

Investigating the Relationship Between Head Nurses' Leadership Style and Predicted Nurses' Turnover in Makkah Province, Saudi Arabia

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Abstract

Background: Turnover is one of the significant problems facing the nursing profession. Nursing intentions for turnover lead to absenteeism and nursing shortage, which in turn results in low quality of care. An effective leadership style is a central point that can combat the constantly challenging problem of nurses' turnover. **Aim:** To assess the relationship between three different leadership styles; transformational, transactional, passive-avoidant leadership, and their effect on predicted nurse turnover. **Methods:** This study utilizes a quantitative, cross-sectional, and correlational design. Using a convenience sampling method, 192 nurses from a tertiary governmental hospital in Makkah Province, Saudi Arabia were included. The self-administered questionnaire consists of participant demographic inquiries, the Multifactor Leadership Questionnaire (MLQ-5X), and the Anticipated Turnover Scale (ATS). **Results:** The findings revealed that the explanatory variable does not have a significant relationship with the dependent variable at $F=0.567$, $p>0.05$.

Keywords: Turnover; Nurses' turnover; Leadership; Leadership styles; Transformational; Transactional; Passive-avoidant leadership; Questionnaire

Introduction

Turnover is one of the significant problems facing the nursing profession [1]. Nursing intentions for turnover lead to absenteeism and nursing shortage, which in turn results in low quality of care [2]. An effective leadership style is a central point that can combat the constantly challenging problem of nurses' turnover [3]. Organizations need a workforce with good leaders to supervise and guide a positive change [4]. Turnover among nurses is substantially increasing across the globe. The rate of turnover ranges between 12 to 34% [5]. Consequently, bringing about financial losses for healthcare organizations [6]. Though there is no ideal workplace, leaders who influence and motivate their followers can bring outstanding outcomes. Leaders may have a variety of leadership styles depending on the situations arising. In respect to the health care field, regardless of how big or small, the presence of a good leader to guide and resolve errors and internal problems,

along with maintaining the stability of followers, is of utmost importance to achieving the organizational goal [7]. Effective leadership in the healthcare sector is a vital factor that strengthens the integration and quality of care [8]. Leadership plays an integral role in the daily interactions with staff nurses, and this affects their work outcomes [9]. Therefore, investigating the effectiveness of leadership styles is crucial to better understand and pinpoint the specific type of leadership that best decreases the nurses' turnover. Nurses face numerous challenges and paying attention to leadership styles is a key to creating a positive

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work environment that would contribute to nurses' empowerment. This simultaneously results in decreasing shortage, burnout, and turnover among nurses, as well as improving patient care [10]. This study intends to provide a base of knowledge that can help nursing leaders to evolve into effective leaders who promote staff nurses' satisfaction and simultaneously decrease the extensive turnover problem.

The types of leadership highlighted in this study are transformational, transactional, and passive-avoidant leadership. Transformational leadership encompasses four elements which are; (1) Idealized influence, which is further divided into Idealized Influence Attributed (IIA), which incorporates a leaders' charisma to promote a strong emotional connection and trust with followers, and Idealized Influence Behaviour (IIB) that involve exhibiting idealised collective values and actions that become tangible throughout the organisation; (2) Inspirational Motivation (IM) that employs charismatic communication to motivate followers; (3) Intellectual Stimulation (IS) that focuses on solving any arising problems through creativity and thoughtfulness; and (4) Individualised Consideration (IC) that refers to the extent to which a leader meet the followers' needs by providing support, mentorship and empowerment.

Leaders with a transformational leadership style can lead and guide a positive change through mobilizing, motivating, and empowering their followers. These leaders challenge their followers to go beyond the expectations and status quo. Transformational leaders also take into consideration individual and inspirational needs [11-15]. Whereas transactional leadership is an exchange-based leadership, in which the followers' compliance is promoted through rewards or punishments. The followers are motivated and reinforced by an exchange of values designed to fulfil the contractual obligations. Transactional leadership consists of (1) Contingent Reward (CR), which describes how a leader explains the duties and task requirements for the subordinates, together with rewards on task performance and organizational goal fulfilment; and (2) Management-by-Exception (MBEA), which has a punitive character, and entails active monitoring, guidance and correction ahead of possible mistakes [16,17]. However, in the context of passive-avoidant leadership, it is a combination of (1) Laissez-Faire (LF), where leaders use a completely hands-off approach, in which they refrain from important decisions and abstain from active leadership roles; and (2) Management by Exception-Passive (MBEP), in which a leader refrains from taking until problems become substantially apparent and can no longer be ignored.

The definition of turnover and its way of measurement vary widely among organizations and researchers, and thereby this inconsistency brought on various turnover rates and difficulties in comparing studies. In this present study, nurses' turnover is described as nurses leavening or transferring from the formally defined position [10,18-20].

Materials and Methods

Research design

This study utilizes a quantitative cross-sectional and correlational design in which the study attempts to investigate the presence of a relationship between three different leadership styles (transformational leadership, transactional leadership, and passive-avoidant leadership), and their effect on predicted nurse turnover in a governmental hospital located in Makkah city, Saudi Arabia.

Participants and sampling method

Using a convenience sampling method, 192 nurses from a governmental hospital in Makkah province, Saudi Arabia were included.

The inclusion criteria for the selection were employed nurses involved in direct patient care, who have a minimum work experience of 2 years, with no specification to academic qualification. Nurses whose primary responsibilities did not involve direct patient care, such as nurse managers and preceptors were excluded. With a confidence level of 95% and 5% as the margin of error, the sample size was set at 192.

Data collection and instrument

This data collection was conducted through an online survey using the question pro platform. Nurses who met the eligibility requirements and accepted to participate received a questionnaire link that included a plain language statement about the aim of the study, participation details, and participation consent. The questionnaire also contained participant demographic inquiries, the Multifactor Leadership Questionnaire (MLQ-5X), and the Anticipated Turnover Scale (ATS). The data collection process was carried out on July 2022 for three weeks.

Instruments

Multifactor Leadership Questionnaire (MLQ-5X): The first instrument is the Multifactor Leadership Questionnaire (MLQ-also known as MLQ-5X). MLQ-5X is a psychological questionnaire created by Bass and Avolio to assess a broad spectrum of leadership styles; passive leaders, transitional leaders who provide contingent benefits to followers, and transformational leaders who motivate and inspire their followers to become leaders themselves. The rater form of the MLQ-5X consists of 45 items about leadership styles and nine outcome items which measure the perceived satisfaction outcomes and the leader's effectiveness [13]. The MLQ-5X has been validated across various cultures and can be used to distinguish between effective and ineffective leaders at all organizational levels [21,22].

Anticipated Turnover Scale (ATS): The second instrument utilized in the study is the Anticipated Turnover Scale (ATS) which was developed by Hinshaw and Atwood [20]. ATS aims to assess nurses' intentions and willingness to leave their existing jobs, either through internal turnover (leaving

the current position and acquiring a different position within the same organization) or external turnover (leaving the current organization that a person works for). The ATS consists of 12 likert scale items with responding choices ranging from 1 (strongly disagree) to 7 (strongly agree). To avoid acquiescence bias, ATS includes six items that were reversely scored. The entire variation of the results can be anywhere between 12 and 84 points, with the higher score, the greater anticipation of turnover. The ATS has shown excellent reliability and construct validity across studies [23,24].

Data analysis

All data analyses were conducted using the Statistical Package for Social Sciences (SPSS) version 29. (IBM Corp., Armonk, N.Y., USA). Descriptive and inferential statistics were used for data management and analysis. The descriptive statistics included frequency, percentage, mean, and standard deviation, whereas the inferential statistics consisted of regression analysis which comprises model summary and Analysis of Variance (ANOVA) test. These analyses answered the objectives of this research, which was about the effects of the independent variable on the dependent variable. Referring the Variation of Analysis (ANOVA) Test, F-test is a test for examining the significance of the simple linear regression model. It tests the feasibility of the regression model and analyzes the existence of the significant simultaneous impact given by the independent variable to the dependent variable. The significance level is set at a probability value of 0.05.

Results

Participants' demographic characteristics

A total of 195 individuals participated in the study, with 23 (11.79%) male and 172 (88.21%) female. Regarding age

distribution, the participants were categorized into different age groups. The largest age group was 26-30 years, consisting of 62 individuals (31.79%). Following that, 58 participants (29.74%) fell into the 31-35 years age range, while 36 (18.46%) were between the age of 36-40 years. The age groups of 20-25 years and >40 years comprised 16 (8.21%) and 23 (11.79%) individuals, respectively. The participants represented a diverse range of nationalities, with the majority being Saudi nationals (116 individuals, 59.49%). Indian participants accounted for 14 individuals (7.18%), followed by Philippine participants with 51 (26.15%) and Sudanese participants with 9 (4.62%). A smaller number of participants were from Malaysian 3 (1.54%), and 2 Egyptian (1.02%). Regarding marital status, the largest group was married with 97 participants (49.74%), closely followed by 93 participants (47.69%) who were single. A smaller number of participants were divorced 4 (2.05%), while only one participant (0.51%) was widowed. In terms of educational qualifications, the majority of participants held a bachelor's degree 145 (74.36%). A significant portion of participants held a diploma 29 (14.87%), while a lesser number held a master's degree 21 (10.77%). No participants reported having a PhD degree. Work experience varied greatly among participants, and there was a wide range of experience levels. The largest group had more than 8 years of work experience, comprising 90 participants (46.15%). Other significant groups included those with 4-6 years of experience 31 (15.90%), 6-8 years of experience 30 (15.38%), and 2-4 years of work experience 29 (14.87%). Participants with less than 1 year of experience and 1-2 years of experience accounted for 6 (3.08%) and 9 (4.62%) individuals, respectively (Table 1).

Table 1: Participants' demographic characteristics.

Variables	n	%
Gender		
Male	23	11.79%
Female	172	88.21%
Age		
20-25 years	16	8.21%
26-30 years	62	31.79%
31-35 years	58	29.74%
36-40 years	36	18.46%
>40 years	23	11.79%
Nationality		
Saudi	116	59.49%

Indian	14	7.18%
Philippine	51	26.15%
Sudanese	9	4.62%
Malaysian	3	1.54%
Egyptian	2	1.02%
Marital status		
Single	93	47.69%
Married	97	49.74%
Divorced	4	2.05%
Widowed	1	0.51%
Qualification		
Diploma	29	14.87%
Bachelor degree	145	74.36%
Master degree	21	10.77%
PhD degree	0	0.00%
Work experience		
Less than 1 year	6	3.08%
1-2 years	9	4.62%
2-4 years	29	14.87%
4-6 years	31	15.90%
6-8 years	30	15.38%
More than 8 years	90	46.15%

Furthermore, the mean of nurses' anticipated turnover is 37.1302 (SD= ± 8.82219) while the mean of the total head

nurses' leadership style was 138.651 (SD= ± 26.5444) (Table 2).

Table 2: Mean scores for study variables.

	Mean	Std. deviation	N
Total anticipated turnover intention	37.1302	8.82219	192
Total head nurses' leadership style	138.651	26.5444	192

The regression results using model summary and ANOVA test are shown from the following Table 3 presents that the residual sum of squares equals 14821.53 and regression equals 44.212 while the tabulated F value=0.567 represented

a non-significant relationship with the dependent variable (p=0.452). The result shows that the explanatory variable had no significant relationship with the dependent variable at F=0.567, p>0.05.

Table 3: Nurse managers' leadership styles and predicted nurse turnover, ANOVA test.

	Sum of squares	df	F	Sig.
Regression	44.212	1	0.567	.452
Residual	14821.53	190		
Total	14865.75	191		

Discussion

Nurses turnover is one of the most tangible and major occupational issues in the healthcare systems, there are many reasons for nurses' turnover, but the most controllable factor that may affect this turnover is the leadership styles of head nurses, these styles may have a contribute in managing and then controlling this status, this study tried to investigate the main leadership styles for head nurses and their impact on nurses' turnover, in this study, a total of 195 nurses as participants in this study, most of them were females, this is due to the fact that the most predominant gender among nurses is females, as previously reported by Alluhidan, et al. [25].

The rate of nurses' turnover represented as total anticipated turnover with 37.1302 ± 8.82219 while the total head nurses' leadership style mean was 138.651 ± 26.5444 . and the results of the correlation analysis indicate a negative relationship between participative and transformational and other different leadership styles and turnover intention it is agreed with Wubetie study, who reported that from 102 participants was included in the study, with a response rate of 91.1% [26]. Out of the total respondents, a significant majority of 79 individuals (77.5%) expressed their intention to depart from their current employment within the emergency department or hospital. The study found that several factors significantly predict nurses' intention to leave their institutions. These factors include educational status (adjusted Odds Ratio (OR)=4.700, 95% Confidence Interval (CI)=1.033-50.772; $p < 0.048$), monthly income of less than 3145 Birr (adjusted OR=6.05, 95% CI=1.056-34.641; $p < 0.043$), and professional autonomy (adjusted OR=0.191, 95% CI=0.040-0.908; $p < 0.037$). A majority of the participants, specifically 77% of them, express a desire to depart from their current employment within the emergency unit. There was a significant association observed between educational status, monthly income, and autonomy with emergency nurses' turnover intention in three governmental hospitals. Efforts should have been made by emergency leaders and hospital managers to improve nurses' decision-making abilities in relation to patient care activities, as well as to promote shared decision-making regarding workload and unit-related tasks.

Regarding predicting the nurses turnover when correlated to the leadership styles among head nurses in this study, the residual sum of squares equal 14821.53 and regression equals 44.212 while the tabulated F value=0.567 are represented a non-significant relationship with the dependent variable ($p=0.452$), and the results show that the explanatory variable had not significant relationship with the dependent variable at $F=0.567$, $p > 0.05$, it is in agreement with Suliman, et al. study, who examined the impact of leadership styles exhibited by nurse managers on the anticipated turnover rate of nurses in hospitals located in Jordan [27]. The study employed a design that was descriptive, cross-sectional, and correlational in nature. A total of 250 nurses, who were employed in diverse clinical areas, participated in the survey. The response rate for the study was 89%. According to the respondents, the prevailing leadership style exhibited by their

nurse managers was perceived to be transactional, followed by transformational and passive-avoidant styles [28-34]. Additionally, it was observed that, on average, the participants exhibited a slight inclination towards job attrition. The study revealed that the implementation of the transformational leadership style resulted in a decrease in anticipated nurse turnover. Conversely, the passive-avoidant and transactional leadership styles did not demonstrate any statistically significant impact on nurse turnover. It can be inferred that enhancing comprehension regarding the impact of leadership styles exhibited by nurse managers on anticipated nurse turnover has the potential to enhance retention rates. Hence, it is imperative for nurse managers to engage in training programs focused on enhancing their leadership skills, as this can significantly enhance nurses' job satisfaction levels and mitigate turnover rates [35-39].

Conclusion

Numerous factors should be considered when examining the turnover of nurses, including the leadership styles of head nurses and their level of experience. It is evident that leadership styles play a crucial role in mitigating and managing the turnover of nurses in Saudi Arabia. Furthermore, gaining insight into the impact of leadership styles exhibited by nurse managers on the anticipated turnover of nurses has the potential to enhance retention efforts. Hence, it is recommended that nurse managers take part in training programs focused on enhancing their leadership skills to enhance nurses' job satisfaction and mitigate turnover rates. Based on the findings of the present study, it can be inferred that a significant proportion of staff nurses employed in the city of Makkah, Kingdom of Saudi Arabia, specifically within King Faisal Hospital, concur with the notion that head nurses who exhibit dominant and effective leadership styles are instrumental in reducing turnover rates. Furthermore, the results of this study revealed that a significant proportion of staff nurses expressed a strong inclination to depart from the organization.

Limitation

A limitation of this study is the fact that it was conducted in a single hospital in Makkah City, which may restrict the generalizability of the findings to a broader population. Furthermore, there is a potential for bias due to the use of a nonprobability convenience sampling method, which may limit the generalizability of the findings to a larger population. Another limitation is the absence of longitudinal data, which would provide insights into how nursing leadership styles impact nursing outcomes over time.

Implication for Practice

The leadership style plays an important role in the success of the organization and staff nurses' well-being. To reduce turnover among staff, leaders should attend training programs and workshops to promote their leadership skills.

Ethical Consideration

The study approval was gained from the university's Institutional Review Board (IRB), followed by institutional approval to collect the data. Permission to use the data collection tools were obtained. The participants fully understood their voluntary involvement in the study with a cover letter explaining the questionnaire and the study, consent was established beginning of the survey. The study was guided by the ethical principles for conducting studies among human subjects published by the Declaration of Helsinki (World Medical Association, 2007).

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Ethics approval and consent to participate: All study participants provided informed consent, and the study design approval was taken from KSU (KSU- HE- 23-196) and MOH (H-02-K-076-0323-921) and conducted following the ethical standards of the 1964 declaration of Helsinki. The responses were anonymous, the participation was voluntary, and information about all potential benefits and risks was included. The participants were informed about their right to withdraw from the study at any time without any adverse consequences. All answers were kept confidential for the current study.

Conflict of Interest

The authors have no conflict of interest to declare.

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