



# Effect of Transformational Leadership Programme on Unit Charge Nurses Leadership Practices: Study Protocol for Randomized Controlled Trial

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## ARTICLE INFO ABSTRACT

**Background:** In today's ever changing and demanding healthcare environment, developing leadership qualities of unit charge nurses is important for achieving organizational success. One way of enhancing leadership skills and behaviors is by administering transformational educational programme. The aim of this study is to evaluate the effect of transformational leadership programme on unit charge nurses' leadership practices. A targeted leadership development programme is developed based on leadership theory and strong evidence to be implemented to enhance charge nurses' leadership skills which in turn impacts staff nurses' work engagement and quality of care for patients.

**Research methodology:** This randomized controlled trial will enroll 184 participants, with 82 in the experimental group and 82 in the control group. A baseline pretest will be conducted using demographic profile, Leadership Practices Inventory and Utrecht work engagement scale. The study participants will receive transformational leadership educational programme, whereas it will be withheld from control group subjects. Instead, they will be provided with standard educational booklets for self-study. Comparison of leadership practice skills will be done before and after the intervention in both groups.

**Results:** Data analysis will be done using appropriate descriptive and inferential statistical methods.

**Discussion:** The primary outcome is expecting an increase of 10% leadership scores among study group subjects from pretest and post- test as assessed by the (LPI) Leadership Practice Inventory by (Kouzes & Posner 2012). The secondary outcome is expecting an increase by 5% Work engagement among study group subjects from the pretest and posttest mean as assessed by ( UWES) Utrecht Work Engagement Scale.

**Conclusion:** Transformational Educational Intervention will be an effective approach for enhancing the transformational leadership practices among Charge Nurses to develop future leaders

**Keywords:** Transformational leadership, Leadership programme, work engagement, Charge Nurses.

## Introduction and Background

According to a report on World Health Statistics, there are many challenges facing health and social care systems around the world: an aging population, increased prevalence of noncommunicable diseases, and

rapidly changing health needs of populations exacerbated by COVID-19 (WHO, 2019). The nurse leader's role is challenging and difficult in today's complex healthcare system. The covid-19 situation had a profound effect on the nursing workforce and nurse managers responsibilities. The leaders are expected to transform their organization's values, beliefs, and behaviours by influencing and leading their workers. In today's ever changing and demanding healthcare environment, developing leadership qualities of frontline nurse managers is important for success of any organization. (Figueroa, Harrison, Chauhan, & Meyer, 2019)

Leadership is defined as a process that persons usually perform to bring forth the best from themselves and their followers (Kouzes & Posner, 2007). Research about nursing leadership has developed to a great extent in the past decades. A multitude of studies indicate that relationship focused leadership styles particularly transformational leadership practices contribute to positive outcomes for the nursing workforce, including job satisfaction, intention to stay in the nursing profession, and health and wellbeing of nurses. (Wong, Cummings, & Ducharme, 2013). Transformational leadership has been shown to be particularly effective in turbulent and uncertain environments, such as those found in today's healthcare organizations (Sherman & Habel 2017). To successfully guide their staff towards the attainment of goals nurse managers needs to develop transformational leadership skills. Some studies depict transformational leadership is effective in increasing the productivity and staff engagement. Staff nurses work engagement in turn results in increased job satisfaction and organizational commitment (Purdy, Laschinger, Finegan, Kerr, & Olivera, 2010). Despite the body of evidence suggests transformational leadership is effective in achievement of organizational goals and improve patient outcomes, nurse managers are often not adequately prepared to act as transformational leaders. Charge Nurses directly involved in clinical care are often chosen because they have excelled in their clinical positions. Sometimes these positions require a bachelors or master's degree, but often there is no direct leadership training. (Krugman, Heggem, Kinney, & Frueh, 2013).

According to the report on *The Future of Nursing: Leading Change, Advancing Health*, (Institute of Medicine, 2011) Leadership is not necessarily innate; many individuals develop into leaders. Development as a leader can be achieved through more formal education and training programs. The pressure to develop more effective leadership practices resulting in meaningful improvement in patient care, is increasing (Goonan & Stoltz, 2004). Cummings et al. (2020) conducted a systematic review to identify determining factors of nursing leadership, and the effectiveness of interventions to enhance leadership in nurses. In this review 49 studies measured the impact of formal and informal educational interventions to develop leadership skills.

Some intervention studies reported a post-intervention increase in self-reported leadership practices whereas others didn't. However, due to equivocal results reported in many included studies and heterogeneity of leadership measurement tools there is no strong evidence found. Results of some intervention studies demonstrate that targeted leadership development interventions are an effective method for improving leadership among nurses. However, these positive findings should be interpreted cautiously as most studies were one-armed intervention studies, using convenience sampling with no control group. Most of the studies were self-reported scores, whereas observed measures are needed to strengthen the validity of findings.

After extensive review of literature search it is identified that there is dearth of studies on the effect of leadership development programme on charge nurses. Most of the studies conducted on the leadership styles and their characteristics are correlational in nature where the causality is not measured. It is identified that there were few studies conducted on leadership styles in Qatar, but researchers did not find studies conducted on effectiveness of targeted transformational leadership development interventions among charge nurses and acting charge nurses.

In particular, the effectiveness of transformational leadership programme in improving the leadership practices remains unclear. Although there is some fragmented evidence suggesting that targeted leadership development interventions are an effective method for improving leadership among nurses. Accordingly, this study is designed to determine the effectiveness of transformational leadership programme in enhancing transformational leadership practices by developing a targeted leadership development programme based on leadership theory and strong evidence and implement among charge nurses to enhance their leadership skills and practices which in turn impacts staff nurses work engagement and quality of care for patients.

Based on the current health scenario and considering the challenges posed by Covid-19, there is a need to develop transformational leadership skills of charge nurses with a view to develop future leaders. In this context the researcher is interested to conduct a study to answer the question, does targeted Transformational Leadership Programme increase Transformational practices?

## **Objectives**

The aim of the study is to evaluate the effect of transformational leadership programme on Unit Charge Nurses leadership practices.

**Primary Objective:** To assess the effectiveness of transformational leadership program in improving the leadership practices of unit charge nurses.

**Secondary Objective:** To explore the relationship between transformational leadership practices and work engagement among unit charge nurses.

### Hypothesis

The following hypothesis is formulated:

**H1:** There will be significant improvement of charge nurse's knowledge and skills related to transformational leadership after implementation of educational programme.

**H2:** There will be a positive correlation between charge nurse's transformational leadership practice and charge nurses work engagement after implementation of the educational programme.

### Study Methodology

#### Research Design

This study uses a parallel group, randomized control group design. The study aims to develop transformational leadership practices of charge nurses and acting charge nurses with a view to develop future leaders. The samples will be selected by computerized blocked randomization method (Polit, D., & Beck, C. 2020). The effect of intervention will be assessed by comparing pre and post-test leadership scores of experimental groups that received transformational education program and also compared with control group. The work engagement scores will also be compared between the groups and also pre and posttest.

**Pilot Study:** A pilot study will be conducted for 16 charge nurses 1 months before the study for the purpose of testing the feasibility of conducting the study and testing the proficiency of the tools.

**Setting:** The study will be conducted among selected hospitals of Hamad Medical Corporation, Qatar.

#### Participants:

The study aims to develop transformational leadership practices of charge nurses and acting charge nurses with a view to develop future leaders. The target population consists of Charge Nurses and Acting Charge Nurses working for Hamad Medical Corporation. The researcher also intends to assess the Work Engagement of charge nurses working in the same units.

#### Inclusion criteria:

- Working as a Charge Nurse or Acting Charge Nurse with all responsibilities of the nursing unit.
- Consent to participate from the Nursing Administration. (Executive Director of Nursing and respective Directors of Nursing)
- Anticipated availability for the complete programme.

#### Exclusion criteria:

- Charge Nurses or Acting Charge Nurses who are currently undergoing any Leadership Training Programme.
- Charge Nurses or Acting Charge Nurses who have already undergone Leadership Training in the recent period of 2 Years. (Either Virtual or Face to Face)

**Sampling:** The sampling frame will be prepared to get an approximate number of subjects in suitable time frame. At 80% power and 5% significance level, the required sample size is 164 (82 in each group). Percentage dropout rate is calculated and the adjusted sample size required will be 180 i.e., 90 in each group. Based on availability and expected withdrawals the enrolled subjects will be 207. The sample calculation is done based on Power Calculator by Sealed Envelope.Com.(Sealed Envelope Ltd. 2012. Power Calculator)

#### Tools/Instruments:

**The demographic profile:** Demographic Survey questionnaire consisted of socio demographic variables that comprises age, gender, highest level of education, years of experience in practice, years of experience in current role, and any leadership training attended before

**The Leadership Practices Inventory:**

The Leadership Practices Inventory (LPI) consists of 5 leadership practice domains: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, encouraging the heart (Kouzes & Posner 2017). Each of these leadership practices are measured by six items rated by 10 Point Likert Scale (1= almost never, 10= almost always). Each sub-scale ranges from 6 to 60, with higher scores indicating better transformational practices.

#### Utrecht Work Engagement Scale:

The Utrecht Work Engagement Scale (UWES), (Schaufeli et al, 2002) is a valid tool that includes 3 dimensions of WE: vigor (6 items), absorption (6 items), and dedication (5 items). A 7-point Likert scale is used, with scores ranging from 0 (never) to 6 (always); higher scores indicate higher levels of engagement.

#### Transformational Leadership Programme:

An evidence based targeted transformational leadership programme is designed to provide charge nurses an opportunity to develop transformational leadership knowledge and skill.

The programme includes a 2-day activity based educational training. The educational programme comprises of the following contents: Concepts of leadership and work engagement, transactional and transformational leadership styles, advantages, and disadvantages of transformational leaders, qualities of transformational leaders, 5- practices of exemplary leadership, the 10 commitments of transformational leadership, and interactive activities on developing transformational leadership skills. Thus, the content of the intervention is based upon a combination of leadership theories and transformational leadership practices based on 5 Practices of Exemplary leadership model (by Kouzes and Posner). The intervention will be finalized after validation by various subject experts from different leaders in nursing. The experts will validate the relevancy, objectivity, and appropriateness in the intervention by selected criteria. The scientific knowledge is completed with the views of subject experts in leadership and nursing education.



Extracted from: **Five Practices of Exemplary Leadership** by James M. Kouzes & Barry Z. Posner. (2012)

### Description of Data collection

The data will be collected after obtaining the Informed Consent from the participants.

**Assessment 1.** Two weeks prior to commencing the educational activity the study participants will receive the tools for data collection (Pre-Test) in both experimental and control groups.

**Assessment 2.** The selected staff nurses for observer- scores will be educated about the tools. 2 to 4 weeks period will be given for them to provide the responses. The observer forms will also be given to the Head Nurses and Nursing supervisors to rate the Study Participants based on the Observer Forms-LPI.

**Assessment 3.** After receiving the responses, the leadership training programme will be conducted at different time points. At the end of the programme, after 4 -week period the post test will be conducted using the tools (Post Test) in both experimental and control groups.

The assessment will be done at 2 different time points and subjected to statistical analysis to ascertain whether there is significant increase in transformational leadership characteristics among study participants following a Transformational Leadership Education Sessions. The work engagement among the charge nurses will also be assessed at two given timepoints.

The expected duration of the study will be 1 year and 6-month Year. The study is expected to begin in July 2022 and be completed by Dec 2023 (Study duration includes submission, approval process, Data Collection, analysis, and manuscript writing).

### Data Analysis

Descriptive statistics will be used to summarize and determine the sample characteristics and distribution of participants' data. The normally distributed data and results will be reported with mean and standard deviation (SD); the remaining results reported with median and inter-quartile range (IQR). The leadership practices scores will be calculated to sum of all the questions for difference domains. Categorical data will be summarized using frequencies and proportions.

Associations between two or more qualitative data variables will be assessed using Chi-square ( $\chi^2$ ) test or Fisher Exact test as appropriate between the groups (intervention vs control). Quantitative data between the two independent groups will be analysed using unpaired t or Mann Whitney U test as appropriate. Univariate and multivariate linear regression analysis (controlling and adjusted such as group, age, gender, education etc.) will be used to determine and assess the associations and predictive values of predictors stated above with leadership practices scores. The results of linear regression analyses will be presented as Coefficients with corresponding 95% CI.



All P values presented were two-tailed, and P values  $<0.05$  was considered as statistically significant. All Statistical analyses will be done using statistical packages STATA version 17.

### **Ethical Consideration**

Before commencing this study, permission from the institutional review board of Hamad Medical Corporation was obtained (MRC-01-22-386). The study started after explanations on the purpose, method, and expected effects of the study to potential participants and their written informed consent was obtained. All participants will be informed about their right to refuse or to participate or withdraw from the study at any time. Those participants data will not be utilized for the analysis. Instead, the number of dropouts / attrition rate will be mentioned in the results/ discussion of the study on completion

### **Adverse Event Reporting:**

The study does not involve any treatment, administering a drug or giving a substance to the human subjects. The study intervention is an educational programme administered to the selected participants. Hence no adverse events are anticipated. All infection control precautions will be undertaken during the education sessions. However, if any participant reports any health issues/ serious events during the educational sessions it will be managed as per the hospital research policy.

### **Results:**

The expected outcomes of the study are presented below

The primary target outcome will be enhancing transformational leadership behavior as assessed by using Leadership Practice Inventory. A mean score percentage of 10 % increase is expected in the experimental group compared to control group. Significant higher scores for transformational leadership are expected in the experimental group compared to control group.

The study also aims to assess the work engagement of charge nurses. The secondary outcome will be improved work engagement due to the charge nurses' transformational style of leadership practices. A mean score difference of 5 % will be expected in experimental group as compared to control group.

### **Discussion:**

This is a randomized clinical trial designed by registered nurse which is a rare phenomenon. The transformational leadership programme will be developed by nurses and administered to charge nurses and acting charge nurses. It is very much clinical nurse led research in emphasis. Most of the research done on transformational leadership are correlation in nature, hence we decided to evaluate the effectiveness of targeted educational programme for charge and acting charge nurses to develop their leadership practices. The study aims to show that this targeted intervention will be effective in enhancing transformational leadership practices. Significant higher scores for transformational leadership are expected in the experimental group compared to control group.

The researcher also intends to assess the work engagement of charge nurses/ acting charge nurses in the study. These subjects are of interest because the transformational characteristics exhibited by the study participants may impact their work engagement. The idea for assessment of work engagement roots to find a relation between transformational leadership practices and enhanced work engagement among nurses.

The study results can recommend for development of targeted educational interventions for middle level managers to enhance their leadership skills and practices which in turn impacts staff nurses work engagement and quality of care for patients

### **Conclusion:**

This randomized control trial is designed to evaluate the effectiveness of targeted educational intervention on transformational leadership development. Transformational Educational Intervention will be an effective approach for enhancing the transformational leadership practices among charge nurses to develop future leaders.

**Sponsor, Funding & Collaborator Information:** No funds were requested from any Organization.

**Consent for publication.** Not applicable.

### **Competing interests**

The authors declare that they have no competing interests.

### **References:**

1. World Health Organization. (2019). World health statistics 2019: monitoring health for the SDGs, sustainable development goals. World Health organization. <https://apps.who.int/iris/handle/10665/324835>

2. Parija, S. C. (2021). Nurses: A voice to lead—a vision for future health care. *Pondicherry Journal of Nursing*, 14(2), 25–25. <https://doi.org/10.5005/jp-journals-10084-13108>
3. Figueroa, C. A., Harrison, R., Chauhan, A., & Meyer, L. (2019). Priorities and challenges for Health Leadership and Workforce Management globally: A rapid review. *BMC Health Services Research*, 19(1). <https://doi.org/10.1186/s12913-019-4080-7>
4. Wong, C. A., Cummings, G. G., & Ducharme, L. (2013). The relationship between nursing leadership and patient outcomes: A systematic review update. *Journal of Nursing Management*, 21(5), 709–724. <https://doi.org/10.1111/jonm.12116>
5. Kouzes, J., M. & Posner, B., Z. (2000). Leadership Practice Inventory: Psychometric Properties. from [http://media.wiley.com/assets/463/73/lc\\_jb\\_psychometric\\_properti.pdf](http://media.wiley.com/assets/463/73/lc_jb_psychometric_properti.pdf), Transformational leadership - Langston. (2017). Retrieved October 19, 2021, from [https://www.langston.edu/sites/default/files/basic-content\\_files/TransformationalLeadership.pdf](https://www.langston.edu/sites/default/files/basic-content_files/TransformationalLeadership.pdf).
6. Sherman, R., & Habel, M. (2017). The role of Transformational Leadership in Nursing. Nurse.com digital guides and publications. from <https://resources.nurse.com/magnet-hospitalstransformational-leadership>. Palalic, R., & Ait Sidi Mhamed, E. M. (2020). Transformational leadership and MNCs: evidence from Morocco community. *Journal of Enterprising. Communities*, 14(2), 201–230. <https://doi.org/10.1108/JEC-01-20200002>.
7. Al-Ansi, A., Rahardjo, K., & Prasetya, A. (2015). Analysis Impact of Leadership Style and Pay Fairness on Job Satisfaction and Organizational Commitment. 2319–7668. <https://doi.org/10.9790/487X-173>
8. Purdy, N., Laschinger, H.K., Finegan, J., Kerr, M., & Olivera, F. (2010). Effects of work environments on nurse and patient outcomes. *Journal of Nursing Management*, 18(8), 901–913. <https://doi.org/10.1111/j.1365-2834.2010.01172>.
9. Krugman, M., Heggem, L., Kinney, L. J., & Frueh, M. (2013). Longitudinal Charge Nurse Leadership Development and evaluation. *JONA: The Journal of Nursing Administration*, 43(9), 438–446. <https://doi.org/10.1097/nnn.0b013e3182a23b26>
10. IOM (Institute of Medicine). (2011). *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: The National Academies Press. <https://www.mapn.org/Resources/Documents/IOM%20Report%20on%20Nursing.pdf>
11. Goonan, K. J., & Stoltz, P. K. (2004). Leadership and management principles for outcomes-oriented organizations. *Medical Care*, 42(4). <https://doi.org/10.1097/01.mlr.0000120782.03031.b4>
12. Cummings, G. G., Lee, S., Tate, K., Penconek, T., Micaroni, S. P. M., Paananen, T., & Chatterjee, G. E. (2021). The Essentials of Nursing Leadership: A systematic review of factors and educational interventions influencing nursing leadership. *International Journal of Nursing Studies*, 115, 103842. <https://doi.org/10.1016/j.ijnurstu.2020.10384>
13. Sealed Envelope Ltd. 2012. Power Calculator for continuous outcome superiority trial. Available from: <http://sealedenvelope.com/power/continous-superiority.pdf>.