizations in Sri Lanka: With Special Reference to Ministries of Western Provincial Council. *Int J Manag Sustainabil*. 2017;6:63-74.
31. To ML, Herman H, Ashkanasy NM. A multilevel model of transformational leadership, affect, and creative process behavior in work teams. *Leadersh Quart*. 2015; 26:543-56.
32. Metwally Ibrahim FG, Elghabbour GMM. Team work effectiveness and its relation with transformational leadership as perceived by nurses at Port Said General Hospitals Port Said Sci J Nurs. 2020; 7:25-41.
33. David S, Armanu A, Afnan TE. The effects of transformational leadership and personality on employee performance in Nissam Malang mediated by organizational commitment. *Russ J Agr Soc Econ Sci*. 2017; 61:207-15.
34. Steinmann B, Klug HJ, Maier GW. The path is the goal: How transformational leaders enhance followers' job attitudes and proactive behavior. *Front Psychol*. 2018; 9:2338.
35. Baljoon RA, Banjar HE, Banakhar MA. Nurses' work motivation and the factors affecting It: A scoping review. *Int J Nurs Clin Pract*. 2018; 5:11-31.