

Research Article

Seeking the Mutual Goal: Investigating Attitude toward Collaboration between Nurses and Physicians

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Received: 14.04.20, Revised: 23.05.20, Accepted: 09.06.20

ABSTRACT

Purpose of study: Inter-professional collaboration is critical for patient care outcomes and instituting proficient communication between nurses and physicians is unescapable. So, this study aims to (i) Investigate the attitude of physicians and nurses toward inter-professional collaboration and (ii) Identify the relationship between certain demographic characteristics and the overall attitude.

Design of study: Cross-sectional descriptive design was adopted in this study.

Methods: The researcher used the Arabic version of the Jefferson Scale of Attitude toward Physician-Nurse Collaboration (JSAPNC) as a tool to achieve the purpose of the study. 236 physician and nurse were participated in the study. All nurses and physicians who have one year of experience or more were qualified to be comprised in the sample.

Findings: Results show that the nurses have more positive attitude toward physician-Nurse collaboration were he total mean score for nurses was 3.10 in comparison to 3.06 for physicians. Also, there was a statistically significant relationship between overall attitude while no relationship appeared with years of experience.

Conclusions: according to the study findings, nurses have more willingness to collaborate with physician despite the literature proven effect of hierarchical model of patient care which is followed in Iraq.

Keywords: Physician-Nurse Collaboration, Jefferson Scale, Inter-professional partnership

INTRODUCTION

Growing complexity and high technological innovations in care process which make the delivery of health care and achieving its goals is impossible for any single healthcare professional. Majority of organizations in healthcare sector are organized in groups (teams) where multiple professionals, such as physicians, nurses, technicians, etc., have to collaborate with the purpose of accomplish optimal outcomes for patient health (Caricati et al., 2015).

Nurse-physician collaboration can be defined "nurses and physicians working together, sharing responsibilities for solving problems and making decisions to formulate and carry out plans for patient care." (Baggs & Schmitt, 1988). So, effective and proper nurse-physician collaboration is indispensable to enhance outcomes of patients health and minimize healthcare financial burden, maximize satisfaction at job, and promote safety of the patient (Elsous, Radwan, & Mohsen, 2017).

Although nurse-physician partnership is beneficial for both of them and for patients, their relationship is frequently labelled as stressed and argumentative (Sollami, Caricati, & Sarli, 2015) and collaboration obstacles have been an continuing issue in health

care sector. This relationship back in days has been unequal on the basis of gender and education, in the means of the physician comes in first and the nurse comes later (Streeton et al., 2016). Many obstacles have been documented that halt attaining a complete partnership with physicians. One of them is that nurses percept collaboration as more valuable and vital than physicians do (Hughes & Fitzpatrick, 2010). Another one, physicians do not appear to recognize the nurses' role and view of practice. Complete partnership attained when both professions identify the distinctive impact and contribution of each of them. Third obstacle is that a disconnect present in quality perception of collaboration. Nurses significantly underestimate the collaboration quality than do physicians. If problem does not identified by both, physicians and nurses will have lower incentive to find a solution (Boev & Xia, 2015).

Also, the variances between nurses and physicians regarding capability, viewpoint, salary, education, position, and gender in some instances, was mentioned in this conflict context. So, improvement of communications between physicians and nurses needs additional nurses training and wide-ranging

modifications are obligatory in the community and the healthcare scheme (Zakerimoghdam, Ghiyasvandian, & Leili, 2015).

Concerning Iraqi health context, physician have control over the entire medical institute in comparison to nurses and they have always been in a situation of higher authority and power. The major health organizations (ex: Ministry of Health) adopt a policies where nurses are administratively directed by physicians and in principle must follow their orders. This condition may cause the nurses have a feeling of restriction and less independence and appreciation and can produce more obstacles and less productive partnership.

As far as we know, this study is one of the first studies evaluating nurses-physician collaboration in Iraq with the Arabic translated form of the Jefferson Scale of Attitude toward Nurse- Physician Collaboration. Main aims of the study was to (i) evaluate physicians and nurses attitudes toward nurse-physician collaboration and (ii) state the socio-demographic influences that could affect it. Also, (iii) to examine the two hypotheses below regarding essential factors affecting nurse and physician cooperative partnership:

H1: The physicians have further negative attitudes toward physician-nurse collaboration than the nurses.

H2: Attitude toward nurse-physician collaboration is associated with experience period at work.

These two hypotheses are relay on role theory (Biddle, 1979; Turner, 2001) which shows that everybody action and activity is based on categories identified by the society and communication among individuals and is managed by the place or position every individual have in a communal or proficient relationship, and consequently communication and interactions do not happen if individual fail to adopt his role. To define collaboration as a behavior, this theory might be used to outline the difficulties of roles of the cooperating individuals.

METHODOLOGY

Design, sitting, and sample

A descriptive design was selected in this study to evaluate nurses and physicians attitudes toward nurse-physician collaboration. A total of 250 questionnaires was distributed to nurses and physicians working in Al-Hussein teaching hospital in Al-Nasiriyah city/Iraq, 236 completed questionnaires is returned with a response rate of 94%. All nurses and physicians who have one year of experience or more were eligible to be included in the study sample.

Instruments

The researcher chooses the Arabic version of the Jefferson Scale of Attitude toward Physician-Nurse Collaboration (JSAPNC) as a tool to achieve the purpose of the study "The Cronbach alpha was 73.2 for the entire model (74.7–89.5) and test-retest reliability was 70.9 and 69.7, respectively. The item content validity index and scale content validity index ranged from 0.77 to 1.00 and 0.88 to 0.94, respectively". The tool has two main parts: Demographic characters included age, gender, educational level, profession, and experience at work. The second part is composed of 15 questions forming 4 factors simply revised from the English original scale: (i) nurse-physician collaboration (items three, four, five, seven, nine, eleven, twelve, and thirteen), (ii) doctor's authority (items fourteen and fifteen), (iii) shared education (items one, two, and six), and (ix) nursing role in patient care (items eight and ten). The answers are measured on four-point Likert scale: (4) = strongly agree; (3) = agree; (2) = disagree (1) = strongly disagree. Except of factor (ii) statements which are reversed-scored (Elsous et al., 2017).

Statistical analysis

The analysis of data was accomplished through the usage of statistical package for social sciences (SPSS) version 22. Frequencies, percentage, means, and standard deviation were used for quantitative variables. Two groups comparison was made by *t*-test and statistically significant was determined at $p < 0.05$.

RESULTS

Demographic Characteristics

67 (28.4%) physicians and 169 (71.6%) nurses responded. 122 (72.2) of nurses were males while 43 (64.2) of physicians were females, 65 were 26-30 years old (38.5%). Majority of nurses and physicians have experience between 1-5 years (Table 1).

Mean Values Differences

There were significant differences between physicians and nurses in the attitude concerning collaboration ($p < 0.001$). The total score mean for nurses was 3.10 in comparison to 3.06 for physicians. Physicians recorded lower than nurses in the 4 domains of the questionnaire ($p < 0.001$), signifying that the nurse's attitudes were more positive toward nurse-physician collaboration compared to physician. For example, the nurses'

mean score in the third domain were 3.32 compared to 2.81 recorded by physicians (Table 2). Table (3) displays highly significant relationship between overall attitude and gender only ($p < 0.009$), while no significant relationship was found between general attitude and years of experience.

Table 1: Socio-demographic characteristics of participants (N = 236)

Variable	Group	Nurses N= 169 (%)	Physician N= 67 (%)	Total N= 236 (%)
Age	20-25 years	19 (11.2)	11 (16.4)	30 (12.7)
	26-30 years	65 (38.5)	40 (59.7)	105 (44.5)
	31-35 years	47 (27.8)	11 (16.4)	58 (24.6)
	36 and above	38 (22.5)	5 (7.5)	43 (18.2)
Gender	Male	122 (72.2)	24 (35.8)	146 (61.9)
	Female	47 (27.8)	43 (64.2)	90 (38.1)
Educational level	Preparatory school graduate	16 (9.5)	0	16 (6.8)
	Diploma	38 (22.5)	2 (3)	40 (17)
	Bachelor	65 (38.5)	55 (82.1)	120 (50.8)
	Master	42 (24.8)	6 (8.9)	48 (20.3)
	Ph.D.	8 (4.7)	0	8 (3.4)
Experience at work	Board	0	4 (6)	4 (1.7)
	1-5 years	60 (35.5)	50 (74.6)	110 (46.6)
	6-10 years	53 (31.4)	11 (16.4)	64 (27.1)
	11 and above	56 (33.1)	6 (9)	62 (26.3)

N=Number of Sample, %=Percentage

Table 2: Differences and mean values according to JSAPNC domains between physicians and nurses

Domain	Profession	M (S.D)	SEM	t	df	p value
Physician-nurse collaboration	Physicians	3.45 (.365)	.045	169.551	412	0.000
	Nurses	3.61 (.293)	.023			
Doctor's authority	Physicians	2.91 (.773)	.094	43.846	408	0.000
	Nurses	2.94 (.665)	.051			
Shared education	Physicians	3.09 (.466)	.057	104.077	387	0.000
	Nurses	3.43 (.469)	.036			
Nursing role in patient care	Physicians	2.81 (.852)	.104	64.001	135	0.000
	Nurses	3.32 (.674)	.052			
General attitude	Physicians	3.06 (.296)	.036	154.272	394	0.000
	Nurses	3.10 (.313)	.024			

M=Mean, S.D=Standard Deviation, SEM=Standard Error of Mean, t= t-test value, df= Degree of freedom

Table 3: Relationship between general attitude and demographic characteristic

Independent variables	B	SE	β	t value	P-value
(Constant)	3.016	.124		24.402	.000
Age	-.045	.047	-.067	-.966	.335
Gender	.121	.046	.182	2.617	.009**
Years of Experience	.005	.039	.014	.136	.892
Educational Level	-.015	.035	-.046	-.433	.666

DISCUSSION

Physicians and nurses collaboration is essential in today's health care sector, but collaboration and

teamwork have traditionally been troubled by multiple encounters, involving differences in authority, bad communication, low respect, and

vague roles description (Edwards et al., 2017). This relies responsibility on the shoulders of the responsible organizations to develop a proper and urgent solutions (ex: legislation of laws) to fill the occupational gap and pile the relationship of nurses and physicians.

Findings exhibit that cooperation attitude between nurses and physicians is considerably different where nurses displayed more positive attitudes than physicians do. This result is incongruent with and supported by preceding related researches (Brown, Lindell, Dolansky, & Garber, 2015; Elsous et al., 2017; Plummer & Copnell, 2016; Sollami et al., 2015). However, some literature studies shows different results where physicians shows more positive attitude toward collaboration (Ardahan, Akçasu, & Engin, 2010; Bowles et al., 2016; Collette et al., 2017), literature impute the nurse-physician relationship to the model followed in patient (hierarchical model) which implies that nurses are just assistant for doctors and are regarded as inferior, a concern that is expected to generate conflicts between physicians and nurses (Gotlib Conn, Kenaszchuk, Dainty, Zwarenstein, & Reeves, 2014) compared with studies involving American nurses (Hojat et al., 2003; Hojat et al., 2001) which have more positive attitude since in America, they used complementary model of professional roles. However, (Barrere & Ellis, 2002; Henkin et al., 2016; Katz & MacDonald, 2002) mentioned that when information regarding role of nurses increases, important positive changes in the attitude of nurses concerning collaboration can occur. Accordingly, inadequate knowledge about nursing roles harmfully disturbs the readiness of physicians to adapt collaborative behaviors.

Even on the level of domains nurses scored higher than physicians. For instance, Incongruity is clear about role of nurses in patient care. (Disagree) were scored more by physicians scored while more nurses scored (agree). similar study refer it to the shortage of organizational sustenance for nurses' impact in patient care holistic model (Sterchi, 2007).

As regards the relationship between JSAPNC with demographic characteristics, this study revealed a statistically significant relationship between attitude and age which is in agreement with (Zakerimoghadam et al., 2015), While no relationship where found with other characteristics including years of experience along the line with (Bowles et al., 2016) and in contrast to (Ma & Stimpfel, 2018) (El Sayed & Sleem, 2011). A potential clarification might be that even long experience years will not affect the collaboration

since the hierarchical model of patient care are being followed in Iraqi health organizations, and changes are necessary on this basis.

Study limitations

This study has two main limitations, first one is that it's complex to take in consideration all factors that affect the attitude of physicians and nurses toward collaboration because of multifaceted relationship between both sides. Consequently, results explanation should be considered carefully. Second one related to the relatively small study sample which limits the external validity of the results.

CONCLUSION

Findings of the study approves one of the two hypotheses. The supported hypothesis is that physicians have further negative attitudes toward physician-nurse collaboration than the nurses. The unsupported hypothesis is that experience period at work has association with overall attitude toward physician-nurse collaboration.

ACKNOWLEDGEMENTS

The authors would like to thank all the participant of the study for their treasured time. Also, great thanks to Dr. Ayman Elsous for his valuable assistant.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest.

FUNDING

The author disclosed receipt of no funding.

ETHICAL PERMISSIONS

Thi-Qar Health Directorate and the hospitals administration validated the permission to advance with the study. Study objectives was clarified to all participants' preceding the start of the study and a written consent was distributed to and signed by the participants Identities were kept anonymous and participation was on voluntary bases.

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