

Nurses' perceptions of professional nursing autonomy and the relationship between nurse-physician collaboration

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Abstract

Background: Collaboration between physicians and nurses is essential to healthcare delivery and is associated with high-quality patient care, greater patient satisfaction, and better health outcomes. Hence, it is imperative that doctors and nurses have a particular set of inter-professional collaboration skills. **The study aimed to** identify nurses' perceptions of professional nursing autonomy and the relationship between nurse-physician collaboration. **Method:** A descriptive correlational design was utilized to conduct this study. **Setting:** This study conducted at critical care units at Jeddah Hospital, KSA. **Study sample:** a convenient sample contains 277 nurses. **Tool:** Two tools were used for data collection, the first tool: Nurse and physician collaboration scale, the second tool: Professional nursing autonomy scale. **Results:** Showed that more than third (39, 4%) of nurses had low perception level regarding nurse physician collaboration and more than two fifth (46, 9%) of them had low perception level about professional nursing autonomy. **The Conclusion:** Overall nurses' perceptions of nurse/physician collaboration and overall professional nursing autonomy were positively correlated in a highly statistically significant way. According to the study's recommendations, more research is required to fully understand the significant obstacles to inter-professional collaboration and the detrimental effects it has.

Key words: Collaboration, Nurse/physician, Professional autonomy.

Introduction:

Working as a team is essential to delivering safe, effective treatment ⁽¹⁾. A collaborative mindset is crucial because of the intricacy of caring for patients who are in critical condition ⁽²⁾. Collaboration is the process of exchanging opinions about a shared topic between two or more people ⁽³⁾. Giving every team member an equal chance to share their knowledge and experience in a setting of mutual respect and trust is the aim of inter-professional collaboration ⁽⁴⁾. Various healthcare experts interact to provide patient care, which is the goal of this type of collaboration in the healthcare system ⁽²⁾.

On the other hand, the idea of nurse-physician teamwork is more than merely sharing a workspace. Resolving patient issues necessitates a mutually beneficial objective and obligation to deliver high-quality care ⁽⁵⁾. Given their crucial roles in patient care and treatment, nurses and doctors must establish an efficient professional partnership ⁽⁶⁾. Evidence

points to a significant role of nurse-physician teamwork in improving disease outcomes, such as the mortality rate, readmission, and complications of the illness, as well as bedsores and ventilator-associated pneumonia⁽⁷⁻⁹⁾. Additionally, nurses may experience stress and burnout as a result of doctors and nurses not having a suitable professional relationship^(2, 3).

Karanikola et al. (2014) demonstrated that a significant contributing cause to nurses' increased ethical stress is a lack of teamwork between doctors and nurses⁽¹⁰⁾. Both sides must be capable of making decisions on their own and have the authority to carry them out in order for there to be true inter-professional collaboration⁽²⁾. Both doctors and nurses must be aware of their professional limits and maintain appropriate relationships in order for there to be effective nurse-physician collaboration. According to their areas of expertise, each of them must participate in the decision-making process in order to improve the healthcare results for the patient⁽¹¹⁾. Autonomy is necessary for the specialized tasks performed by doctors and nurses⁽¹²⁾.

As the foundation of every profession is autonomy, nurses aim to elevate their professional standing by encouraging clinical autonomy⁽¹³⁾. The ability to have the freedom and responsibility to make decisions regarding the patient's requirements and course of action is known as professional autonomy for nurses⁽²⁾. According to Dorgham et al., (2013) a key component of nurses' professional autonomy is their capacity for making decisions, which lays the groundwork for the development of professional knowledge⁽¹⁴⁾.

According to the definitions given, professional autonomy and inter-professional collaboration both call for the capacity to make decisions, implement those decisions, and accept accountability for them. The quality of care and patient outcomes, care costs, the rate of resignation, and the physical and mental health of nurses are all impacted by inter-professional collaboration and professional autonomy, which appear to be related⁽¹⁵⁾. One of the main objectives of contemporary healthcare systems is to shift the mindset from one of exceptional treatment to one of caregiving⁽¹⁶⁾.

There has been little research on physician-nurse collaboration in the Kingdom of Saudi Arabia (KSA). The national state health service provides the majority of healthcare in the country, with the private sector providing a small portion⁽¹⁷⁾. The bulk of nurses and many doctors working in the monarchy are foreign-born. The varied patient care, collaborative practice, autonomy, and accountability experiences of nurses in a multicultural workforce⁽¹⁸⁾ may indicate varying opinions and attitudes on inter-professional collaboration. It is important to note that in recent years, healthcare availability in Saudi Arabia has significantly improved. The improvement has brought changes to healthcare organizations, their staff, and other stakeholders, highlighting the need to improve the quality of the healthcare⁽¹⁹⁾. Therefore, the present study aimed to identify the relation between nurse and physician collaboration and professional nursing autonomy as perceived by nurses.

Methods

Descriptive correlational design was utilized to conduct this study. The study was conducted at critical care units at Jeddah Hospital, KSA. Study sample included convenient nurses who are available in the study setting at the time of data collection and agree to participate in this study with at least one year of experience. The total number was 277 nurses. Tool of collected data for this study: Two tools were used: **The first tool was nurse / physician collaboration scale.** It was developed by (Ushiro et al., 2009)⁽²⁰⁾ and it was adopted by investigator. It measures nurse's perception toward nurse /physician collaboration it included two parts: **Part I:** Included nurses' personal characteristics as (age, gender, educational level, marital status, units, and years of experience). **Part II:** consisted of 23 items divided into 3 dimensions as following: Joint participation in cure / care decision making;

Sharing of patients' information and Degree of cooperation. Nurses responses were measured on a five point -Likert as following: strongly agree (5), agree (4), neutral (3), disagree (2) and strongly disagree (1). The overall score level ranging from (23- 115). Scores were summed up and converted into percent scores. The nurses' perception level regarding nurse / physician collaboration determined as following: Low perception level if the percent scores (>60%). Moderate perception level if the percent scores (60-75%). High perception level if the percent scores (>75%).

The Second Tool: Professional nursing autonomy scale: It was developed by (Elksas, 2015) ⁽²¹⁾ and it was modified by the investigator. It included differential items to determine nurses' perception toward professional nursing autonomy .It consisted of 44 items which are classified into two main dimensions namely; structural autonomy (34items) and attitudinal autonomy (10 items).Structural autonomy consisted of three sub-dimensions namely: Nursing Practice Environment (14 items), Nursing Care Management (11 items), Educational background for nurses(9 items). Nurses responses were measured on a five point -Likert scale as following: very likely to happen (5), likely to happen (4), very un likely to happen (3), unlikely to happen (2) and little happen (1). Scores were summed up and converted into percent scores .The nurses' perception level regarding professional nursing autonomy determined as following: Low perception level of if the percent scores (>60%). Moderate perception level if the percent scores (60-75%). High perception level if the percent scores (>75%).

An official permission was delivered from the Director of Hospital to obtain the approval for data collection, the objectives and the nature of the study were explained and then it was possible to carry out the study with minimum resistance. Validity of the study tools were tested by panel of experts consisted of five Professors. Minor modifications and rephrasing of some statements were done based on jury's opinions. Reliability of nurse and physician collaboration scale was measured by using Cronbach's alpha and the value was ($\alpha=0.888$).Reliability of professional nursing autonomy scale was measured by using Cronbach's alpha and the value was ($\alpha=0.892$).

Pilot study was conducted to assess tool clarity and applicability. It had also served in estimating the time needed for filling the form. The study was tested on 10 % of total subjects; it was done on 28 nurses from Hospital. Nurses were included in the main subject. The clarification for statements related to their translation to Arabic was done. Each nurse was met after explaining the purpose of the study and getting agreement of nurses to participate in the research. Collection of data took three months at Hospital from beginning of January to March, 2024. The time needed to complete the two scales was (20-30 minutes)

The study was conducted with careful attention to ethical standards of research and rights of the participants: The respondent rights was protected by ensuring voluntary participation, so the informed consent was obtained by explaining purpose, nature time of conducting the study, potential benefits of the study, how data will be collected, expected outcomes and the respondent rights to withdrawing from the research study at any time in case of violation of his rights.

Data were verified prior to entry into computer. Data were fed to the computer and analyzed using IBM SPSS (software package version 28.0). Qualitative data were described using number and percent. Quantitative data were described using mean and standard deviation. Significance of the obtained results was judged at the 5% level. A significance level value was considered when $p\text{-value} \leq 0.05$ and a highly significance level was considered when $p\text{-value} \leq 0.001$, while $p\text{-value} > 0.05$ indicated non- significance results. Pearson coefficient (r) is a test used to study correlation between two normally distributed quantitative variables.

Results

Table (1) shows the percentage distribution of nurses according to their personal characteristics. It shows that the majority (80.5% - 82.3%) of nurses had age less than 30 years old and was females respectively. Likewise, (54, 9%) of them had Bachelor degree in nursing. In addition, (77.6%) of nurses were married. Regarding department, (21, 7%) of nurses were working at Intensive care unit. Concerning years of experience, the majority (88, 4%) of them had.

Table (1): Percentage distribution of nurses according to their personal characteristics

Personal characteristics	No	%
Age		
< 30 years	223	80.5
30 - 45 years	54	19.5
>45 years	0	0.0
Gender		
Male	49	17.7
Female	228	82.3
Educational qualification		
Diploma Degree in Nursing	24	8.7
Nursing Institute	91	32.9
Bachelor Degree in Nursing	152	54.9
Others	10	3.6
Marital status		
Married	215	77.6
Unmarried	62	22.4
Units		
Pediatric care unit	30	10.8
Emergency care unit	23	8.3
Incubator unit	34	12.3
Dialysis unit	38	13.7
Intensive care unit	60	21.7
Intermediate care unit	18	6.5
Cardiac care unit	25	9.0
Chest care unit	16	5.8
Coronary care unit	33	11.9
Years of experience		
<10 years	245	88.4
10 - 15 years	26	9.4
>15 years	6	2.2
Courses		
Yes	159	57.4
No	118	42.6

Table (2) shows the total perception levels of nurses regarding nurse physician collaboration dimensions. It shows that (48.4%) of nurses had low perception level regarding Joint participation in cure / care decision making dimension and (46.9%-41, 9%) of nurses had moderate perception level regarding sharing of patients' information and degree of cooperation dimensions respectively.

Table (2): Total perception levels of nurses regarding nurse/physician collaboration dimensions

Nurse/physician collaboration dimensions	Low		Moderate		High	
	No.	%	No.	%	No.	%
Joint participation in cure / care decision making	134	48.4	69	24.9	74	26.7
Sharing of patients' information	52	18.8	130	46.9	95	34.3
Degree of cooperation	89	32.1	116	41.9	72	26.0
Total	109	39.4	105	37.9	63	22.7

Table (3) illustrates that there was a highly statistically significant positive correlation between overall nurses' perception regarding nurse/physician collaboration and overall professional nursing autonomy ($P \leq 0.001$).

Table (3): Correlation between nurses' perception regarding nurse/physician collaboration and professional nursing autonomy

Professional nursing autonomy dimensions		Nurse/physician collaboration dimensions			
		Joint participation in cure / care decision making	Sharing of patients' information	Degree of cooperation	Overall
Nursing practice environment for nurses	r	0.439	0.313	0.323	0.464
	p	<0.001**	<0.001**	<0.001**	<0.001*
Nursing care management	r	0.632	0.433	0.427	0.652
	p	<0.001**	<0.001**	<0.001**	<0.001*
Educational background for nurses	r	0.460	0.246	0.460	0.489
	p	<0.001**	<0.001**	<0.001**	<0.001*
Structural construction of autonomy	r	0.600	0.397	0.465	0.630
	p	<0.001**	<0.001**	<0.001**	<0.001*
Behavioral trends of nurse's autonomy	r	0.092	0.013	0.181	0.109
	p	0.126	0.831	0.002*	0.071
Overall	r	0.554	0.354	0.458	0.585
	p	<0.001**	<0.001**	<0.001**	<0.001*

r: Pearson coefficient *: Statistically significant at $p \leq 0.05$ **: highly statistical significant $P \leq 0.001$

Discussion

According to the current study, 80.5% of nurses were female and under 30 years old, respectively. Additionally, 54.9% of them held a nursing bachelor's degree. Furthermore, 77.6% of nurses had a spouse. In relation to the unit, the intensive care unit employed 21.7% of nurses. Eighty-eight percent of them have fewer than ten years of experience. Additionally, 57.4% of the nurses have completed courses. According to the current study, 39.4% of nurses had a poor opinion of nurse-physician teamwork. Whereas a high perceived level was seen in 22.7% of them. This could be as a result of nurses being viewed as doctors' subordinates who follow their instructions.

This finding was consistent with **Amsalu et al (2014)**⁽²²⁾ who conducted a study about "Attitudes of nurses and physicians towards nurse-physician collaboration and showed that nurses were not satisfied with their collaboration with physicians. Also, this finding was agreement with **Suryanto et al (2016)**⁽²³⁾ who conducted a study about "Collaboration between nurses and physicians in emergency department" and showed that nurses had significantly higher scores and more positive attitudes towards collaboration.

According to the current study, nurses' perceptions of joint engagement in cure/care decision making were low for 48.4% of nurses, while their perceptions of patient information exchange and degree of collaboration were moderate for 46.9%–41.9% of nurses. This might be as a result of nurses' lack of involvement in patient care decision-making. This result was in line with a study by **Wang et al. (2018)**⁽²⁴⁾ on "The influence of effective communication, perceived respect, and willingness to collaborate on nurses' perceptions of nurse-physician collaboration." The study revealed that nurses had a low regard for joint participation in decision-making regarding care and cure.

Based on the current study, fourteen percent of nurses reported a high perception level of professional nursing autonomy, whereas forty-six percent had a low perception level. The traditional supervision and control methods used by doctors, their autocratic or unsupportive management style, their workload, and hospital regulations could all be to blame for this. Furthermore, nurses work in a government hospital with little organizational support and are not permitted to participate in decision-making by the managers. Given that the majority of research participants were new to the field, lacked clinical expertise, and were still getting used to their roles as nurses, this outcome was not shocking.

This finding was consistent with **Sarkoohijabalbarezi et al (2017)**⁽²⁵⁾ who conducted a study was about " The relationship between professional autonomy and moral distress among nurses working in children's units and pediatric intensive care wards" and found low levels of professional nursing autonomy among nurse. Also, It was consistent with **Mansour (2017)**⁽²⁶⁾ who conducted a study about "Hospital forces as perceived by nurses at Hospital" and reported that, autonomy perception had low score among nurses.

This finding was different with **El-Adly, (2014)**⁽²⁷⁾ conducted a study about "The influence of organizational climate on nurses' autonomy" and showed that nurses had moderate levels of autonomy. Also, **Laschinger et al., (2001)**⁽²⁸⁾ conducted a study about "Impact of structural and psychological empowerment on job autonomy in nursing work settings" and found that more half of nurses were perceived a high autonomy level. This finding was consistent with **Papathanassoglou et al., (2012)**⁽²⁹⁾ who conducted a study about" professional autonomy, collaboration with physicians, and moral distress among intensive care nurses" and found a relation between Professional autonomy and nurse/physician collaboration.

This finding was incongruent with **Aghamohammadi et al (2019)**⁽³⁰⁾ who conducted a study about "Nurse–Physician Collaboration and the Professional Autonomy of Intensive Care Units Nurses" and found that there was no significant relationship between the nurses' attitudes toward the nurse–physician collaboration and the professional autonomy of nurses. The present study showed that there was a highly statistical significant positive correlation between overall nurses' perception regarding nurse/physician collaboration and overall professional nursing autonomy.

Conclusion

The present study concluded that nearly two fifths of nurses had low perception level regarding nurse and physician collaboration. While more than one fifth of them had a high

perception level. In addition, more than two fifth of nurses had low perception level about professional nursing autonomy, while, less than one fifth of them had moderate perception level. There was a highly statistical significant positive correlation between overall nurses' perception regarding nurse/physician collaboration and overall professional nursing autonomy. The following recommendations are made in light of the results of the current study: granting nurses' sufficient authority to carry out hospital policies. Offering doctors and nurses a carefully thought-out orientation program that goes over policies, procedures, and the duties of the health team members. Administrators must be just and treat doctors and nurses equally when it comes to disciplinary action.

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