Chelonian Conservation And Biology

Vol. 17No.2 (2022) | https://www.acgpublishing.com/ | ISSN - 1071-8443

DOI:doi.org/10.18011/2022.04(1) .3196.3204

EXAMINING THE RELATIONSHIP BETWEEN CONTINUING EDUCATION AND JOB PERFORMANCE AMONG NURSING TECHNICIANS IN KSA

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Nursing technician

Abstract

Continuing education plays a crucial role in maintaining and enhancing the knowledge, skills, and competencies of healthcare professionals, including nursing technicians. This study aims to examine the relationship between continuing education and job performance among nursing technicians in Saudi Arabia. A cross-sectional survey was conducted among 500 nursing technicians working in various healthcare facilities across the country. The survey assessed participants' involvement in continuing education activities, their perceived impact on job performance, and their actual job performance ratings. Descriptive statistics, correlation analysis, and multiple regression were used to analyze the data. The findings revealed a significant positive relationship between continuing education and job performance, with those engaging in more continuing education activities displaying higher job performance ratings. The study highlights the importance of promoting and supporting continuing education for nursing technicians in KSA to improve the quality of patient care and overall healthcare outcomes.

Introduction

Nursing technicians play a vital role in delivering quality healthcare services in various settings, including hospitals, clinics, and long-term care facilities. In Saudi Arabia, nursing technicians work alongside registered nurses and other healthcare professionals to provide essential patient care, such as monitoring vital signs, administering medications, and assisting with personal hygiene [1]. As the healthcare landscape continues to evolve, with advancements in technology, changes in patient demographics, and the emergence of new diseases, it is crucial for nursing technicians to continuously update their knowledge and skills to meet the changing demands of their roles [2].

Continuing education refers to the learning activities and programs that healthcare professionals engage in after their initial training and certification to maintain, enhance, and broaden their knowledge, skills, and competencies [3]. Continuing education can take various forms, such as

attending conferences, workshops, seminars, online courses, and in-service training sessions [4]. Previous studies have demonstrated the positive impact of continuing education on healthcare professionals' job performance, patient outcomes, and overall healthcare quality [5-7].

In Saudi Arabia, the Ministry of Health (MOH) and the Saudi Commission for Health Specialties (SCFHS) have emphasized the importance of continuing education for healthcare professionals, including nursing technicians [8]. The SCFHS has established mandatory continuing education requirements for healthcare professionals to maintain their licensure and practice in the country [9]. However, there is limited research on the actual involvement of nursing technicians in continuing education activities and its relationship with their job performance in the Saudi Arabian context.

This study aims to address this gap by examining the relationship between continuing education and job performance among nursing technicians in Saudi Arabia. The findings of this study can provide valuable insights for healthcare organizations, policymakers, and educators to develop and implement effective strategies to promote continuing education and enhance the job performance of nursing technicians in the country.

Methods

Study Design and Participants

A cross-sectional survey design was employed to collect data from nursing technicians working in various healthcare facilities across Saudi Arabia. The target population included all nursing technicians who were actively practicing in the country at the time of the study. A stratified random sampling technique was used to select participants from different regions and types of healthcare facilities to ensure a representative sample. The sample size was calculated using the Raosoft sample size calculator, with a margin of error of 5%, a confidence level of 95%, and a response distribution of 50%. Based on these parameters, a minimum sample size of 377 was required. However, to account for potential non-response and incomplete surveys, a total of 500 nursing technicians were invited to participate in the study.

Data Collection

Data were collected using a self-administered online survey developed by the researchers based on a review of relevant literature and consultation with experts in the field. The survey consisted of three main sections: (1) demographic and professional characteristics, (2) involvement in continuing education activities, and (3) job performance. The survey was piloted with a small group of nursing technicians (n=30) to assess its clarity, relevance, and ease of completion. Minor revisions were made based on the feedback received.

The final survey was distributed electronically to the selected participants via email, with a cover letter explaining the purpose of the study, the voluntary nature of participation, and the confidentiality of responses. Participants were given two weeks to complete the survey, with a

reminder email sent after one week. Informed consent was obtained from all participants before they could access the survey.

Measures

Demographic and Professional Characteristics

Participants were asked to provide information on their age, gender, educational level, years of experience as a nursing technician, type of healthcare facility they work in, and region of practice.

Involvement in Continuing Education Activities

Participants' involvement in continuing education activities was assessed using a series of questions adapted from previous studies [10, 11]. Participants were asked to indicate the number of continuing education activities they had attended in the past year, the types of activities (e.g., conferences, workshops, online courses), and the total number of hours spent on these activities. They were also asked to rate the perceived impact of continuing education on their job performance using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

Job Performance

Job performance was measured using a 10-item scale developed by the researchers based on the core competencies for nursing technicians outlined by the SCFHS [12]. The scale assessed participants' self-reported performance in areas such as patient care, communication, teamwork, professionalism, and technical skills. Each item was rated on a 5-point Likert scale (1 = poor, 5 = excellent). The total score ranged from 10 to 50, with higher scores indicating better job performance. The scale demonstrated good internal consistency reliability (Cronbach's alpha = 0.87).

Data Analysis

Data were analyzed using SPSS version 26.0. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic and professional characteristics of the participants, their involvement in continuing education activities, and their job performance scores. Pearson's correlation coefficient was used to examine the bivariate relationship between the number of continuing education hours and job performance scores. Multiple linear regression analysis was conducted to assess the predictive relationship between continuing education hours and job performance while controlling for demographic and professional characteristics. A p-value of less than 0.05 was considered statistically significant.

Results

Demographic and Professional Characteristics

A total of 478 nursing technicians completed the survey, yielding a response rate of 95.6%. The majority of the participants were male (62.3%), aged between 25 and 34 years (58.2%), and held a diploma in nursing (79.1%). The average years of experience as a nursing technician was 6.5 years (SD = 4.2). Most of the participants worked in public hospitals (72.8%) and were from the central region of Saudi Arabia (41.6%). Table 1 presents the detailed demographic and professional characteristics of the participants.

Table 1. Demographic and Professional Characteristics of the Participants (N = 478)

Characteristic	**n (%)**
Gender	
- Male	298 (62.3%)
- Female	180 (37.7%)
Age (years)	
- <25	82 (17.2%)
- 25-34	278 (58.2%)
- 35-44	96 (20.1%)
- ≥45	22 (4.6%)
Educational Level	
- Diploma in Nursing	378 (79.1%)
- Bachelor's Degree in Nursing	100 (20.9%)
Years of Experience	
- <5	192 (40.2%)

Characteristic	n (%)
- 5-9	186 (38.9%)
- ≥10	100 (20.9%)
Type of Healthcare Facility	
- Public Hospital	348 (72.8%)

nvolvement in Continuing Education Activities

The majority of the participants (87.4%) reported attending at least one continuing education activity in the past year. The average number of continuing education hours completed was 24.6 hours (SD = 18.5). The most common types of continuing education activities attended were workshops (68.2%), followed by conferences (45.6%) and online courses (38.9%). Participants generally had positive perceptions of the impact of continuing education on their job performance, with a mean score of 4.2 (SD = 0.7) on a 5-point Likert scale.

Job Performance

The mean job performance score was 41.8 (SD = 5.6) out of a possible 50 points. Participants scored highest in the areas of professionalism (M = 4.4, SD = 0.6) and communication (M = 4.3, SD = 0.7), and lowest in the areas of technical skills (M = 3.9, SD = 0.8) and patient care (M = 4.1, SD = 0.7).

Relationship Between Continuing Education and Job Performance

Pearson's correlation analysis revealed a significant positive relationship between the number of continuing education hours and job performance scores ($r = 0.42$, $p < 0.001$). Multiple linear regression analysis showed that continuing education hours significantly predicted job performance scores ($\beta = 0.38$, $p < 0.001$), even after controlling for demographic and professional characteristics. The model explained 22.4% of the variance in job performance scores ($R^2 = 0.224$, $F(6, 471) = 22.7$, $p < 0.001$). Table 2 presents the results of the multiple linear regression analysis.

Table 2. Multiple Linear Regression Analysis Predicting Job Performance Scores

Predictor	B	SE B	β	p
Constant	28.42	1.85		<0.001

Predictor	B	SE B	β	p
Continuing Education Hours	0.11	0.02	0.38	<0.001
Age	0.03	0.04	0.04	0.451
Gender	-0.62	0.48	-0.05	0.197
Educational Level	0.79	0.58	0.06	0.176
Years of Experience	0.08	0.05	0.07	0.132
Type of Healthcare Facility	0.31	0.41	0.03	0.452

Discussion

This study examined the relationship between continuing education and job performance among nursing technicians in Saudi Arabia. The findings revealed that the majority of nursing technicians participated in continuing education activities, with an average of 24.6 hours per year. This is consistent with the mandatory continuing education requirements set by the SCFHS for healthcare professionals in the country [9]. However, there was considerable variation in the number of continuing education hours completed by participants, suggesting potential disparities in access to and engagement with continuing education opportunities.

The study also found a significant positive relationship between continuing education hours and job performance scores, indicating that nursing technicians who engaged in more continuing education activities tended to have better job performance. This finding aligns with previous studies that have demonstrated the positive impact of continuing education on healthcare professionals' knowledge, skills, and competencies [5-7]. Continuing education can help nursing technicians stay up-to-date with the latest evidence-based practices, enhance their critical thinking and problem-solving abilities, and improve their communication and collaboration with other healthcare team members [13].

The multiple linear regression analysis further confirmed the predictive relationship between continuing education hours and job performance, even after accounting for demographic and professional characteristics. This suggests that continuing education is a key factor in promoting job performance among nursing technicians, regardless of their age, gender, educational level, years of experience, or type of healthcare facility they work in. These findings underscore the importance of providing adequate support and resources for nursing technicians to engage in continuing education activities and apply their learning to their daily practice.

Despite the positive relationship between continuing education and job performance, the study also identified areas for improvement in nursing technicians' job performance, particularly in technical skills and patient care. This highlights the need for targeted continuing education programs that address these specific competencies and ensure that nursing technicians have the necessary knowledge and skills to provide high-quality care to their patients [14].

Limitations and Future Directions

This study has several limitations that should be acknowledged. First, the cross-sectional design limits the ability to establish causal relationships between continuing education and job performance. Future studies could employ longitudinal designs to examine the long-term impact of continuing education on nursing technicians' job performance and patient outcomes. Second, the study relied on self-reported data, which may be subject to social desirability bias. Objective measures of job performance, such as supervisor ratings or patient satisfaction scores, could be incorporated in future research to corroborate the findings.

Third, the study was conducted in the context of Saudi Arabia, and the findings may not be generalizable to other countries with different healthcare systems and continuing education requirements. Comparative studies across different countries and cultural contexts could provide valuable insights into the global landscape of continuing education for nursing technicians.

Implications for Practice and Policy

The findings of this study have important implications for healthcare organizations, policymakers, and educators in Saudi Arabia. Healthcare organizations should prioritize continuing education for nursing technicians and provide them with the necessary resources, such as time off, funding, and access to relevant programs, to facilitate their participation. Policymakers should continue to support and enforce mandatory continuing education requirements for nursing technicians to ensure that they maintain and enhance their competencies over time. Educators should design and deliver continuing education programs that are tailored to the specific needs and learning preferences of nursing technicians, using evidence-based instructional strategies and technologies [15].

Moreover, the study highlights the need for a collaborative approach to continuing education, involving various stakeholders such as healthcare organizations, professional associations, academic institutions, and government agencies. By working together, these stakeholders can create a supportive and sustainable ecosystem for continuing education that promotes the professional development and job performance of nursing technicians in Saudi Arabia.

Conclusion

This study provides evidence of the positive relationship between continuing education and job performance among nursing technicians in Saudi Arabia. Nursing technicians who engaged in more continuing education activities tended to have better job performance, regardless of their

demographic and professional characteristics. The findings underscore the importance of promoting and supporting continuing education for nursing technicians to enhance their competencies, improve patient care, and contribute to the overall quality and safety of healthcare in the country. Healthcare organizations, policymakers, and educators should work together to create a robust and sustainable continuing education system that meets the evolving needs of nursing technicians and the healthcare system as a whole.

References

1. Almalki, M., FitzGerald, G., & Clark, M. (2011). The nursing profession in Saudi Arabia: An overview. International Nursing Review, 58(3), 304-311.
2. Alsabban, W., & Badeaa, E. (2021). The challenges facing nursing education in Saudi Arabia: A review. Journal of Healthcare Communications, 6(1), 1-5.
3. Cervero, R. M., & Gaines, J. K. (2015). The impact of CME on physician performance and patient health outcomes: An updated synthesis of systematic reviews. Journal of Continuing Education in the Health Professions, 35(2), 131-138.
4. Viljoen, M., Coetzee, I., & Heyns, T. (2017). Critical care nurses' reasons for poor attendance at a continuous professional development program. American Journal of Critical Care, 26(1), 70-76.
5. Bluestone, J., Johnson, P., Fullerton, J., Carr, C., Alderman, J., & BonTempo, J. (2013). Effective in-service training design and delivery: Evidence from an integrative literature review. Human Resources for Health, 11, 51.
6. Qalehsari, M. Q., Khaghanizadeh, M., & Ebadi, A. (2017). Lifelong learning strategies in nursing: A systematic review. Electronic Physician, 9(10), 5541-5550.
7. Saudi Commission for Health Specialties. (2021). Continuing professional development. https://www.scfhs.org.sa/en/registration/ClassAndRegister/Reregister/Pages/default.aspx
8. Alshehri, A. A., Alhakami, A. S., Alshehri, M. A., & Alshehri, M. S. (2021). Knowledge, attitude, and practice of healthcare practitioners towards continuing professional development programs: A cross-sectional study. Journal of Multidisciplinary Healthcare, 14, 1439-1448.
9. Chong, M. C., Francis, K., Cooper, S., & Abdullah, K. L. (2014). Current continuing professional education practice among Malaysian nurses. Nursing Research and Practice, 2014, 126748.
10. Nsemo, A. D., John, M. E., Etifit, R. E., Mgbekem, M. A., & Oyira, E. J. (2013). Clinical nurses' perception of continuing professional education as a tool for quality service delivery in public hospitals Calabar, Cross River State, Nigeria. Nurse Education in Practice, 13(4), 328-334.
11. Saudi Commission for Health Specialties. (2014). Saudi nursing technician competency framework. https://www.scfhs.org.sa/en/registration/ClassAndRegister/Reregister/Documents/Nursing%20Technician%20Competency%20Framework.pdf

12. Vaona, A., Banzi, R., Kwag, K. H., Rigon, G., Cereda, D., Pecoraro, V., Tramacere, I., & Moja, L. (2018). E-learning for health professionals. Cochrane Database of Systematic Reviews, (1), CD011736.
13. Zaghini, F., Fiorini, J., Piredda, M., Fida, R., & Sili, A. (2020). The relationship between nurse managers' leadership style and patients' perception of the quality of the care provided by nurses: Cross sectional survey. International Journal of Nursing Studies, 101, 103446.
14. Coventry, T. H., Maslin-Prothero, S. E., & Smith, G. (2015). Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: An integrative review. Journal of Advanced Nursing, 71(12), 2715-2727.