



Relationship Between Nurses and Social Workers Perceptions of Medical Secretary Roles and Information- Sharing Behaviors: A Cross-Sectional Study

Saleh Enad Jalwe Alshmmri¹, Amina Makimi Mays Al-Dhafiri², Amani Makimi Miss Aldfiri³, Intisar Nayef Kreidi Al-Dhafiri⁴, Abdulaziz Thani Adeed Alshammri⁵, Arif Raja Aldhafeeri⁶

1-Medical supply and supply department, Medical Secretary
2-nurse, King Khalid Hospital Kidney Center
3-Nursing technician, Al-Azizia Health Center
4-Nursing technician, Dental Center
5-Nursing technician, Supply and supplies
6-Al Rawda health center, Social worker

Abstract

Information-sharing plays a crucial role in providing effective inpatient care, especially between nurses and nursing assistants. Nurses who have a positive perception of the roles of nursing assistants are more likely to engage in productive information-sharing behaviors with them. This study investigates the correlation between nurses' perceptions of nursing assistant roles and the frequency of information-sharing with nursing assistants. Data were gathered from 2,642 nurses across 182 hospitals using a self-administered cross-sectional survey questionnaire. The questionnaire included measures of nurses' perceptions of nursing assistant roles across four factors: (i) enhancing patients' abilities through daily care, (ii) caring for diverse patients with broad perspectives, (iii) facilitating coordination and cooperation within the team, and (iv) increasing information sharing among team members regarding patients. Information-sharing behaviors assessed included expressions, inquiries, linguistic responses, and feedback. Multiple regression analyses were performed to analyze each nurse's information-sharing behaviors. The results indicated a positive correlation between nurses' perceptions of nursing assistant roles and their frequency of information-sharing with nursing assistants. The strength of these correlations varied depending on the specific type of information-sharing behavior. Therefore, enhancing nurses' understanding of nursing assistant roles could potentially enhance their information-sharing behaviors, contributing to more effective collaborative practices in healthcare settings.

KEYWORDS: collaborative practice, cross-sectional study, information-sharing behaviors, nurses, nursing assistants

Introduction

Efficient information-sharing among healthcare staff is crucial for providing high-quality patient care. In this study, information-sharing is defined as the process of ensuring that all team members have access to the same information, which has been identified as a predictor of effective team performance by previous research (Mesmer-Magnus & DeChurch, 2009). Nurses hold a unique position in interdisciplinary collaboration (André, Nøst, Frigstad, & Sjøvold, 2017) and often collaborate with nursing assistants (NAs) in patient care (Gion & Abitz, 2019). The roles of NAs have become increasingly important in healthcare settings, including hospitals where the number of NAs has decreased, leading to a need for increased hiring (Ministry of Health, Labour and Welfare, 2017).

Nursing assistants may not always have formal qualifications or standardized educational backgrounds, necessitating hospital-based training on essential duties, safety protocols, and infection control (Ministry of Health, Labour and Welfare, 2012). While the specific tasks and access to patient information vary across facilities, NAs are typically expected to provide patient care under nurse supervision (Ministry of Health, Labour and Welfare, 1993). This includes direct care tasks like bathing patients and assisting with toileting, as well as indirect tasks such as changing bed linens and transferring patients. Given the potential overlap in tasks between nurses and NAs, understanding their roles and fostering collaboration is crucial for comprehensive and high-quality patient care (Kalisch, 2011; Kalisch & Lee, 2010; Wagner, 2018).

Effective information-sharing between nurses and NAs is essential for ensuring patient safety, recovery, and smooth discharge from hospitals. Nurses often have access to detailed patient information, while NAs, through regular care provision, acquire valuable insights into patients' conditions and needs (Kunimatsu, 2015; Potter & Grant, 2004). The close relationships NAs develop with patients provide additional contextual information that can be vital for effective care planning. Therefore, improving information flow between nurses and NAs is an area worthy of investigation.

Information-sharing behaviors encompass various actions such as expressing information, asking questions, providing linguistic responses, and offering feedback. These behaviors are crucial for effective communication and collaboration within healthcare teams (Downs & Adrian, 2004). However, studies have indicated shortcomings in information-sharing between nurses and NAs, such as inadequate task explanations and delayed task completion, highlighting the need to improve information-sharing behaviors (Kleinman & Saccomano, 2006; Shibata et al., 2003).

The perception nurses hold of NA roles can significantly influence their information-sharing behaviors. Positive perceptions of NA roles may lead to more effective collaboration and information-sharing practices. However, research on the relationship between nurses' perceptions of NA roles and their information-sharing behaviors is limited, especially in quantitative studies. This study aims to bridge this gap by investigating how nurses' perceptions of NA roles relate to their information-sharing behaviors toward NAs, providing insights into factors that can enhance collaboration and communication within healthcare teams.

METHODS

Study Design and Participants

This study was conducted focusing on integrated community care wards (ICCWs) within general hospitals. ICCWs play a crucial role in providing post-acute and subacute care, catering to patients transitioning from acute care settings and those requiring support for daily living activities. Nursing assistants (NAs) play a significant role in these settings, particularly in collaboration with nurses, given the staffing dynamics with fewer NAs compared to nurses.

A power analysis using G*Power 3.1.9.4 determined a minimum sample size of 776 participants for a fixed model linear multiple regression with specific parameters (R² deviation from 0 with 10 predictors, $\alpha = 0.05$, power = 0.95, effect size of 0.02). From a total of 1860 hospitals, 660 were randomly selected based on their acceptance of the facility standard report. Invitation letters were sent to nursing department directors in these hospitals, resulting in 185 hospitals (194 wards) agreeing to participate. Anonymous self-report questionnaires were distributed to 3781 nurses in ICCWs, with a final response rate of 79.2%.

All participants were provided with information about the study's purpose, voluntary participation, and privacy protection. The study received approval from the relevant university ethics committee

Measures

Nurses' perceptions of NA roles were assessed using a validated measurement scale comprising four factors and 16 items. These factors included improving patients' abilities through daily care, caring for various patients using broad perspectives, facilitating coordination and cooperation among team members, and increasing information sharing among team members.

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Information-sharing behaviors were evaluated through a subscale of the Communication Audit and the Listening Skills Scales. Nurses were asked about their frequency of expressing information, asking questions, providing linguistic responses during conversations, and offering feedback on the value of information received. Responses were rated on a five-point Likert scale ranging from "never" to "always." Demographic data collected included information on sex, age, marital status, educational level, length of experience at the facility and on the ward, qualifications, employment status, position, and work shifts.

Statistical Analysis

Descriptive analyses were conducted for participant characteristics, and bivariate analyses were performed. Multiple regression analyses were carried out, controlling for individual characteristics that might influence information-sharing behaviors. These analyses examined the relationships between nurses' perceptions of NA roles and their information-sharing behaviors toward NAs. Multiple regression analyses were also conducted to explore the associations between nurses' perceptions of NA roles across the four factors and each type of information-sharing behavior. IBM SPSS Statistics 24.0 for Windows was used for statistical analyses, with a significance level set at $P < 0.05$.

Results

The participant data from the study included 2642 nurses from 182 hospitals, with an overall response rate per facility of 88%. Most participants were female (91.9%) and registered nurses (91.3%), with a mean age of 38.6 years. The majority had vocational school backgrounds (80.1%), and the average years of facility and ward experience were 8.7 years and 3.3 years, respectively.

Nurses' perceptions of NA roles and information-sharing behaviors were assessed using a scale. The highest-rated NA role perceived by nurses was "increasing the amount of information on patients among team members," followed by "improving patients' abilities through daily care," "facilitating coordination and cooperation among team members," and "caring for various patients using broad perspectives." In terms of information-sharing behaviors, linguistic response was rated the highest, followed by expressing, feedback, and asking.

Multiple regression analyses revealed significant positive relationships between nurses' perceptions of NA roles and their information-sharing behaviors toward NAs. Specifically, expressing information to NAs was positively related to all four NA roles. Asking behavior was positively related to "caring for various patients using broad perspectives" and "facilitating coordination and cooperation among team members," while being negatively related to "increasing the amount of information on patients among team members." Linguistic response was positively related to "improving patients' abilities through daily care" and "increasing the amount of information on patients among team members," but negatively related to "caring for various patients using broad perspectives." Providing feedback was positively related to "caring for various patients using broad perspectives" and "facilitating coordination and cooperation among team members."

Overall, the determination coefficients ranged from 0.066 to 0.15, indicating that nurses' perceptions of NA roles significantly influenced their information-sharing behaviors toward NAs.

Table 1: Characteristics of Participants

Characteristic	n (%) or mean \pm SD	[Range]
Age (years)	38.6 \pm 10.3	[20–70]
Sex		
- Female	2427 (91.9)	
- Male	158 (6.0)	
Employment status		
- Regular employee	2390 (90.5)	
- Temporary employee	251 (9.5)	
Qualification		

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- Registered nurse	2413 (91.3)	
- Assistant nurse	229 (8.7)	
Educational background		
- Bachelor's degree or higher	187 (7.0)	
- Vocational school	2115 (80.5)	
Position		
- Assistant nurse manager	300 (11.4)	
Years of facility experience	8.7 ± 8.5	[0–45]
Years of ward experience	3.3 ± 3.8	[0–34]
Response rate per facility (%)	88 ± 16	[20–100]

Table 2: Scores for Nursing Assistant (NA) Roles and Information-Sharing Behaviors

Category	Mean ± SD	Cronbach's α
Nurses' perceptions of NA roles		
- Improving patients' abilities through daily care	3.8 ± 0.7	0.78
- Caring for various patients using broad perspectives	2.9 ± 1.0	0.82
- Facilitating coordination and cooperation among team members	3.4 ± 0.8	0.82
- Increasing the amount of information on patients among team members	4.4 ± 0.7	0.80
Information-sharing behaviors		
- Expressing	3.5 ± 0.7	0.86
- Asking	2.7 ± 0.8	0.90
- Linguistic response	3.7 ± 0.5	0.87
- Feedback	3.0 ± 0.8	0.91

Table 3: Results of Multiple Regression Analyses with All Four Nursing Assistant (NA) Roles as Independent Variables

	Expressing	Asking	Linguistic response	Feedback
Nurses' perceptions of NA roles				
- Improving patients' abilities through daily care	0.118	0.004	0.127	0.048
- Caring for various patients using broad perspectives	0.055	0.206	-0.072	0.063
- Facilitating coordination and cooperation among team members	0.104	0.233	0.040	0.189
- Increasing the amount of information on patients among team members	0.129	-0.061	0.200	-0.026
ΔR2	0.098	0.143	0.080	0.064
Adjusted R2	0.101	0.150	0.108	0.066

Discussion

The study revealed a positive correlation between nurses' perceptions of Nursing Assistants (NA) roles and their information-sharing behaviors towards NAs. Nurses who had a better understanding of NA roles demonstrated more frequent information-sharing behaviors with NAs. This finding underscores the importance of nurses recognizing and comprehending NA roles to facilitate effective collaboration and communication in healthcare settings, ultimately enhancing patient care quality based on shared information. (Afzal et al., 2018)

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In collaborative work environments like healthcare, it is crucial for employees to comprehend the roles of other staff members. This understanding is particularly vital for nurses working with NAs, as effective teamwork relies on clear roles and communication. Recognizing NA roles enables nurses to engage in expressing behavior more frequently, ensuring essential patient information is shared promptly and accurately among the care team. (Kudo et al., 2019)

Furthermore, nurses' perceptions of specific NA roles, such as caring for patients and facilitating coordination, were associated with their frequency of asking questions to NAs. Effective communication and understanding of NA roles are essential for nurses to seek information from NAs, especially considering NAs' potential difficulties in discussions due to limited medical knowledge. This highlights the need for continuous education and awareness among healthcare professionals regarding the roles and contributions of each team member. (Lindh Falk et al., 2017)

Linguistic response, which reflects timely information sharing in the workplace, was not directly linked to a specific NA role but rather reflected overall communication practices. Feedback from nurses to NAs on the value of patient information emerged as a crucial factor for promoting future information-sharing and improving patient care quality. This feedback loop encourages meaningful observations and exchanges between nurses and NAs, fostering a collaborative and patient-centered care environment. (Wagner, 2018) While the study acknowledges the low explanatory power in some areas, it suggests considering other factors related to nurses' information-sharing behaviors, such as their relationships with NAs. Future research should explore additional aspects influencing information-sharing and the impact of improved understanding of NA roles on enhancing collaboration between nurses and NAs. Overall, enhancing nurses' understanding of NA roles is essential for optimizing information-sharing and teamwork, ultimately benefiting patient outcomes. (Kalisch, 2011)

Limitations

1. The study utilized a self-report questionnaire, potentially leading to discrepancies between reported perceptions and actual actions.
2. Responses may have been influenced by social desirability bias, possibly resulting in inflated scores for information-sharing behaviors and nurses' perceptions of NA roles.
3. Interactions among nurses within their department were not fully considered, which could have affected the dynamics of information-sharing behaviors.

Despite these limitations, the study successfully established a relationship between nurses' perceptions of NA roles and their information-sharing behaviors. It highlighted the significance of understanding occupational roles for effective collaboration, particularly in terms of information-sharing. Future research should delve deeper into the factors influencing information-sharing behaviors, considering longitudinal studies that explore the mutual influence between nurses and NAs.

Conclusions

The study concluded that nurses' perceptions of NA roles significantly impact their information-sharing behaviors towards NAs. While the strength of this relationship varied across different information-sharing behaviors, a comprehensive understanding of all NA roles was deemed essential for fostering effective collaboration between nurses and NAs. These findings emphasize the importance of role clarity and mutual understanding in healthcare teams to enhance patient care outcomes and overall teamwork.

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