



INFLUENCING FACTORS OF NURSE- PHYSICIAN COLLABORATIVE RELATIONSHIP IN SELECTED HOSPITALS, GUWAHATI, ASSAM WITH A VIEW TO DEVELOP STRATEGIES TO ENHANCE COLLABORATIVE RELATIONSHIP: A DESCRIPTIVE STUDY

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ABSTRACT:

BACKGROUND: Effective teamwork between healthcare professionals is recognized to be a critical element of patient safety and quality of care. Collaborative relationships between nurses and physicians in healthcare settings are crucial for optimizing patient care, promoting effective communication, ensuring resource efficiency, and facilitating shared decision-making. These relationships are essential for delivering high-quality, patient-centered care. These relationships are essential for delivering high-quality, patient-centered care. El Sayed and Sleem (2011) view collaboration as a partnership between both parties in a relationship. These authors defined collaboration "as the process of joint decision-making among independent parties, involving joint ownership of decisions and collective responsibility for outcomes". Collaboration in this definition involves not only partnership in the decisions made but also shared responsibility for the decisions made.

OBJECTIVES:

- To identify the key influencing factors of nurse-physician collaborative relationship in selected hospitals, Guwahati, Assam.
- To develop strategies to enhance nurse-physician collaborative relationship in selected hospitals, Guwahati, Assam.
- To find association between levels of nurse-physician collaborative relationship with selected demographic variables.

METHODS AND MATERIALS: The research approach adopted was quantitative approach. A non-experimental descriptive design was used in this study to accomplish the objectives. Study was undertaken on 154 nurses and 24 physicians of selected hospitals of Guwahati, Assam using Multistage Convenience sampling technique. The data were collected using semi-structured questionnaire on influencing factors of nurse-physician collaborative relationship. Self report was the technique used for it.

RESULTS: The findings revealed that out of 154 nurses and 26 physicians, the demographic results shows that majority 82(45.6%) were in the age group of 21-25 years, 165(91.7%) were female, 120(66.7%) were GNM, 89(49.4%) had 1-5 years of working experience, 150(83.3%) were unmarried, 60(33.3%) were working in Intensive care unit. Out of 154 nurses and 26 physician majority 172(95.56%) agreed to effective induction class, 61(33.89%) were uncertain to lack of recognition from organizational support factors, 146(81.11%) agreed in open communication from communication factors, 167(92.78%) agreed in cultural respect and valuing each other's contributions, 95(52.78%) disagreed on blaming one another from mutual respect factors and 166(92.22%) agreed in effective teamwork, 106(58.89%) disagreed to ego from interpersonal relationship. The

demographic variables gender ($p=0.001$), professional qualification ($p=0.0001$) and marital status ($p=0.0001$) had statistically significant association with influencing factors of collaboration between nurses-physician relationship at $p<0.001$ level. The demographic variable age ($p=0.030$) and total years of working experience ($p=0.022$) had statistically significant association with influencing factors of collaboration between nurses-physician relationship at $p<0.05$ level.

CONCLUSION

The present study showed that the level of nurses- physician collaborative relationship is highly influenced by the factors like effective induction class, open communication, cultural respect and valuing each other's contribution and effective teamwork. The developed strategies based on the factors identified will help to build a positive nurse-physician collaborative relationship.

KEYWORDS: Collaboration, nurse, physician, influencing factors

INTRODUCTION:

The professions of nursing and medicine together makeup a significant portion of health care providers supporting collaboration between them are essential in the development of appropriate treatment plans that lead to the best patient outcomes. Patients feel the health care team is working together to ensure care delivered is carried out appropriately when they visually observe active collaborative measures (Starmer et al.2014).

Collaboration between nurses and physicians will improve their ability to achieve patient well being. Furthermore, collaboration and understanding between nursing staff and physicians improves patient outcome and the job satisfaction of nurses and may be a factor in the retention of nurses, Trust and integrity playing an important role in effective nurse-physician relationship. Valuable information about the patient may not be shared, and orders may be delayed if antagonism, poor communication, and mistrust exist between doctors and nurses (El- Hanafy, 2018).

OBJECTIVES:

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- To develop strategies to enhance nurse-physician collaborative relationship in selected hospitals, Guwahati, Assam.
- To find association between levels of nurse-physician collaborative relationship with selected demographic variables.

METHODOLOGY:

A descriptive design was used in the study to accomplish the objectives using non- probability convenient sampling technique for obtaining adequate sample for the study. Study was done on 154 nurses and 26 physicians in selected hospitals of Guwahati, Assam. Respondents were selected on the basis of inclusion and exclusion criteria; semi structured knowledge questionnaire was used to assess the influencing factors of nurse-physician collaborative relationship.

DESCRIPTION OF THE TOOL-

In order to meet the objectives of the study, the following tools were constructed which consists of three sections:

Section-I: Demographic Variables

Section-II: Semi-structured questionnaire

Section-III: Strategies to enhance nurse-physician collaborative relationship

DATA COLLECTION PROCEDURE:

Data collection process was scheduled from 28th September to 19th October 2023.

Prior data collection, permission was obtained from the respective authorities. After getting permission, the investigator visited the hospitals on the given dates and was introduced to the nurses and physicians who fulfilled the pre- determined selection criteria. The investigator explained the purpose of her study and she assured them of the confidentiality and anonymity to get their co-operation and prompt responses during data collection. 154 nurses and 26 physicians were selected using multistage convenience sampling method. A written informed consent was also taken from the nurses and physicians. Then the investigator distributed the tools developed to assess the influencing factors of nurse-physician collaborative relationship which took 15-20 minutes to complete in average.

RESULTS:**SECTION I: Frequency and percentage distribution of demographic variables of nurses and physicians.****TABLE 1:****n = 180**

Demographic Variables	Frequency (f)	Percentage (%)
Age in years		
21 – 25	82	45.6
26 – 30	66	36.7
31 – 35	16	8.9
>35	16	8.9
Gender		
Male	15	8.3
Female	165	91.7
Others	-	-
Professional qualification		
MBBS	11	6.1
MBBS with Post Graduation Diploma	4	2.2
MD	10	5.6
G.N.M	120	66.7
B.Sc. Nursing	25	13.9
Postbasic B.Sc. Nursing	8	4.4
M.Sc. Nursing	-	-
Nurse Practitioner	-	-
Others, specify	2	1.1
Total years of working experience		
<1 year	54	30.0
1 – 5 years	89	49.4
5 – 10 years	23	12.8
>10 years	14	7.8
Marital status		
Married	30	16.7
Unmarried	150	83.3
Divorced	-	-
Widowed	-	-
Area of work		
Emergency room	15	8.3
Medical ward	53	29.4
Surgical ward	25	13.9
Intensive care unit	60	33.3
OT	4	2.2
If any other area specify	23	12.8

The table 1 depicts that most of the nurses and physicians, 82(45.6%) were aged between 21 – 25 years, 165(91.7%) were female, 120(66.7%) were GNM, 89(49.4%) had 1 – 5 total years of working experience, 150(83.3%) were unmarried and 60(33.3%) were working in intensive care unit.

SECTION II: Assessment of mean and standard deviation of influencing factors of collaboration between nurses-physician relationship

Table 2:

n = 180

Influencing Factors	Score
Mean	61.84
S.D	6.82

The table 2 shows that the mean score of collaboration score was 61.84±6.82.

SECTION III: Frequency and percentage distribution of influencing factors of nurse-physician collaborative relationship in selected hospitals

TABLE 3:

n= 180

SL.NO	Factors	Agree		Uncertain		Disagree	
		f	%	f	%	f	%
A.	Organizational support						
1.	Effective induction class.	172	95.56	6	3.33	2	1.11
2.	Work load.	95	52.78	69	38.33	16	8.89
3.	Supportive policies and procedures.	166	92.22	14	7.78	-	-
4.	Inexperience health professionals.	64	35.56	47	26.11	69	38.33
5.	Inadequate resources.	77	42.78	43	23.89	60	33.33
6.	Adequate mental support.	113	62.78	42	23.33	25	13.89
7.	Lack of recognition.	60	33.33	61	33.89	59	32.78
8.	Lack of appreciation.	79	43.89	61	33.89	40	22.22

9.	Professional and personal guidance.	147	81.67	26	14.44	7	3.88
10.	Welfare activities (parties, picnic)	109	60.56	40	22.22	31	17.22
B.	Communication						
11.	Open communication	146	81.11	22	12.22	12	6.67
12.	Fear in expressing opinion/ideas.	63	35	63	35	54	30
13.	Hesitation in opening up conversation.	65	36.11	55	30.56	60	33.33
14.	Openness to feedback	145	80.55	21	11.67	14	7.78
15.	Use of medical jargon.	105	58.33	54	30	21	11.67
16.	Assertiveness of health professionals.	123	68.33	44	24.45	13	7.22

C.	Mutual respect						
17.	Trust on each other	156	86.67	15	8.33	9	5
18.	Cultural respect	167	92.78	8	4.44	5	2.78
19.	Valuing each other's contributions	162	90	13	7.22	5	2.78
20.	Blaming one another	53	29.44	32	17.78	95	52.78

D.	Interpersonal relationship						
21.	Professional etiquette.	159	88.33	20	11.11	1	0.56
22.	Effective teamwork	166	92.22	9	5	5	2.78
23.	Conflicts among professionals.	57	31.67	61	33.89	62	34.44
24.	Ego	33	18.33	41	22.78	106	58.89
25.	Lack of recognition from both professionals.	42	23.33	44	24.45	94	52.22
26.	Lack of appreciation from both professionals.	53	29.44	39	21.67	88	48.89

The table 3 shows that with regard to **influencing factors related to Organizational support**, out of 154 nurses and 26 physicians majority i.e.172(95.56%) agreed to effective induction class, 166(92.22%) agreed to supportive policies and procedures,147(81.67%) agreed to professional and personal guidance, 113(62.78%) agreed to adequate mental support,109(60.56%) agreed to welfare (parties, picnic) , 95(52.78%) agreed to work load,79(43.89%) agreed to lack of appreciation, 77(42.78%) agreed to inadequate resources, 69(38.33%) disagreed to inexperience health professionals, 61(33.89%) were uncertain to lack of recognition.

Influencing factors related to communication shows that, out of 154 nurses and 26 physicians majority i.e. 146(81.11%) agreed to open communication,145(80.55%)agreed to openness to feedback, 123(68.33%) agreed to assertiveness of health professionals, 105(58.33%)agreed to use of medical jargon,65(36.11%) agreed to hesitation in opening up conversation, 63(35%) agreed to fear in expressing opinion/ideas and 63(35%) were also uncertain to fear in expressing opinion/ideas.

Influencing factors related to mutual respect shows that , out of 154 nurses and 26 physicians majority i.e. 167(92.78%) agreed to cultural respect, 162(90%) agreed to valuing each other's contributions,156(86.67%) agreed to trust on each other, 95(52.78%) disagreed on blaming one another.

Influencing factors related to interpersonal relationship that, out of 154 nurses and 26 physicians majority i.e. 166(92.22%) agreed to effective teamwork, 159(88.33%) agreed to professional etiquette, 62(34.44%) disagreed to conflicts among professionals, 88(48.89%) disagreed to lack of appreciation from both professionals, 94(52.22%) disagreed to lack of recognition from both professionals, 106(58.89%) disagreed to ego.

SECTION IV: Association between level of nurse-physician collaborative relationship with selected demographic variable

TABLE 4:

n=180

Demographic Variables	Low Collaboration		Moderate Collaboration		High Collaboration		Fisher Exact test p-value
	f	%	f	%	f	%	
Age in years							p=0.030 S*
21 – 25	10	5.6	57	31.7	15	8.3	
26 – 30	12	6.7	43	23.9	11	6.1	
31 – 35	7	3.9	8	4.4	1	0.6	
>35	7	3.9	7	3.9	2	1.1	
Gender							p=0.001 S***
Male	9	5.0	5	2.8	1	0.6	
Female	27	15.0	110	61.1	28	15.6	
Others	-	-	-	-	-	-	
Professional qualification							p=0.0001 S***
MBBS	8	4.4	3	1.7	0	0	
MBBS with Post Graduation Diploma	2	1.1	2	1.1	0	0	
MD	7	3.9	3	1.7	0	0	
G.N.M	16	8.9	82	45.6	22	12.2	
B.Sc. Nursing	2	1.1	18	10.0	5	2.8	
Postbasic B.Sc. Nursing	1	0.6	6	3.3	1	0.6	
M.Sc. Nursing	-	-	-	-	-	-	
Nurse Practitioner	-	-	-	-	-	-	
Others, specify	0	0	1	0.6	1	0.6	
Total years of working experience							p=0.022 S*
<1 year	7	3.9	41	22.8	6	3.3	
1 – 5 years	15	8.3	55	30.6	19	10.6	
5 – 10 years	8	5.0	13	7.2	1	0.6	
>10 years	5	2.8	6	3.3	3	1.7	
Marital status							p=0.0001 S***
Married	14	7.8	16	8.9	0	0	
Unmarried	22	12.2	99	55.0	29	16.1	
Divorced	-	-	-	-	-	-	
Widowed	-	-	-	-	-	-	
Area of work							p=0.175 N.S
Emergency room	6	3.3	8	4.4	1	0.6	
Medical ward	10	5.6	32	17.8	11	6.1	
Surgical ward	1	0.6	21	11.7	3	1.7	
Intensive care unit	14	7.8	37	20.6	9	5.0	
OT	2	1.1	2	1.1	0	0	
If any other area specify	3	1.7	15	8.3	5	2.8	

***p<0.001, **p<0.01, *p<0.05, S – Significant, p>0.05, N.S – Not Significant

INTERPRETATION

The table 4 depicts the association of influencing factors of collaboration between nurses

physician relationship with their selected demographic variables.

Age: The calculated p value was 0.030. Since the p value was less than 0.05 there was significant association between influencing factors and age.

Gender: The calculated p value was 0.001. Since the p value was less than ≤ 0.001 there was significant association between influencing factors and gender.

Professional qualification: The calculated p value was 0.0001. Since the p value was less than ≤ 0.001 there was significant association between influencing factors and Professional qualification.

Total years of working experience: The calculated p value was **0.022**. Since the p value was less than 0.05 there was significant association between influencing factors and Total years of working experience.

Marital status: The calculated p value was **0.0001**. Since the p value was less than ≤ 0.001 there was significant association between influencing factors and marital status

Area of work: The calculated p value was 0.175. Since the p value was more than 0.05 there was no significant association between influencing factors and area of work.

Therefore, H_0 was rejected and H_1 is accepted which inters that there was significant association between level of nurse-physician collaborative relationship with selected demographic variables like age, gender, professional qualification, working experience and marital status.

H_1 is rejected and H_0 was accepted which inters that there was no significant association between level of nurse-physician collaborative relationship with selected demographic variable-area of work.

CONCLUSIONS

Based on the analysis of the findings of the study, the following inferences were drawn:

Out of 154 nurses and 26 physicians, the demographic results shows that majority 82(45.6%) were in the age group of 21-25 years, 165(91.7%) were female, 120(66.7%) were GNM, 89(49.4%) had 1-5years of working experience, 150(83.3%) were unmarried, 60(33.3%) were working in Intensive care unit.

Out of 154 nurses and 26 physicians, the mean score of collaboration score was 61.84 ± 6.82 , median score was 61.0. The minimum score was 47.0 and maximum score was 76.0

Out of 154 nurses and 26 physician majority 172(95.56%) agreed to effective induction class, 61(33.89%) were uncertain to lack of recognition from organizational support factors,

146(81.11%) agreed in open communication from communication factors, 167(92.78%) agreed in cultural respect and valuing each other's contributions, 95(52.78%) disagreed on blaming one another from mutual respect factors and 166(92.22%) agreed in effective teamwork, 106(58.89%) disagreed to ego from interpersonal relationship

The table IX shows the demographic variables gender ($p=0.001$), professional qualification ($p=0.0001$) and marital status ($p=0.0001$) had statistically significant association with level of nurse-physician collaborative relationship at $p < 0.001$ level.

The table IX further shows that the demographic variable age ($p=0.030$) and total years of working experience ($p=0.022$) had statistically significant association with level of nurse-physician collaborative relationship at $p < 0.05$ level.

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