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The attitudes of healthcare professionals towards nurse–physician collaboration

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Abstract

Aims: This study aims to investigate the perceptions and attitudes of healthcare professionals, particularly focusing on the nurse-physician collaboration and satisfaction levels with the quality of collaboration in clinical settings.

Design: A descriptive comparative study design was utilized to assess the attitudes of 338 participants, including 158 internship nurses, 139 staff nurses, and 41 physicians. Participants were selected from intensive care units, surgical departments, and medical departments.

Methods: Data was collected using two instruments: a socio-demographic data sheet and the Jefferson Scale of Attitude towards Nurse-Physician Collaboration (JSANPC), which comprises 15 items across four dimensions.

Results: The study revealed that internship nurses expressed a high level of dissatisfaction (38.6%) regarding the quality of collaboration between nurses and physicians compared to staff nurses and physicians. Conversely, physicians reported a higher satisfaction level (61%) with the collaboration between themselves and nurses. Staff nurses exhibited a significantly positive attitude (mean score: 48.45 (4.03)) towards nurse-physician collaboration compared to physicians and internship nurses.

Conclusion: The findings highlight that internship nurses are generally dissatisfied with the level of collaboration between nurses and physicians in clinical settings.

Keywords: collaboration, healthcare professionals, internship nurses, staff nurses, physicians

Introduction

The complexity of the nursing profession, rooted in skills and quality healthcare delivery, necessitates effective collaboration among nurses, physicians, and internship nurses. This collaboration is crucial in healthcare organizations where teamwork is paramount, as most activities are carried out collectively. Intern nurses, as defined in this study, are graduate professional nurses enrolled in nursing internship programs. They are responsible for providing daily care services, including basic and critical care, under the guidance of preceptors who serve as role models and support persons in clinical practice. Collaborative efforts among physicians, nurses, and other healthcare personnel are pivotal for improving healthcare quality, enhancing patient outcomes, and increasing satisfaction among the healthcare team, particularly in settings characterized by constant interactions among healthcare staff, where nurse-physician relationships are fundamental to patient care (Aghamohammadi et al., 2019).

Collaboration among healthcare professionals requires shared goals and open dialogue to deliver high-quality patient care and resolve healthcare challenges (Sharifiyana & Zohari, 2016). Effective communication between nurses and physicians is essential for information flow within the healthcare system. Collaboration not only benefits patients but also contributes to the professional satisfaction of healthcare professionals involved in the collaboration. When nurses and physicians share responsibility for patient care and well-being, collaboration yields significant benefits (Green et al., 2015).

Elsous et al. (2017) describe nurse-physician collaboration as cooperative efforts in resolving difficulties and making decisions for patient care plans. Historically, nurse-physician interactions were characterized by physician dominance and nurse subservience, where physicians held a paternalistic and directive role while nurses followed suit (House & Havens, 2017). This unequal dynamic, compounded by gender influences and hospital professional boundaries, limited nurses' professional autonomy and jurisdiction (Amsalu et al., 2014).

The role disparity between nurses and physicians, historically rooted in gender biases, led to nurses being perceived as followers or implementers of physician orders. This historical perception, along with gender-based interactions, has affected collaboration, with reports of decreased collaboration when predominantly male nursing teams interact with female medical teams (Migotto et al., 2019).

Nurses require clinical autonomy to enhance their competence and professional growth (Motamed-Jahromi & Jalali, 2015). Professional autonomy empowers nurses to make decisions based on patient needs and exercise freedom in patient care (Georgiou & Papathanassoglou, 2017). However, challenges such as discrimination during internships and physician dominance in patient care decisions have limited nurses' autonomy and engagement in healthcare delivery (Jamshid et al., 2016; Sana et al., 2013).

The internship period for novice nurses is crucial for gaining clinical skills and experiences necessary for professional development. However, interactions with hospital staff, particularly nurses and physicians, can lead to frustration and dissatisfaction among interns, contributing to attrition and nursing shortages (Elsous et al., 2017; Githui & Wambuiw, 2019).

METHODS

Study Design

A descriptive comparative study design was employed for this research.

Study Setting

The study was conducted in the intensive care units, surgical department, and medical department, which comprises 9 floors. The critical care units included the general intensive care unit (ICU), cardiac care unit (CCU), cardiothoracic ICU, chest ICU, plastic ICU, and emergency ICU. The surgical department consisted of three units: A1/A2 with 7 rooms and 60 beds, B1/B2 with 6 rooms and 46 beds, and C1/C2 with 4 rooms and 42 beds. The medical department was divided into male (6 rooms, 48 beds) and female (8 rooms, 64 beds) sections.

Study Subjects

The study included 338 healthcare professionals, comprising 139 nurses, 158 internship nurses, and 41 physicians, who agreed to participate in the study.

Inclusion Criteria: All internship nurses, staff nurses, and physicians available during the study period in the specified departments were included.

Exclusion Criteria: Other healthcare team members not meeting the inclusion criteria were excluded.

Study Tools

Two instruments were used: a personal characteristics data sheet gathering information on age, gender, marital status, work settings, years of experience, and educational qualification; and the Jefferson Scale of Attitude towards Nurse–Physician Collaboration (JSANPC), comprising 15 items across four dimensions: shared education and teamwork (7 statements), caring as opposed to curing (3 statements), staff nurses' autonomy (3 statements), and physicians' authority (2 statements). The JSANPC uses a four-point scale ranging from strongly agree (4) to strongly disagree (1), with higher scores indicating a more positive attitude towards nurse-physician collaboration.

Validity of the Study Tool

The face validity of the study tool was established through translation into Arabic and review by five experts from the faculty of nursing (three professors and two assistant professors). The translation accuracy was confirmed via a translate-retranslate process.

Procedures

The study comprised preparatory, pilot study, and field work phases conducted over four months from July to October 2019.

Preparatory Section

Literature review, tool translation, and retranslation were conducted during this phase.

Pilot Study

A pilot study involving 10% of the sample (34 participants) was conducted to assess the tool's clarity, understandability, and time needed for completion. No modifications were made post-pilot study, and data from the pilot study were included in the final analysis. The Cronbach's α for the JSANPC ranged from 0.70 to 0.93, indicating high reliability.

Field Work

Data collection occurred over three months from August to October 2019. The researchers explained the study purpose to participants, obtained oral consent, distributed the study tools, provided clarifications, and collected completed forms during morning shifts for four days weekly.

Internship nurses were assessed during the last two months of their internship year (2018/2019) to evaluate their attitudes towards nurse-physician collaboration.

Ethical Consideration

Approval for the research proposal was obtained from the Nursing Administration Department, the ethical committee, and the graduate studies committee at A University . Participants provided oral consent, and confidentiality and privacy were ensured. Participants had the right to refuse or withdraw from the study at any time.

Analysis

Data were analyzed using IBM SPSS 20.0 software. Descriptive statistics, t-tests, ANOVA, and Pearson correlation were used for data analysis, with $p < .05$ considered statistically significant.

RESULTS

Socio-demographic data of study participants (N = 338) The data in this table revealed that the total number of participants were 338, most (76.0%) of them had their age from 20–25 years, more than half of them (57.2%) of them were males while (42.8%) of them were female. Also, it was noticed that more than half of them (57.2%) were single. About (43.3%) of them were working in medical units and most (77.8%) had <5 years of experience. And lastly, about half (53.9%) of staff nurses were graduated from secondary school of nursing diploma.

Mean and standard deviation of individual items of (JSANPC) The data in this table demonstrate that internship nurses scored high in eight items than staff nurses and physicians for instance; structure collaborative relationship should be concerned by physician 3.83 (0.43), a nurse should be viewed as a collaborator and coworker with a physician rather than his/her assistant 3.78 (0.49), during their education, physicians and nurses should be involved in teamwork to understand their respective roles 3.77 (0.48). While staff nurses scored high in six items than internship nurses and physicians for instance, they would be answerable to care they provided for patients, they are fit to assess and react to needs of psychological aspects of patients and they have specific proficiency in patient teaching and emotional support (3.57 (0.6), 3.45 (0.88), 3.41 (0.75)), respectively. Physicians scored higher than staff nurses and internship nurses in one item only namely doctors should be the dominant authority in all aspects of patient care 2.2 (0.88).

Mean scores and differences between them for (JSANPC) sub-scales according to study participants The data in this table demonstrate that there is high statistical significant difference between groups of participants in all subscales at (p = <.001**). The highest score was related to share education and teamwork (28) while the lowest one was related to physician's authority (8). It is observed that staff nurses have got the highest mean score (48.45 (4.03)) than internship nurses and physicians in general. The data also

revealed that internship nurses scored high in one subscale, shared education and teamwork (25.56 (2.38)) than staff nurses and physicians. While staff nurses scored high in three subscales: caring versus curing, nurse's autonomy and physician's authority (10.29 (1.64), 10.32 (1.39) and 5.04 (1.5)), respectively, compared with internship nurses and physicians.

Mean scores and differences between them for (JSANPC) sub-scales according to workplace In general, the data in this table reveal that there are statistically significant differences between different work settings and overall attitude ($p = .002$*). The ICU units have got the highest score (25.09 (2.64)) in subscale of shared education and teamwork, while medical department has got the highest score (9.86 (1.81) in subscale of caring as opposite to curing. Finally, surgical department has got the highest score (10.24 (1.62) and 4.88 (1.7)), respectively, in subscales of nurse's autonomy and physician's authority.

Correlation coefficient between (JSANPC) sub-scales and demographic characteristics for study participants The results declare that there is high statistical significant negative correlation between age and overall attitude with ($R = -0.278$**), and also, there is statistical negative correlation between years of experience and overall attitude ($R = -0.046$). It is observed that there is statistical significant positive correlation between years of experience and shared education and teamwork ($R = 150$*). In addition, there is statistical negative correlation between age and shared education and teamwork and nurse's autonomy ($R = -0.326$**, -0.227**), respectively.

Level of satisfaction among internship nurses, staff nurses and physicians regarding the quality of collaboration between nurses and physicians It is noted that internship nurses have got the highest score (38.6%) at the poor level comparing to staff nurses' and physicians' scores (12.2% and 31.7%), respectively. Also, staff nurses have got the highest score (33.1%) at the excellent level comparing to (12.2%) for nurse internship and (6.6%) for physicians. However, physicians have got the highest score (61%) at satisfactory level comparing to (54.7% and 48.7%), respectively, for staff nurses and nurse internship.

These results provide a comprehensive overview of the study's findings, including participant demographics, attitude towards nurse-physician collaboration, differences based on profession and workplace, correlations with demographic variables, and levels of satisfaction regarding collaboration quality.

Discussion

The relationship and collaboration between staff nurses and physicians exhibit a dynamic interplay influenced by various factors. Numerous studies have reported a low level of collaboration between staff nurses and physicians (Elham & El-Hanafy, 2018), while others have noted a higher level of collaboration from the side of staff nurses compared to physicians (Melkamu et al., 2020). This study aims to delve into healthcare professionals' attitudes towards nurse–physician collaboration and assess their satisfaction with the quality of collaboration.

The findings depicted in Figure 1 reveal that internship nurses (IN) are dissatisfied with the level of collaboration between nurses and physicians. This outcome supports Hypothesis 3, indicating that INs do not approve of the way physicians cooperate with nurses. This sentiment may stem from their experiences during the internship period, where they observed staff nurses in a relatively subservient role. Moreover, as INs have graduated with a baccalaureate degree similar to physicians, they reject being placed in a subordinate position and express dissatisfaction with this collaboration dynamic.

Furthermore, gender role perceptions entrenched in cultural norms contribute significantly to the subservient role of nurses. The data from our study (Table 1) indicates a higher proportion of male physicians compared to female physicians, resulting in female nurses often working more with male physicians. This gender-based imbalance can lead to conflicts rooted in perceived roles (Holyoake, 2011), disrupting collaboration between nurses and physicians. Shahrzad et al. (2015) also highlighted a hierarchical communication model in Middle Eastern countries, where nurses are seen as assistants to physicians, reflecting the findings of Elham & El-Hanafy (2018).

On the contrary, staff nurses express satisfaction with the level of collaboration, reflected in their high scores in the excellent level. They accept the existing collaboration dynamic with physicians. This finding aligns with previous studies indicating positive attitudes towards inter-professional collaboration (Krogstad

et al., 2002). However, significant differences were observed among the three participant groups in all (JSANPC) subscales (Table 3). INs exhibited a less positive attitude towards nurse–physician collaboration compared to staff nurses and physicians, contrasting with Shahrzad et al.'s (2015) findings regarding bachelor of nursing students' positive attitudes towards collaboration.

From a researcher's perspective, INs, during their training period, are oriented towards following specific instructions and practicing skills related to patient care in collaboration with nurses and physicians. Their agreement to collaborate implies cooperation in work, responsibilities, participation in problem-solving, decision-making, and developing patient care plans (Mathur, 2011).

Staff nurses demonstrate a highly positive attitude towards nurse–physician collaboration compared to physicians and INs (Hypothesis 1), with the highest mean score overall and positive attitudes towards collaboration elements (Table 2). These findings are consistent with previous studies in various countries (Hojat et al., 1999; Hansson et al., 2010; El-Sayed & Sleem, 2011), indicating staff nurses' favorable disposition towards collaboration compared to physicians (Hughes & Fitzpatrick, 2010; Jones & Fitzpatrick, 2009; Taylor, 2009; Zheng et al., 2016).

In terms of (JSANPC) subscales, staff nurses exhibit high mean scores in three subscales: caring as opposed to curing, nurses' autonomy, and physician authority. While past research in t noted lower professional autonomy for nurses (Dorgham & Al-Mahmoud, 2013), recent studies have shown a significant percentage of staff nurses achieving high autonomy scores (Masoumeh et al., 2018). This underscores the importance of nurses taking proactive steps to engage in patient care decisions and stand alongside physicians rather than following them passively.

Physicians express the second-highest positive attitude towards nurse–physician collaboration after staff nurses (Table 3). This acceptance of the collaboration level stems from their dominant role over staff nurses in patient care aspects. This dominance contributes to their satisfaction with their position of authority. However, a total domination of patient care by physicians is rejected by INs and staff nurses, highlighting issues such as income disparities, gender dynamics, lack of empowerment among nurses, organizational support gaps, and weak nursing management in hospitals.

The analysis of different work settings (Table 4) reveals significant differences, with ICU participants showing high scores related to shared education and teamwork, while medical units emphasize caring aspects and surgical units focus on nurses' autonomy and physician authority. These variations reflect the nature of patient care and the dynamics within each setting.

Overall, age and experience do not consistently correlate positively with collaboration attitudes except for experience's correlation with shared education and teamwork. This underscores the need for commitment from both staff nurses and physicians, irrespective of their age or experience, to fulfill their roles in patient care effectively. Dysfunctional collaboration often arises from improper communication between staff nurses and physicians (Elsous et al., 2017).

In conclusion, addressing the complexities of nurse–physician collaboration requires addressing gender roles, enhancing nurses' autonomy, promoting effective communication, and fostering mutual respect and understanding between all healthcare professionals.

Limitations of the study:

There are several limitations to consider in this study. First, the sample size of physicians was relatively small compared to the larger number of nurses and internship nurses. Future studies could benefit from including more diverse samples from different hospitals to enhance the generalizability of the findings. Additionally, data were collected primarily from ICUs, surgical, and medical departments. To improve representativeness and generalizability, future research should include a broader range of departments within healthcare settings.

Another limitation is that the study was conducted solely in one university hospital, whereas University comprises a total of 7 university hospitals. This narrow focus may limit the generalizability of the study's findings and could be addressed in future research by including multiple university hospitals.

Conclusion:

In summary, the current study highlights several key findings. Internship nurses expressed dissatisfaction with the level of collaboration between nurses and physicians, indicating areas for potential improvement in inter-professional dynamics. Staff nurses, on the other hand, reported satisfaction with the level of collaboration and demonstrated a more positive attitude compared to physicians and internship nurses. Physicians ranked second in terms of satisfaction with collaboration, indicating a generally positive perception but with room for enhancement. The healthcare team perceived the surgical department as having the highest mean scores regarding the level of collaboration between nurses and physicians, compared to ICUs and medical departments. These findings provide valuable insights into the dynamics of nurse-physician collaboration within healthcare settings.

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