Attitude and Readiness of Nursing Students Regarding Interprofessional Collaboration in Healthcare Practice

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ABSTRACT

Background: Healthcare system measures the quality of care given in a hospital. So, it is necessary to assess the quality based on the manpower and needs. Interprofessional collaboration is an important aspect in which people from different professions come together and work for the patient need. By this it satisfies the quality care and increases better outcome.

Objective: To find a relation between attitude and readiness of nursing students regarding interprofessional collaboration in healthcare practice.

Materials and Methods: A correlational research design was utilized to accomplish the objective of the study. A total of 134 undergraduate nursing students from Father Muller College of Nursing who met the inclusion criteria participated in the study. The data was collected by using demographic proforma along with the Attitude Towards Health Care Team Scale (ATHCTS) and Readiness for Interprofessional Learning Scale (RIPLS) to evaluate the Attitude and Readiness of nursing students regarding interprofessional collaboration in healthcare practice. Written permission was obtained from the relevant authorities and the participants before the study. The data were analyzed by using descriptive and inferential statistics with the help of SPSS

Results and conclusion: The findings of the study revealed that the nursing students have a favourable attitude and readiness towards IPC

(Quality of care 42.39 (SD = 8.89), time constraints 10.46 (SD= 2.56) Teamwork and collaboration 29.3(SD = 11.6), Negative professional identity 9.7 (SD=3.5) Positive professional identity13.1 (SD=4.8), roles and responsibilities 9.2 (SD=3.2) and there is no significant relationship between the attitude and the readiness towards interprofessional collaboration in health care practice.

Keywords: healthcare system, interprofessional collaboration, quality care, attitude, readiness

INTRODUCTION

Interprofessional education (IPE) "occurs when students from 2 or more professions learn about, from, and with each other."

Interprofessional education (IPE) has a positive impact on multidisciplinary team in daily healthcare work practice. Interprofessional education helps in developing cooperation among medical and nursing students. Interprofessional communication plays a major role in developing collaboration among healthcare professionals. This helps in understanding the roles and skills which is the primary prerequisite to improving collaborative patient-centered care.^[1]

The collaboration consists of people who are from diverse backgrounds with an active and ongoing partnership. They work together

mainly to solve problems, provide care and service and enhance the participation of all patients and their families in collaborative practice.^[2]

WHO defines Interprofessional Collaboration Practice as: "Collaborative practice in health care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, careers and communities to deliver the highest quality of care across settings. "[3]

Collaborated health care always improves patient outcomes. Working together also helps in reducing the workload as well as increasing satisfaction from the job. A clear and well-defined purpose along with communication, leadership, discipline, feasibility and accountability always should be characteristic of teamwork.^[4]

According to Gardner and Korth (1998), Attitude toward teamwork is defined as the individual's will (internal state) to continue working with the same team, as well as with other teams (a personal action).

One of the most classic definitions of attitude is that proposed by ALLPORT (1935): - "A state of mental and neural disposition organized employing experience, which exerts a directive or dynamic influence on the individual 's response to all kinds of objects and situations". ¹ Readiness the word itself refers to a state or quality of being ready and contains the following promptness, elements preparedness, aptitude and willingness. Collaboration readiness can be stated as the evidence of readiness reflected in the provision of staff, budget, training, technology, and other resources to support collaboration based on the quality and effectiveness of past and collaborative current activities across organizational boundaries.^[5]

Internationally, due to the increase in global health issues and their needs, rising costs of health care, shortages in the healthcarerelated workforce and lack of understanding and respecting the contributions of health professionals there is high pressure on healthcare systems. Studies of IPE have indicated that health professionals have worked together as a team to manage tough practice situations that require systematic collaboration and informed between different professions and professional specialties in recent years. The research has further shown that collaborative practice can also develop access and improves the coordination of health services, their resources, and outcomes for people with chronic diseases and also helps in decreasing patient's complications, tension, conflicts with caregivers. hospital readmission, clinical error rates, and staff turnover.^[6]

According to the Joint Commission on Accreditation of Health Care Organizations in America (JCAHO), Nearly 60% of medical errors are directly caused by a breakdown in communication and collaboration between nurses and doctors and 75% of patients dying were reported as sentinel events.^[7]

The key to a successful healthcare system is collaborative care. But a gap that tends to form over it is very hard to bridge. Many gaps impede the facilitation of interprofessional collaboration. It can be physical gaps, perception gaps, ego barriers or the temporal divides that separate two or more groups working shifts. These can emerge as the conceptual gulf between the interprofessions. ^[8]

The communication style, adaptation and holistic care of the nurses put them in the line as an ancillary profession. A study conducted by Evert Schot observed multiple health professionals for their contribution to interprofessional collaboration. The results showed that nurses are observed to be more strongly engaged in bridging gaps (67.9% out of the total of 'their' fragments) than physicians (42.2%). ^[9]

Interprofessional teamwork happens when different healthcare workers put their effort together to provide better care. Interprofessional relationships refer to two or more professionals from different backgrounds who come together as a team

and maintain a good relationship with the caregivers, with the families, with the patient and also with the other professional for of better care the patient. Interprofessional collaboration in healthcare helps in the prevention of medication errors, improves patient's experiences and helps in delivering better patient outcomes. This helps in the reduction of healthcare costs. Thus it is important to have an interprofessional collaboration 'n the healthcare setting.

MATERIALS & METHODS

Research Approach:

A descriptive research approach has been used to assess the attitude and Readiness of nursing students regarding interprofessional collaboration (IPC) in healthcare Practice

Research Design:

Correlational research design is chosen in this study to assess the attitude and readiness of nursing students regarding Interprofessional Collaboration in healthcare practice.

Variables understudy:

The research variables of this study are Attitude and Readiness towards Interprofessional collaboration in healthcare practice and demographic variables are the characteristics and attributes of the study subjects. The demographic variables are age, gender, Year of study, years of clinical experience, and previous information regarding IPC.

Research Setting:

The present study is conducted at Father Muller College of Nursing, Mangaluru.

Population:

The population in this study comprises of nursing students studying at Father Muller College of Nursing, Mangaluru

Sample and Sampling Technique: Sample:

The study sample consisted of 134 nursing students of Father Muller College of Nursing, Mangalore. The students in IV BSc = 81; I PBBSc = 34; II PBBSc = 19

Sampling Technique:

In this study, the non-probability – purposive sampling technique was used. Data collection instrument:

In this study, the instruments used for data collection were:

Tool 1: Baseline Proforma

Tool 2: Attitude Towards Health Care Team Scale (ATHCTS)

Tool 3: Readiness for Interprofessional Learning Scale (RIPLS)

Data collection process:

Informed consent was being obtained from the subjects for participation in the study. Baseline Characteristics has been collected by demographic proforma

Attitude towards Interprofessional Collaboration in Healthcare practice was assessed by The Attitude Towards Health Care Team Scale (ATHCTS). The ATHCT scale comprised 14 items which had been divided into 2 subscales: Quality of care and Time constraints

Readiness towards Interprofessional Collaboration in Healthcare practice was Readiness Assessed bv the for Interprofessional Learning Scale (RIPLS). The RIPLS scale Consists of 19 items which had been divided under 4 subscales; Teamwork and Collaboration. Positive professional identity, Negative professional identity, Roles and Responsibilities.

Data analysis:

Data was analyzed by using descriptive and inferential statistics. Descriptive statistics mean, median and standard deviation were used to assess the attitude and readiness of Nursing students regarding IPC. To find the association between the attitude and readiness of nursing students with selected demographic variables chi-square test was used.

RESULT

Baseline Characteristics: The data collected shows that most subjects were female (97.01%) and only (2.98%) of subjects were male. Out of 134, the majority of the subjects (78.35%) belonged to the age

group <24 years and (21.64%) of subjects belonging to the age group of ≥ 24 years. The data collected shows that (60.44%) of subjects belonged to 4th year B.Sc. nursing, (25.37%) of subjects belonged to PBBSc nursing 1st year and 14.17% of subjects belonged to PBBSc nursing 2nd year. More than half of the subjects (58.20%) had no clinical experience, (16.41%) had <1 year of experience, (10.44%) had 1 to 2 years of clinical experience and (14.92%) of subjects had more than 2 years of clinical experience. The data collected shows that (72.38%) of subjects had no prior information and (27.61%) of subjects had previous information on Interprofessional Collaboration in healthcare practice.

Main findings:

Distribution of subjects according to the grading of their Attitude and Readiness score:

It was revealed that (81.3%) of the participants had a favourable attitude and (18.7%) had an unfavourable attitude in the area of Quality of Care. In the area of Time Constraints, (58.2%) participants had a favourable attitude and (41.8%)of participants had unfavourable attitude. There is a weak positive correlation between attitude and readiness of nursing students towards interprofessional collaboration (r =0.108).

 Table 1: Mean, Mean Percentage and Standard deviation of subjects on Attitude regarding Interprofessional Collaboration in healthcare practice

VARIABLE	MAX. SCORE	MEAN	STANDARDDEVIATION	MEAN PERCENTAGE(%)				
Quality of care	55	42.39	8.89	77.08%				
Time constraints	15	10.46	2.56	69.75%				
Maximum score = 70								

 Table 2: Mean, Mean Percentage and Standard deviation of subjects on Readiness regarding Interprofessional Collaboration in healthcare practice

VARIABLE	MAX. SCORE	MEAN	STANDARDDEVIATION	MEAN PERCENTAGE(%)
Teamwork and collaboration	45	29.3	11.6	65.18%
Negative professional identity	15	9.7	3.5	65.17%
Positive professional identity	20	13.1	4.8	65.59%
Roles and responsibilities	15	9.2	3.2	61.98%

Maximum score= 95

Association between Attitude and Readiness of nursing students regarding Interprofessional Collaboration in healthcare practice and selected demographic variables

Table 3: Association between attitude regarding IPC and selected demographic variables N=134	
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	Table 5. Association between attitude regarding if C and selected demogra				Ē	
ST.		ATTITUDE MEDIAN <55 ≥55		χ^2		
No.	VARIABLES				Df	P value
110.						
1.	Age in years					
	a) <24	56	49	3.231	1	3.84
	b)≥24	10	19			
2.	Gender					
	a) Male	2	2	.001	1	3.84
	b) Female	64	66	-		
	Year of Study	45	36			
3.	a) Fourth-year BSc(N)	13	0.1			5.99
	b) PB.BSc 1st year	8	11	3.327	2	5.77
	c)PB.BSc 2nd year	0	11			
	Years of clinical experience					
	None	44	34			
	b) Less than 1 year	8	14	4.690	3	7.82
	c)1-2 years	7	7			
	d)More than 2 years	7	13	-		
	Previous information regarding Interprofessional Collaboration in a healthcare setting	15	22			
5.		51	22 46	1.553	1	3.84
	b) No	01	40			

P < 0.05 level of significance *

SL No.	VARIABLES	READIN <63.5	ESSMEDIAN >63.5	χ^2	Df	P valu
	Age in years a) <24 b) ≥24	54 13	51 16	.396	1	3.84
-	Gender a) Male b) Female	1 66	3 64	1.031	1	3.84
	Year of Study a) Fourth-year BSc(N) b) PBBSC 1 st year c)PBBSC 2 nd year	40 18 9	41 16 10	.183	2	5.99
4.	Years of clinical experience a) None b) Less than 1 year c)1-2 years d) More than 2 years	41 8 11 7	37 14 13 13	8.213*	3	7.82
).	Previous information regarding Interprofessional Collaboration in a healthcare setting Yes No	21 46	16 51	.933	1	3.84

Relationship	between	Attitude	and	Readiness	of	nursing	students	toward		
Interprofessional Collaboration.										

Table 5: Relation between Attitude and Readiness of nursing students towardInterprofessional Collaboration.

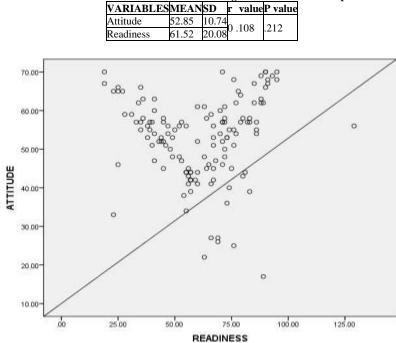


Fig 1. Scattered diagram showing a weak positive relationship between attitude and readinessof nursing students towards Interprofessional collaboration.

The study findings showed a weak positive relationship (r = 0.108) between the research variables (attitude and readiness towards interprofessional collaboration) and hence it was concluded that there is no significant relationship between attitude and readiness of nursing students regarding IPC.

DISCUSSION

In this study the majority of subjects (78.35%) belong to the age group <24 years, most of the subjects (97.01%) were female, (60.44%) of subjects belonged to 4^{th} year B.Sc. nursing, (25.37%) of subjects belonged to PB BSc nursing 1^{st} year. (58.20%) of subjects had no clinical

experience, (16.41%) had <1 year of clinical experience, (10.44%) had 1 to 2 years of clinical experience and (14.92) of subjects had more than 2 years of clinical experience. (72.38%)of subjects had no prior information regarding IPC in health care practice. A similar study conducted to assess the perceptions of IPE among nursing students in Saudi Arabia by Adel S. Bashatah potraved that a higher proportion (n = 281, 54.4%) of the participants were females and were between 21 and 24 (n =350; 67.7%) years old.^[10]

Attitude Towards Health Care Team Scale (ATHCTS) had two areas namely quality of care and time constraints. The study revealed that (81.3%) of the subjects had a favourable attitude in the area of Ouality of care with a mean score of 42.39 (SD=8.89) and (58.2%) of participants had favourable attitudes in the area of Time constraints with a mean score of 10.46 (SD=2.56). A similar conducted by T.Edward study et.al portrayed that three factors were identified; "quality of care", "team efficiency", and "time constraint" with Cronbach's alpha measures of 0.73. 0.50, and 0.45 respectively. The overall mean attitude score was 58.15 ± 6.28 (95% CI, 57.42– 58.88).[11]

In Readiness for Interprofessional Learning Scale (RIPLS) mainly there are 4 areas that are Teamwork and collaboration, Negative professional identity, Positive professional identity, and Roles and responsibilities. The study findings showed that the mean and standard deviation of Teamwork and Collaboration 29.3 (SD=11.6), was Negative Professional Identity 9.7 (SD= 3.5). Positive Professional Identity 13.1 (SD= 4.8) and Roles and Responsibilities 9.2 (SD = 3.2). A similar study conducted by Atwa H et al. portrayed that overall, the average mean score for the "Teamwork and Collaboration" subscale was the highest $(4.33\pm0.56),$ "Negative while the Professional Identity" subscale had the lowest average mean score (3.59 ± 1.03) and all the individual statements within this subscale showed low mean scores ^[12]

Chi-square was computed to test the hypothesis. The present study indicated that there is association between readiness of nursing students regarding interprofessional collaboration in healthcare practice and selected demographic variable such as years of clinical experience ($\chi^2 = 8.213$) at 0.05 level of significance. In a study conducted by Pan Afr Med J portrayed that using binary logistic regression, the respondent's gender, age, years of experience in the profession, years of experience in teaching, school of affiliation, academic position did not significantly influence their attitude towards IPE. ^[13]

The research hypothesis was tested using Spearman's rank correlation coefficient. The study findings showed a weak positive relationship (r = 0.108) between the research variables (attitude and readiness towards interprofessional collaboration) and hence it was concluded that there is no significant relationship between attitude and readiness of nursing students regarding IPC.

CONCLUSION

The following conclusions were derived based on the findings of the study:

The study revealed that (81.3%) of the subjects had a favourable attitude in the area of Quality of care with a mean score of 42.39 (SD=8.89) and (58.2%) of participants had favourable attitudes in the area of Time constraints with a mean score of 10.46 (SD=2.56).

The study findings showed that the mean and standard deviation of Teamwork and Collaboration was 29.3 (SD=11.6), Negative Professional Identity 9.7 (SD= 3.5). Positive Professional Identity (SD= 4.8) and Roles and Responsibilities 9.2 (SD = 3.2).

The present study indicated that there is association between readiness of nursing students regarding interprofessional collaboration in healthcare practice and selected demographic variable such as years of clinical experience ($\chi^2 = 8.213$) at 0.05 level of significance. There was no association between Attitude of nursing

students and selected demographic variables.

The study findings showed that there is no significant relationship (r = 0.108) between attitude and readiness of nursing students regarding IPC.

Declaration by Authors

Ethical Approval: Approved

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Conflict of Interest: The authors declare no conflict of interest.

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