Original article

Physician-Nurse collaboration-Is there a discrepancy?

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Abstract

Background: Inter professional collaboration is essential for all the professionals especially in healthcare management to enhance quality care and to attain job gratification. We conducted aforementioned study in tertiary care teaching Hospital and Medical College in India to evaluate the perception of doctors and care takers on inter-professional collaboration.

Materials and Methods: A transversal hospital based survey consists of two features to assess the collaboration between the professionals. Feature 1comprises of the demographic information. Feature 2 comprises of Jefferson's attitude scale of physician nurse collaboration.

Keywords: ICU nurses, surgical nurses, medical nurses, ER nurses, cardiology nurses, orthopedic nurses and pediatric nurses.

Introduction

Collaboration is working with another person or in a group to achieve the common and shared task and goal. Collaboration is a multifaceted phenomenon; it needs a long term communication and relationship between healthcare professionals. Especially between physician and nurses, it creates a positive or negative influence in the patient care. Previous studies stated that, collaboration as a process which occurs during communication. Some have stated that collaboration as a structure, but they have not succeeded in proving that neither collaboration as a process nor a structure.[1] A safe patient care and efficient patient outcome cannot be achieved alone. No profession can stand alone to develop their team and communication. To achieve positive patient outcome and job satisfaction, collaboration plays an essential role.

Background: Differences in an individual make conflicts and if it is handled well, it can produce fruitful solution to the organization. Collaboration needs understanding of one's professional contributions and their limitations. If there is difficulty in collaborating between the healthcare professionals, resulting in emotional distress, conflicts, poor patient care, and dissatisfaction and consequently ends up in professional burnout. Collaboration requires team building and it needs lot of patience to reach the best solution.In tradition, collaboration means an interpersonal communication between the physician and a nurse.[2-5] Healthcare professionals such as physicians, nurses, social workers were of inadequate training to collaborate as inter professionals while providing care to the patient.[6] In spite of efficient inter professional collaboration, threat arise due to obstacles such as gender-specific and class prejudice, chain of

command in institutional framework and physician's assumption that he is an adjudicator in all final decisions.[7] Difference in opinion and goal directed approach for physician and nurses lead to conflict in inter professional relationship and in turn affect the patient care standards until, the doctors and clinical nurses enhance interaction along with relationship.[8] Inability to communicate effectively or poor communication and loss of teamwork in workplace resulting in poor patient end result.[9] Nurses have reported that it is very difficult in dealing with the physicians who are authoritative, kind of behaviour. It is more common in the healthcare scenario especially with the older physicians compared with the younger persons. Because, of the authoritative behaviour of the physicians, nurses got disappointed and dissatisfied in attending even the rounds performed in patient care. The main reason for the collaboration issue due to poor communication, and the physician were more concerned with medical cure or management rather the nurses were more concerned with the emotional issues, difference in their level of education, professional knowledge, and kinds of nurse expertise. And surprisingly, doctors and clinical nurses working in critical care units have shown a good climate of collaboration, mutual respect and understanding as it may be due to the clinical knowledge and expertise of empowering nurses.[10] There is a need for improvement in the nurse's expertise, clinical judgment in caring the patient by continuing in-service education, attending seminars and international conferences to update their knowledge according to the trend and thereby experiencing professional empowerment.Every person has the inner strength to contribute awareness, insight, in equal level and respect to the others values, opinion, and intelligence.[11, 12] Collaboration is always a developing path expanding over time, whether team member changes or there is a change in the structure of an organization.[13, 14] Quality in hospital care and good patient outcome depends on the structure/organization which protects the inter relationship of knowledge and inter professional collaboration in the working area.[15-17] Job satisfaction is always an end result of good teamwork.[18] Discrepancies in teamwork is the reason for the nurses job dissatisfaction in their job.[19] Job dissatisfaction resulting in leaving the profession and thus provoking shortage of nurses in critical care.[20] Good inter professional relationship helps in reducing the number of days in hospital stay and decrease the rate of readmission and improve patient outcome in elder patients with chronic diseases.[21]

Many researches underwent in the past to assess the attitude of physician nurse collaboration, we put forward in India to assess the unrevealed factors towards the perception of physician and nurse on inter professional collaboration and the associated variables influencing inter professional collaboration in tertiary care medical college and hospital. This study helps to develop a resultant stratagem to the hospitals in preventing emotional distress, conflicts, poor patient care, job dissatisfaction and burnout to the employee.

Subject: The two groups of subjects were involved in this study, are nurses and physicians. The subject was selected according to convenient sample, that those who were working at the time of data collection in medical, surgical, cardiology, orthopedic, pediatric, emergency and intensive care units.

Tool: The data was collected using a questionnaire survey of Jefferson's attitude scale of physician nurse collaboration. The data collection was done using

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two variables. The first variable includes demographic information such as gender, age, working unit and years of experience. The second variable includes a Jefferson's scale of physician-nurse collaboration on attitude. The questionnaire consists of 15 items, which is categorized under 4 subtopics such as shared education and teamwork (comprises of 7 items), caring versus curing (comprises of 3 items), nurse's autonomy (comprises of 3 items) and physician's dominance (comprises of 2 items).

Methods:Approval to conduct this study in tertiary care medical college and hospital was obtained prior to data collection from the responsible authorities. The standard questionnaire of Jefferson's attitude scale of physician nurse collaboration was used to assess inter professional collaboration. The questionnaire was circulated to the study subjects that are to the physicians and nurses who were working at the time of data collection. It is a simplified tool, which took about 10-15 minutes to complete the survey. The entered answers were checked for any blanked out field and collected for computerized entry.The inclusive criteria were 1) 18 years of age and above; 2) able to interpret, communicate and compose English; 3) be a registered nurse or physician and 4) Employee working in Tertiary care Medical College and Hospitals.Ethical concern was obtained from all the subjects who are willing to partake in research activity, after explaining the purposes and objectives of the study. Freedom has given to the subject for with drawl at any point of time during the study.

Scoring: The completed questionnaires were scored. The standard Jefferson's attitude of physician nurse collaboration contains 15 items. Each item to be responded in 4 point-Likert scale arranged from strongly accepted (4) to strongly denied (1). The final scores consisted of four sub-scores: the last 2 items in the subtopic "physician dominance" were reversely scored as strongly accepted (1) to strongly denied (4). The higher score corresponds to stronger acceptance towards doctor-caretaker collaboration. The higher rating on "physician dominance" indicates the disapproval of physician commanding over care taker in patient care. The higher rating on "Nurses autonomy" illustrate the active involvement and importance shared by nurses in making decision in patient care. The higher acceptance on "shared education and teamwork" denotes stronger coordination towards incorporative training and inter professional teamwork and conclusively, a higher scoring on "caring versus curing" influences a positive and significant contribution to academic and psychosocial activities of patient care.[22]

Statictics Analysis: Demographic variable including gender, age, working unit and years of experience were entered as numbers and percentages were obtained. Frequencies for all variables were found out. Chi square analysis was performed to analyze the relationships among the variables and subscales such as shared education and teamwork, caring versus curing, nurse's autonomy and physician's dominance. The gathered details was entered in the statistical package of social sciences (SPSS), version 19. Data were conferred using inferential and descriptive statistics in the pattern of numbers, percentages, frequencies, t-test is used to find out the means and standard deviation and to compare the two group of professionals and the level of significance was set at p value <0.05. Pearson's correlation coefficient analysis was used to rule out the relationship between the variables.

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Results :

Demographic Characteristics	**Nurses (n=100)**	**%**	**Physicians (n=97)**	**%**
Gender				
Male	30	70	43	44.3
Female	70	30	54	55.7
Age				
20 - 25	78	78	37	38.1
26 - 30	11	11	31	32
31 - 35	9	9	15	15.5
36 - 40	2	2	8	8.2
> 40	0	0	6	6.2
Experience				
<5 years	80	80	62	63.9
5-10 years	12	12	21	21.6
10 -15 years	6	6	8	8.2
> 15 years	2	2	6	6.2
Department Medicine	38	38	34	35.1
Surgery	27	27	20	20.6
ICU	25	25	30	30.9
Emergency	10	10	13	13.4

Table I: Demographic characteristics of the participants

Table I describes the demographic characteristics of the participants. Sample size of 197 participants were involved in this study in which, 100 participants were nurses and the rest 97 participants were physicians. 38% of nurses were working in the department of medicine, 27% were working in the department of surgery, 25% were working in Intensive care Unit and the rest 10% of the nurses were working in emergency room.Among physicians, 43(44.3%) were male and 54(55.7%) were female. 37(38.1%) of physicians belongs to the age group of 20-25 years, 31(32%) under the age group of 26-30 years, 15(15.5%) in 31-35 years, 8(8.2%) belongs to 36-40 years and 6(6.2%) belongs to more than 40 years. 62(63.9%) of physicians had experience of less than 5 years, 21(21.6%) had 5-10 years of experience, 8(8.2%) had 10-15 years of experience, and 6(6.2%) had more than 15 years of experience. 34(35.1%) of physicians were working in the department of medicine, 20(20.6%) were working in the department of surgery, 30(30.9%) were working in Intensive care Unit and the rest of the physicians13(13.4%) were working in emergency room.

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Collaboration Subscales	Medicine	Surgery	ICU	Emergency	p-value
Shared educational and Collaborative relationships	3.3671±0.4691	3.2948±0.4009	3.4234±0.4259	3.1677±0.2265	0. 000
Caring as opposed to curing	3.3519±0.5063	3.3050±0.4549	3.4424±0.4447	3.3913±0.3431	0. 000
Nurses autonomy	3.3333±0.5280	3.2624±0.4862	3.2899±0.3801	3.3215±0.4755	0. 000
Physicians dominance	1.9167±0.8558	1.8404±0.7231	1.8909±0.7917	2.0217±0.7305	0.009
Total	**11.969±2.3595**	**11.7026±2.0651**	**12.0466±2.0424**	**11.9022±1.7756**	**0. 000**

Table II: Nurse-Doctor Collaboration subscales compared with department

Table II shows that the critical care nurses and doctors average total score was greater at 12.04(SD=2.04) compared to medical, surgical and emergency nurses and physicians average total score. When the four departments mean scores were compared, it is found to be highly significant at the p value less than 0.000

Collaboration Factors	Nurses	Physicians	p-value
Shared educational and Collaborative relationships	3.4814±0.3642	3.1988±0.4338	0. 000
Caring as opposed to curing	3.5433±0.4229	3.1924±0.4299	0. 000
Nurses autonomy	3.4700±0.4522	3.1684±0.4517	0. 000
Physicians dominance	2.0700±0.8617	1.7320±0.6695	0. 002
Total	**12.5647±2.101**	**11.2916±1.9849**	**0. 000**

Table III: Comparison of collaboration factors with nurses and physicians

Table III shows that the nurses mean composite sum score was 12.56(SD=2.10) in comparison with physicians mean composite sum score of 11.29(SD=1.98). The nurses mean composite sum score was found to be highly significant than the physician mean composite sum score at the p value less than 0.000 indicating the nurses show positive attitude towards nurse-physician collaboration compared to the physician.

And also, mean composite sum score in comparison with nurses and doctors group in association to the collaboration subscales such as shared education and teamwork, caring versus curing, nurses autonomy and physician dominance.In the shared education and teamwork subscale, the mean composite sum score of nurses was 3.48(SD=0.36) is incomparably greater than the physician mean composite sum score of 3.19(SD=0.43) denotes that nurses have a higher adaptation towards interdisciplinary training and inter-professional teamwork.In caring conflicting curing subscale, the mean composite sum score of nurses 3.54(SD=0.42) is incomparably greater than the mean composite sum score of physician of 3.19(SD=0.42) indicates a more convinced attitude of caretakers contribution to the psycho-educational facet of caring patients.In nurses autonomy subscale, the mean composite sum score of nurses 3.47(SD=0.45) is incomparably greater than the mean

composite sum score of physician of 3.16(SD=0.45) indicates the nurses shows higher understanding with caretakers entanglement in opinion referring with caring of patients and strategies.In physicians dominance subscale, the mean composite sum score of nurses2.07 (SD=0.86) is incomparably greater than the physicians mean composite sum score of 1.73(SD=0.66) indicates that nurses shows a complete disallowance of authoritative role by the doctor in rendering patient care.

Collaboration Factors	**Demographic Characteristic**			
Sub factor	**Age (r)**	**Experience (r)**	**Department (r)**	**Gender (r)**
Shared educational and Collaborative relationships	-0.101	-0.017	-0.062	0.093
Caring as opposed to curing	-0.172	-0.1	0.066	-0.001
Nurses autonomy	-0.115	0.009	0.004	0.027
Physicians dominance	-0.111	-0.059	0.023	0.034
Total	**-0.031**	**0.07**	**-0.015**	**-0.003**

Table IV: correlation coefficient of demographic variables with collaboration subscales

Table IV shows there was an absolute relationship among collaboration subscales for doctor-caretaker teamwork and their experience(r=0.07) while adverse relationship with age (r=-0.03), department (r=-0.015) and gender (r=-0.003). Nurses autonomy was positively correlated with experience(r=0.009). Caring as opposed to curing, nurses autonomy and physicians dominance was found to be in absolute relationship with department(r=0.066, 0.004, 0.023) respectively. Shared educational and collaborative relationships, nurses autonomy and physicians dominance was found to be in absolute relationship with gender(r=0.093, 0.027, 0.034) respectively.

collaboration	**Nurses**	**Physicians**
Strong	50	17
Good	49	80
Satisfactory	1	0

Table V: Acceptance level of collaboration with nurses and physicians

Table V shows that 50% of nurses show a strong attitude towards the physician nurse collaboration and 49% shows a good and 1% nurse shows a satisfactory attitude towards the physician nurse collaboration. Among the physicians, majority of them 80(82.4%) shows good attitude towards physician nurse collaboration and 17(17.52%) shows strong attitude towards physician nurse collaboration. It shows the most favourable attitude towards the nurses by the physicians in their work environment. Compared to physicians, nurses show a strong collaboration in their work environment. It is represented in **figure I.**

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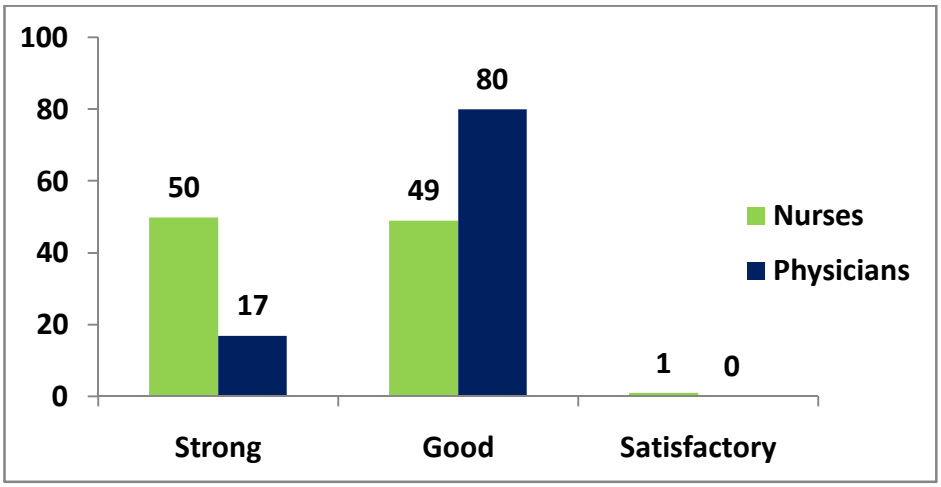

Figure I: Acceptance level of collaboration with nurses and physicians

Physician dominance	Nurses	Physicians
Very high	28	28
high	37	50
moderate	23	16
low	12	3

Table VI: view of physician dominance among nurses and physicians

Table VI shows that 28% of nurses felt that physician dominance is very high, 37% of nurses felt that physician dominance is high, 23% of nurses felt that physician dominance is moderate and 12% of nurses felt that physician dominance is low, whereas the physicians shown 28.8% were of very high dominance, 51.54% were of highly dominant, 16.49% were of moderate dominance and 3.09% were of low dominance respectively. It is represented in **figure II**.

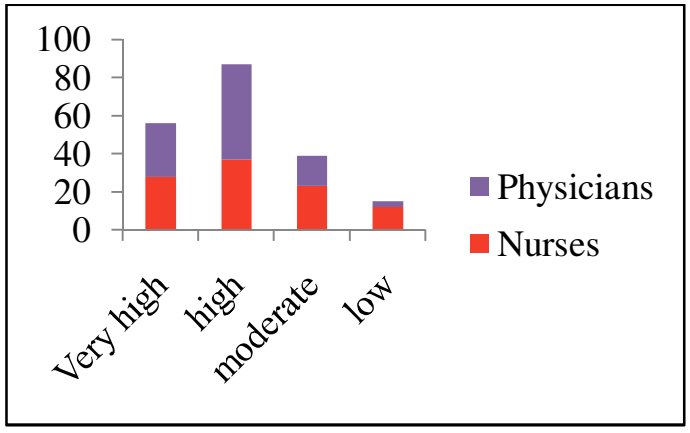

Figure II: view of physician dominance among nurses and physicians

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Discussion

The study results shows that the number of physicians still unaware that their harsh and rude communication affects the nurses job satisfaction and day to day interaction in patient care. Many nurses have a lack of support from the physician and nurses expected to work in a respectful environment and want the physician to acknowledge the importance of their role as a nurse in a team. Nurses frequently reported that rude, harsh and disruptive behaviour of physician is difficult to handle in their work environment and it is more common in experienced physician than the young doctors[7]. Moreover, physicians are less likely to listen the nurses regarding their patient assessment, and what they actually do[23, 24]. There is a vast difference in the approach of nurses and physicians towards patient care. Even our study findings suggestive that physician dominance is negatively correlated with the experience. And, the experienced nurses found to be more autonomous than the inexperienced nurses. Experience is negatively correlated with caring versus curing, shared education and teamwork collaboration and absolute relationship with nurses autonomy. Age factor is adverse relationship with shared education and teamwork collaboration, caring opposed curing, nurses autarchy and physician authority.Even now, nurses are facing gender related issues in their work places, especially female nurses working with male and female physicians. Female nurses felt that they were controlled by the male physician as like traditional model, male dominates the female as he has superior power[25]. Our study results indicating that gender issues negatively correlated with caring versus curing factor and positively correlated with physician dominance, nurses autonomy and shared education and teamwork collaboration.Inter-professional collaboration is considered to be an essential factor for nurses compared to physicians for their job satisfaction[26]. The study findings too confirmed that nurses expressed more positive attitude towards inter-professional collaboration than physician. The good outcome of patient care needs collaboration between health care members. When the success arise the credit will be shared by all the team members. But in most of the circumstances, the power role, the income generators in health care, physicians are recognized for the patient outcomes. Due to the difference in income, less authority, and traditionally believed to be in lower classes made the nurses in bottom line at the time of success. On the other hand, nurses too a yield earner, but the concealment of caretakers occur due to the wage difference and unsubstantial authority of nurses in health care.Nursing is an autonomous profession which has a scope for wide autonomous practice in health care. Despite of all controversies such as the focus of nursing views as shown in the media and other networking sites, nursing is not organized, managed or either controlled by the physicians. Even though the nurses have limited ascendancy and practical power than physicians, nurses have a unique, integrated and comprehensive patient assistance. Nursing is a profession where nurses can masters their skills and nowadays, nurses can be a independent practitioners. Many physicians consider themselves as an essential regard for patient care and showing troublesome etiquette, including verbal and non verbal issues remains there in health care[27]. Our study findings shows that nurses autonomy found to be highly significant in intensive care units and surgical units indicating that there is culture in which patient concern is given importance and hence shown

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a higher inter-professional collaboration. Physician dominance, nurses autonomy and caring versus curing is positive correlated with the working area and negatively correlated with shared education and team work collaboration. Medicine and nursing are the two professions that has to work and interact most frequently with each other towards patient care and cure. Physicians are trained to assess the patient history, ruling out the diagnosis and to treat and evaluate the patient outcomes. While, nurses are trained to collect history of the patient, advocate the patient family members and care towards the patient during their ICU stay[28]. For example, patients who are admitted in ICU needs ventilator and the weaning from the ventilator, early mobilization, to control and prevent hospital acquired infection such as VAP and the length of ICU stay depends on the staff nurses and the other health care team members[29, 30]. Thus nurses autarchy, shared training and teamwork is found to be incomparably higher in surgical and intensive care units.Inter-professional collaboration and team approach is often welcomed in critical care setting, the difference is often found due to the individual difference in each profession and the identity in each profession. The professional identity includes their attitude, belief, perception, training gained during education and a role of a individual in a team as a member[28]. For example, in critical care, the physician role was deemphasized and the nurses and the other health care team members role were highlighted.

Conclusion:

Teamwork in health care need to be improved in healthcare to have the good impact on patient outcome. The study findings suggestive that physician nurse collaboration has a good impact on nurses showing positive attitude towards inter-professional collaboration and teamwork than physicians. And also, nurses autonomy is significantly higher in areas of critical care shows the concern of teamwork towards patient outcome. Current scenario is nurses and physicians interdependently working towards the patient outcome shows a cordial refreshing relation of nurse-physician in critical care.

Abbreviation	Expansion
ICU	Intensive Care Unit
ER	Emergency Room
NA	Nurses Autonomy
PD	Physician Dominance

Future Prospects:

Medical and nursing curriculum has to include the relationship between the inter professionals, their roles and responsibilities, in order to improve the mutual understanding between nurses and physician and thereby to enhance their relationship and communication. It is essential to provide inter disciplinary veiling chances for the professionals to understand their roles and responsibilities, and their limitations while collaborating as a member in a team. It is important to keep shared in-service and continuing educational programs and conferences to focus on teamwork and techniques of interaction.

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