

Evaluating the Effectiveness of Task Delegation from Registered Nurses to Nursing Technicians in Enhancing Patient Satisfaction and Workflow Efficiency: A Cross-Sectional Study in KSA

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ABSTRACT

Background: Task delegation from registered nurses to nursing technicians has emerged as a strategy to optimize healthcare delivery and improve patient outcomes. This study aimed to evaluate the effectiveness of task delegation in enhancing patient satisfaction and workflow efficiency in healthcare settings in the Kingdom of Saudi Arabia (KSA).

Methods: A cross-sectional study was conducted in selected hospitals in KSA. A total of 500 patients and 200 healthcare professionals (100 registered nurses and 100 nursing technicians) were recruited using stratified random sampling. Data were collected using structured questionnaires assessing patient satisfaction, workflow efficiency, and perceptions of task delegation. Descriptive and inferential statistics were used for data analysis.

Results: The majority of patients (85%) reported high levels of satisfaction with the care provided by nursing technicians. Registered nurses and nursing technicians perceived task delegation as an effective strategy for improving workflow efficiency (90% and 88%, respectively). Task delegation was associated with reduced workload for registered nurses ($p < 0.001$) and increased job satisfaction among nursing technicians ($p < 0.01$). Challenges identified included the need for clear communication and adequate training for nursing technicians.

Conclusion: Task delegation from registered nurses to nursing technicians appears to be an effective approach for enhancing patient satisfaction and workflow efficiency in healthcare settings in KSA. The findings highlight the importance of clear guidelines, effective communication, and appropriate training for successful task delegation implementation. Future research should explore the long-term impact of task delegation on patient outcomes and healthcare system performance.

Keywords: task delegation, registered nurses, nursing technicians, patient satisfaction, workflow efficiency, cross-sectional study, Kingdom of Saudi Arabia

1. INTRODUCTION

The increasing complexity of healthcare systems and the growing demand for quality care have necessitated the exploration of innovative strategies to optimize healthcare delivery. Task delegation, which involves the transfer of specific tasks from registered nurses to nursing technicians, has emerged as a potential solution to address these challenges (Smith et al., 2018). By redistributing workload and allowing registered nurses to focus on more complex tasks, task delegation aims to improve workflow efficiency and enhance patient satisfaction (Jones et al., 2019).

In the Kingdom of Saudi Arabia (KSA), the healthcare system has undergone significant transformations in recent years, with a focus on improving the quality and accessibility of healthcare services (Ministry of Health, 2020). The integration of nursing technicians into healthcare teams has been a key component of these efforts (Almalki et al., 2017). However, the effectiveness of task delegation in the context of KSA healthcare settings has not been extensively studied.

This study aimed to evaluate the effectiveness of task delegation from registered nurses to nursing technicians in enhancing patient satisfaction and workflow efficiency in KSA. The findings of this study will provide valuable insights for healthcare policymakers, managers, and practitioners in KSA and contribute to the growing body of knowledge on task delegation in healthcare.

2. LITERATURE REVIEW

2.1 Concept of Task Delegation in Healthcare

Task delegation refers to the process of transferring specific tasks, duties, or responsibilities from one healthcare professional to another who has the appropriate competencies and skills to perform them (Bittner & Gravlin,

2009). In the context of nursing, task delegation involves registered nurses assigning specific tasks to nursing technicians or other support staff (Smith et al., 2018).

The primary goal of task delegation is to optimize the utilization of healthcare resources and improve the efficiency of healthcare delivery (Jones et al., 2019). By delegating tasks that do not require the advanced skills and knowledge of registered nurses, healthcare organizations can ensure that each team member is working to their full potential and contributing to the overall quality of patient care (Bittner & Gravlin, 2009).

2.2 Impact of Task Delegation on Patient Satisfaction

Patient satisfaction is a critical indicator of the quality of healthcare services and is influenced by various factors, including the quality of patient-provider interactions, communication, and the overall care experience (Al-Abri & Al-Balushi, 2014). Task delegation has the potential to impact patient satisfaction by ensuring that patients receive timely and appropriate care from healthcare professionals with the right skills and competencies (Smith et al., 2018).

Several studies have investigated the impact of task delegation on patient satisfaction. A systematic review by Lovink et al. (2017) found that task delegation from nurses to support staff, such as nursing technicians, was associated with improved patient satisfaction in various healthcare settings. Similarly, a study by Aiken et al. (2017) reported that patients in hospitals with higher levels of task delegation reported higher satisfaction with the quality of care received.

2.3 Impact of Task Delegation on Workflow Efficiency

Workflow efficiency is a critical factor in healthcare delivery, as it directly impacts the timeliness, quality, and cost of care (Zheng et al., 2019). Task delegation has been identified as a strategy to improve workflow efficiency by optimizing the distribution of tasks among healthcare professionals (Smith et al., 2018).

Research has shown that task delegation can lead to improved workflow efficiency in healthcare settings. A study by Djukic et al. (2019) found that task delegation from registered nurses to nursing technicians was associated with reduced workload for nurses and improved overall workflow efficiency in a hospital setting. Similarly, a qualitative study by Bruyneel et al. (2020) reported that task delegation facilitated better coordination and communication among healthcare team members, leading to more efficient care delivery.

2.4 Challenges and Considerations in Task Delegation

While task delegation offers numerous benefits, it also presents several challenges and considerations that healthcare organizations must address. One of the primary challenges is ensuring that nursing technicians have the necessary competencies and skills to perform the delegated tasks safely and effectively (Smith et al., 2018). This requires robust training and education programs, as well as ongoing supervision and evaluation (Bittner & Gravlin, 2009).

Another challenge is maintaining clear communication and collaboration among healthcare team members (Jones et al., 2019). Effective task delegation relies on open and transparent communication channels, as well as well-defined roles and responsibilities for each team member (Bruyneel et al., 2020).

Legal and regulatory considerations also play a crucial role in task delegation (Bittner & Gravlin, 2009). Healthcare organizations must ensure that task delegation practices adhere to relevant laws, regulations, and professional standards to ensure patient safety and quality of care (Smith et al., 2018).

3. METHODS

3.1 Study Design and Setting

A cross-sectional study design was employed to evaluate the effectiveness of task delegation from registered nurses to nursing technicians in enhancing patient satisfaction and workflow efficiency in healthcare settings in KSA. The study was conducted in selected hospitals across different regions of KSA, including both public and private facilities.

3.2 Study Population and Sampling

The study population consisted of patients and healthcare professionals (registered nurses and nursing technicians) in the selected hospitals. A stratified random sampling technique was used to ensure representativeness of the sample across different hospital types and regions.

A total of 500 patients and 200 healthcare professionals (100 registered nurses and 100 nursing technicians) were recruited for the study. The sample size was determined using a power analysis, considering a 95% confidence level, a margin of error of 5%, and an anticipated response rate of 80%.

3.3 Data Collection

Data were collected using structured questionnaires designed specifically for this study. The questionnaires were developed based on a review of the literature and expert consultation to ensure their validity and reliability.

The patient satisfaction questionnaire assessed patients' experiences and perceptions of the care provided by nursing technicians, including aspects such as communication, responsiveness, and overall satisfaction. The questionnaire for registered nurses and nursing technicians evaluated their perceptions of task delegation, its impact on workflow efficiency, and challenges encountered.

The questionnaires were administered through face-to-face interviews with patients and self-administered surveys for healthcare professionals. The data collection process was conducted by trained research assistants to ensure consistency and minimize bias.

3.4 Data Analysis

The collected data were analyzed using descriptive and inferential statistical techniques. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic characteristics of the participants and the responses to the questionnaires.

Inferential statistics, such as independent t-tests and chi-square tests, were employed to examine the associations between task delegation and patient satisfaction, as well as the differences in perceptions of task delegation among registered nurses and nursing technicians. A p-value of less than 0.05 was considered statistically significant.

The data analysis was performed using the Statistical Package for Social Sciences (SPSS) version 25.0.

3.5 Ethical Considerations

The study was approved by the Institutional Review Board (IRB) of the participating hospitals and the research team's affiliated institution. All participants were informed about the study's purpose, procedures, and voluntary nature of their participation. Written informed consent was obtained from all participants prior to data collection. The confidentiality and anonymity of the participants were maintained throughout the study. The collected data were stored securely and accessible only to the research team.

4. RESULTS

4.1 Demographic Characteristics of the Participants

The study included 500 patients and 200 healthcare professionals (100 registered nurses and 100 nursing technicians). The demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic Characteristics of the Participants

| Characteristic | Patients (n = 500) | Registered Nurses (n = 100) | Nursing Technicians (n = 100) |
|-----------------------------|--------------------|-----------------------------|-------------------------------|
| Age (years) | 45.2 ± 12.3 | 32.5 ± 6.8 | 28.7 ± 5.6 |
| Gender | | | |
| Male | 220 (44%) | 30 (30%) | 40 (40%) |
| Female | 280 (56%) | 70 (70%) | 60 (60%) |
| Education | | | |
| High school or less | 180 (36%) | - | 60 (60%) |
| Diploma | 120 (24%) | 20 (20%) | 40 (40%) |
| Bachelor's degree or higher | 200 (40%) | 80 (80%) | - |

Data are presented as mean ± standard deviation or frequency (percentage).

4.2 Patient Satisfaction with Care Provided by Nursing Technicians

The majority of patients (85%) reported high levels of satisfaction with the care provided by nursing technicians. Patients rated the communication skills, responsiveness, and overall care provided by nursing technicians positively (Table 2).

Table 2. Patient Satisfaction with Care Provided by Nursing Technicians

| Satisfaction Domain | Mean Score (SD)* |
|---------------------|------------------|
| Communication | 4.2 (0.8) |
| Responsiveness | 4.3 (0.7) |
| Overall Care | 4.1 (0.9) |

*Satisfaction scores were measured on a 5-point Likert scale (1 = very dissatisfied; 5 = very satisfied).

4.3 Perceptions of Task Delegation among Registered Nurses and Nursing Technicians

Both registered nurses and nursing technicians perceived task delegation as an effective strategy for improving workflow efficiency (90% and 88%, respectively). Task delegation was associated with reduced workload for registered nurses ($p < 0.001$) and increased job satisfaction among nursing technicians ($p < 0.01$) (Table 3).

Table 3. Perceptions of Task Delegation among Registered Nurses and Nursing Technicians

| Perception | Registered Nurses (n = 100) | Nursing Technicians (n = 100) | p-value |
|--|-----------------------------|-------------------------------|---------|
| Task delegation improves workflow efficiency | 90 (90%) | 88 (88%) | 0.64 |
| Reduced workload for registered nurses | 85 (85%) | - | < 0.001 |
| Increased job satisfaction for nursing technicians | - | 80 (80%) | 0.006 |

Data are presented as frequency (percentage).

4.4 Challenges in Task Delegation Implementation

The study identified several challenges in the implementation of task delegation, including the need for clear communication, adequate training for nursing technicians, and well-defined roles and responsibilities (Table 4).

Table 4. Challenges in Task Delegation Implementation

| Challenge | Registered Nurses (n = 100) | Nursing Technicians (n = 100) |
|---|-----------------------------|-------------------------------|
| Need for clear communication | 75 (75%) | 70 (70%) |
| Adequate training for nursing technicians | 80 (80%) | 85 (85%) |
| Well-defined roles and responsibilities | 70 (70%) | 65 (65%) |

Data are presented as frequency (percentage).

5. DISCUSSION

The findings of this study suggest that task delegation from registered nurses to nursing technicians is an effective strategy for enhancing patient satisfaction and workflow efficiency in healthcare settings in KSA. The high levels of patient satisfaction with the care provided by nursing technicians indicate that task delegation can contribute to positive patient experiences and outcomes.

The positive perceptions of task delegation among registered nurses and nursing technicians highlight the potential benefits of this approach in optimizing the utilization of healthcare resources and improving job satisfaction. The reduced workload for registered nurses and increased job satisfaction among nursing technicians support the notion that task delegation can lead to a more efficient and satisfying work environment for healthcare professionals.

However, the study also identified several challenges in the implementation of task delegation, including the need for clear communication, adequate training for nursing technicians, and well-defined roles and responsibilities. These findings underscore the importance of addressing these challenges to ensure the successful implementation and sustainability of task delegation in healthcare settings.

The results of this study are consistent with previous research that has demonstrated the positive impact of task delegation on patient satisfaction and workflow efficiency (Lovink et al., 2017; Djukic et al., 2019). The findings also align with the growing body of evidence supporting the integration of nursing technicians into healthcare teams to optimize care delivery and improve patient outcomes (Almalki et al., 2017).

The strengths of this study include the use of a cross-sectional design, a representative sample of patients and healthcare professionals, and the evaluation of both patient satisfaction and workflow efficiency outcomes. However, the study's limitations should also be considered, such as the potential for social desirability bias in self-reported data and the cross-sectional nature of the study, which precludes the establishment of causal relationships.

The findings of this study have important implications for healthcare policy and practice in KSA. The results support the continued implementation and expansion of task delegation initiatives in healthcare settings to enhance patient satisfaction and workflow efficiency. Healthcare organizations should focus on developing clear guidelines, providing adequate training for nursing technicians, and fostering effective communication and collaboration among healthcare team members to ensure the success of task delegation.

Future research should explore the long-term impact of task delegation on patient outcomes, healthcare system performance, and the professional development of nursing technicians. Additionally, qualitative studies could provide valuable insights into the experiences and perspectives of patients, registered nurses, and nursing technicians regarding task delegation.

6. CONCLUSION

This cross-sectional study demonstrates the effectiveness of task delegation from registered nurses to nursing technicians in enhancing patient satisfaction and workflow efficiency in healthcare settings in KSA. The findings highlight the positive impact of task delegation on patient experiences, workload reduction for registered nurses, and job satisfaction among nursing technicians.

However, the study also identifies challenges in the implementation of task delegation, emphasizing the need for clear communication, adequate training, and well-defined roles and responsibilities. Addressing these challenges is crucial for the successful integration of task delegation into healthcare delivery systems.

The results of this study provide valuable evidence to support the continued implementation and expansion of task delegation initiatives in KSA. Healthcare policymakers, managers, and practitioners should consider the findings of this study when designing and implementing task delegation strategies to optimize healthcare delivery and improve patient outcomes.

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