

## Structural Empowerment And Clinical Competency Among The Nurses In Bangladesh

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### ABSTRACT:

**Background:** Clinical competency enclose nurse's knowledge, skills and attitude which provides a safe, effective, and quality of nursing care in clinical arena is ensured by structural empowerment.

**Aim:** This descriptive correlational study aimed to identify the perception of and to examined the relationship between structural empowerment and clinical competency among nurses in Bangladesh.

**Method:** Data were collected by using self-administered questionnaires answered by 180 random registered nurses. These questionnaires included the Clinical competency measured by the Competency Inventory for Registered Nurses questionnaire and Nurses' empowerment measured by Condition for work Effectiveness Questionnaire (CWEQ) II questionnaire.

**Result:** In this study, most of the participants were female (87%), the mean age was 35.77 years. The mean score of clinical competencies ( $M = 3.64$   $SD = 0.45$ ), and ( $M = 3.64$   $SD = 0.45$ ) revealed a strong and positive correlation between structural empowerment and clinical competency ( $r = 0.509$ ,  $p < 0.01$ ). In this study, significance and relationship between the age and structural empowerment ( $F = 3.20$ ,  $P = 0.043$ ), monthly income and structural empowerment ( $F = 3.082$ ,  $P = 0.05$ ). Other findings of the study, the religion and clinical competency ( $t = -2.012$ ,  $p = 0.05$ ) were significance and relationship.

**Conclusion:** Enhancing structural empowerment helps improve the clinical competency which improves quality of nursing care.

**Implications for Nursing management:** Authorities and organizations should maintain nurses' quality of nursing care to improve the health care system, and they must continuously evaluate and prioritize their clinical competence in relation structural empowerment of nurses.

**Key words:** Quality nursing care, clinical competence, structural empowerment, Bangladesh.

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### I. Introduction

Clinical competency encompasses nurse's knowledge, skills and attitude that should possess in order to provide a safe and quality care. It is the ability to solve complex problems using a combination of knowledge, attitude and practical skills and its goal is to assess the practical capabilities of nurses in various fields in order to meet the needs of public service (Mohamadirizi, Kohan, Shafei, & Mohamadirizi, 2015). Nurses are front lines of quality provider, the safety net, the "eyes and ears" of the hospital, and nurses are the "heart and soul of the hospital" (Duff, 2019).

In nursing practice, nurses are required to apply their acquired knowledge, skills and innate individual traits to each situation and be able to adapt that knowledge and those skills to different circumstances (Fukada, 2018). Clinical competency interprets the combination of skills, knowledge, attitudes, values, and abilities that underpin effective and/or superior performance in a profession occupational area and context of practice (Keykha, Mazlum, Varasteh, & Arbabisarjou, 2016). Ramirez, et al. (2018) discussed that clinical competency is the ability of nurses in playing a professional role in a clinical environment in hospital as the quality of the services provided. Numminen, Meretoja, Isoaho, & Kipli, (2013) revealed that clinical competence is to offer nursing cares based on performance professional standards and requires the skill and competence of nurses. According to (Ghanbari, Hasandoost, Lyili, Khomeiran, & Momeni, 2017) competence in nursing and midwifery will be considered as the ability to perform nursing duties, and the ability to effectively integrate the cognitive, affective and psychomotor skills while performing patient care.

Structural empowerment involves looking at essential organizational structures such as access to opportunity, information, resources, and support as well as formal and informal power that provides nurses with the chance to accomplish work in a meaningful way Kanter, (1979) and Khatun, Latif, Nesa, & Mallick, (2020). Structural empowerment increases nursing autonomy promoting the highest levels of clinical excellence and professional practice (Eo, Kim, & Lee, 2014). In essence, structural empowerment will enhance quality of nursing care and the patients will be satisfied (Callicutt, 2015). Empowerment has a positive effect on employees' attitude and behavior. In healthcare, nurses' empowerment provides them an opportunity of taking more responsibility and self-confident to initiate change that positively affects better patient outcome (Ali, Nageeb, & Hassona, 2018). Empowerment not only positively affects patient outcome, but also it is vital for nurses themselves for self-development and professional autonomy (Aljaramiez, Baumberger-Henry, Darrell, & Kim, 2021). Studies related to nurse's empowerment regarding professional competence conducted by Kuokkanen, et al. (2016) have reported that nurse's empowerment and professional competence were positive relationship ( $r = .482$  &  $p < 0.001$ ). Another study (Duff, 2019) revealed that relationship between structural empowerment and nurse practitioner competence were significance and positive relationship ( $r = .81$  &  $p < 0.001$ ). Empowerment leads to increased personal health, job satisfaction, individual competence, and self-esteem which in turn, increase perceptions of personal control. It has a direct effect on improving health outcomes (Al-Dweik, Al-Daken, Abu-Snieneh, & Ahmad, 2016). The health sector of Bangladesh especially clinical competence of nurse is facing challenges affecting the work within improvement of quality care. There are many problems of the nursing profession in this hospital setting such as inadequate standards guideline of clinical competency, lack of using nursing knowledge and skills in practice, lack of recognizing specialized care, lack of empowerment such as poor work environment, and less satisfied with their jobs in hospital.

This study will explore the empowerment and clinical competency among the nurses in Bangladesh. Consequently, it could be helpful to establish reciprocal and clear expectations among the nurses on structural empowerment and clinical competency which would be obliging to create a healthy professional atmosphere contributing to effective quality of nursing care. The findings of the current study will provide baseline information and direction for all nurses to examine clinical competency in aspect of empowerment and to realize clinical competency that are effective in clinical practice.

## **II. Material and Methods:**

### **Sample selection:**

In this descriptive correlational study, we explored the level and relationship between the perceptions of the clinical competency and structural among nurses in Bangladesh. We collected data at a public, referral, and tertiary-level hospital in Dhaka, Bangladesh from December'2022 to May'2023.

We selected 180 nurses by a simple random sampling technique. The estimated sample size was calculated for an acceptable minimum level of significance ( $\alpha$ ) of  $< 0.05$ , an expected power ( $1 - \beta$ ) of 0.80, and an estimated population effect size of 0.25 (\*) (Polit & Beck, 2006).

### **Instrument**

To collect data and measure the main variables in this study, a two-part questionnaire was used which was Clinical competency measured by the Competency Inventory for Registered Nurses and Nurses' empowerment measured by Condition for work Effectiveness Questionnaire (CWEQ) II were revalidate by Bangladeshi research expert, consisting of reliable and valid tool.

The self-administered questionnaires will be used in this study. It contains three sections including:

1. Nurses' Demographic Questionnaire: age, gender, marital status, religion, level of education in nursing, years of working experience, monthly salary (in taka), shift of work, and current positions hold and work place.

2. Clinical competency measured by the Competency Inventory for Registered Nurses developed by (Liu, Yin, Ma, Lo, & Zeng, 2009). It contains 7 dimensions, 35 questionnaires and will use Likert scale of five answers: 0 = not competent at all, 1 = slightly competent, 2 = Competent 3= Competent enough, 4 = Very competent. A higher score indicates more competent in clinical care in the organization based on the question.

3. Nurses' empowerment measured by Condition for work Effectiveness Questionnaire (CWEQ) II developed by Laschinger, et al, (2001). There were six components including information (3 items), opportunity (3 items), support (3 items), resource (3 items), workplace setting: Job Activities Scale (JAS) (3 items), and Organizational Relationships Scale (ORS) (4 items), will be used. The questionnaire consists of 19 items on a 5-point Likert scale (1 =none, 2= little, 3 = some, 4=good, and a lot=5). A higher score indicates more affirm to the environment. Revalidate the questionnaires by Bangladeshi nurse research expert including Competency Inventory for Registered Nurses 0.96 and Nurses' empowerment measured by Condition for work Effectiveness Questionnaire (CWEQ) II 0.90. The Content Validity Index (CVI) are acceptable at least .80 (Waltz, Strikland, and Lenz, 2010).

The pilot study was conducted to 20 nurses working in the same hospital. For the internal consistency, the Cronbach's alpha coefficient was 0.91 for clinical competency and 0.82 for structural empowerment, indicating that these instruments were reliable.

**Ethical Consideration:**

The International Review Board of the Dhaka Medical College approved in this study. All participants provided an informed consent. They were assured of the anonymity and confidentiality of their responses and that only the overall results were presented to the nursing administrators to design the needed managerial interventions.

**Findings of the study**

The Statistical Package for the Social Sciences (SPSS) version 23 was used to analyze the data. Frequencies and percentages were calculated for study sample characteristics. Descriptive statistics, including, measures of central tendency and means were calculated for each subscale and total score of the Competency Inventory for Registered Nurses and Condition for work Effectiveness Questionnaire (CWEQ) II.

We examined the statistical difference between the demographics (Age, gender, marital status, religion, level of education in nursing, work experience, monthly income, duty station) and the clinical competency and structural empowerment as independent variables. We compared two independent groups in gender (male, female), religion (Muslim, Hindu and others), Marital status (Married, Unmarried) Furthermore, we compared ANOVA test in three or more independent groups based on age (<30, 31 – 41, ≤42), education (Diploma in Nursing, BSc in Nursing, Master in nursing or over), monthly income (<40000, 40001 – 50000, and ≤50000Taka and more), and length of work experience in nursing (<10, 10.01 – 20, and ≤20 years) duty station preferred patient ward (Male medicine, Female medicine, Male surgery, and Female surgery). In this study, significance and relationship between the age and structural empowerment (F =3.20, P = 0.043), monthly income and structural empowerment (F =3.082, P = 0.05). The score of the higher salary group (≥40,001 Taka) was higher (M = 103.9) than that of the lower-salary group (M = 83.4). Other findings of the study, the religion and clinical competency (t = -2.012, p = 0.05) were significance and relationship. Table 1 summarizes the demographic information of the 180 participants. The mean age was 35.77 years (SD = 9.4, range: 21–58), and most of them were female (n = 156, 86.67%), married (n = 159, 88.33%), and Muslim (n = 139, 77.22%). The study findings shows that Hindus and others have more competent and empowerment than others (3.71+0.51) More than half of them had a Diploma in Nursing (n = 88, 48.89%), and others had a Bachelor of Science (BSc) in Nursing or a higher degree (n = 92, 51.11%). Among them, (n=126; 70%) had a work experience of within 10 years, and 68.33% had a monthly salary of 40,000 Takas. According to Mallika, Tulasi Das (2020) identified that the average income of nurses who worked in a public hospital was approximately 35,000 Takas. Participants were selected from the male medicine ward (n = 52, 28.29%), male surgery ward (n = 60, 33.33%), female medicine (n = 44, 24.44%), female surgery (n = 23, 12.78%), and most of them chose dayshift duty (n = 161, 90.56%). Both the Competency Inventory for Registered Nurses and Condition for work Effectiveness Questionnaire (CWEQ) II obtained a Cronbach's alpha coefficient of 0.67, which suggests that they are reliable (Norman, *et al*, 2010).

**Correlations**

**Table 1: Nurses' demographic characteristics and their relationship with clinical competency and structural empowerment**

Demographic characteristic		Frequency (n)	(%)	M+SD	t/r//F	p
1. Age				35.77 + 9.34		
	<30	99	55	3.63 +0.42		
	31 - 41	38	21	3.52 +0.54		
	≤42	43	24	3.77+ 0.46		
Clinical Competency					0.733	0.42
	<30	99	55	3.63 +0.42		
	31 - 41	38	21	3.52+0.54		
	≤42	43	24	3.77+0.44		
Structural empowerment					3.20	0.043
2. Gender						
	Male	24	13	3.11+0.36		
	Female	156	87	3.00 +0.41		
Clinical Competency					1.28	0.20
	Male	24	13	3.50 +0.55		
	Female	156	87	3.66 +0.44		
Structural empowerment					-1.624	-0.10
3. Marital status						
	Married	159	88	3.01 + 0.41		
	Unmarried	21	12	3.01 +0.36		
Clinical Competency					-0.49	0.96

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	Married	159	88	3.64 +0.46		
	Unmarried	21	12	3.66 + 0.43		
Structural empowerment					-0.172	0.86
4. Religion						
	Muslim	139	77	2.98 +0.39		
	Hindu & others	41	33	3.12 +0.45		
Clinical Competency					-2.012	0.05
	Muslim	139	139	3.62 +0.44		
	Hindu & others	41	41	3.71+0.51		
Structural empowerment					-1.802	0.32
5. Education						
	Diploma	88	49	2.97 + 0.42		
	B.SC.	61	34	3.06 + 0.40		
	Master	31	17	3.05 + 0.41		
Clinical Competency					1.02	0.63
	Diploma	88	49	3.46 + 0.42		
	B.SC.	61	34	3.64 + 0.49		
	Master	31	17	3.64 + 0.51		
Structural empowerment					0.007	0.99
6. Experience						
	<10	126	70	2.99+0.39		
	10.01 - 20	21	12	2.98+0.41		
	≤20	33	18	3.11+0.45		
Clinical Competency					1.24	0.29
	<10	126	70	3.61+ 0.46		
	10.01 - 20	21	12	3.61+0.40		
	≤20	33	18	3.81+0.45		
Structural empowerment					2.583	0.80
7. Income						
	<40000	123	68	2.98+0.40		
	40001 - 50000	22	12	3.09+0.28		
	≤50000	35	20	3.06+0.49		
Clinical Competency					1.071	0.35
	<40000	123	68	3.60+0.47		
	40001 - 50000	22	12	3.61+0.42		
	≤50000	35	20	3.81+0.41		
Structural empowerment					3.082	0.05
8. Station						
	MM	52	29	3.12 + 0.32		
	FM	44	24	2.96 + 0.41		
	MS	60	33	2.97 + 0.40		
	FS	23	14	2.95 +0.55		
Clinical Competency					1.942	0.13
	MM	52	29	3.70 +0.42		
	FM	44	24	3.67 + 0.48		
	MS	60	33	3.55 + 0.48		
	FS	23	14	3.71 + 0.42		
Structural empowerment					1.357	0.26
9. Shift						
	Morning	163	91	3.01+0.41		
	Evening & others	17	9	3.02+0.35		
Clinical Competency					-0.12	.90
	Morning	163	91	3.65+0.45		
	Evening & others	17	9	3.60+0.51		
Structural empowerment					0.37	0.71

**Competency Inventory for Registered Nurses and Condition for work Effectiveness Questionnaire (CWEQ)**

Table II shows the mean scores of the Competency Inventory for Registered Nurses. The mean overall score of Competency Inventory for Registered Nurses was (M =3.01, SD = 0.41)and among the seven dimensions, Legal/ethical practice (M =3.36, SD = 0.46) achieved the highest mean score, followed by Leadership (M =3.20, SD = 0.53), Professional development (M =3.07, SD = 0.48)Clinical care (M =3.01, SD = 0.51)Interpersonal relation (M =2.83, SD = 0.61)Teaching-coaching (M = 2.81, SD = 0.64)Critical thinking/Research aptitude (M =2.79, SD = 0.79) showed lowest score. Among all items, nurse respect the patient's/client's right to choose and self-determination in nursing and health care (M = 2.28, SD = 1.14), nurse

defend decisions using scientific knowledge principles (M = 2.62, SD = 0.93) and nurse initiate the appropriate orientation programs for new nurses (M = 2.63, SD = 1.06) showed the lowest value.

**Section II: Competency Inventory for Registered Nurses Questionnaires 3.01 (0.41)**

Dimension	M (SD)	Items	M (SD)
<b>Dimension 1 – Clinical care</b>	3.01 (0.51)	I identify and include immediate patient needs in the plan of nursing care.	3.07 (0.65)
		I assess all health dimensions of client, i.e., physical, psychosocial, spiritual aspects.	3.01(0.819)
		I involve the patient and family in the planning and implementation of care.	2.96(0.723)
		I utilize technological advances to improve nursing and health care.	2.84(0.824)
		I evaluate results of nursing care interventions.	3.19 (0.723)
<b>Dimension 2 – Leadership</b>	3.20 (0.53)	I recognize other’s contribution and achievement.	3.27(0.698)
		I accept and uses constructive criticism.	3.08(0.780)
		I act to develop an atmosphere for teamwork and cooperation.	3.21(0.666)
		I resolve conflict in a positive way.	3.14(0.796)
		I coordinate the relation between nurses and all related personnel.	3.22 (0.698)
<b>Dimension 3: Interpersonal relation</b>	2.83 (0.61)	I take responsibility for one’s own performance.	2.67(0.920)
		I respect the patient’s/client’s right to privacy.	3.22(0.713)
		I ensure confidentiality and security of written and verbal information acquired in a professional capacity.	3.13(0.798)
		I respect the patient’s/client’s right to choose and self-determination in nursing and health care.	2.28(1.14)
<b>Dimension 4 – Legal/ethical practice</b>	3.36 (0.46)	I take responsibility for one’s own performance.	3.41(0.70)
		I respect the patient’s/client’s right to privacy.	3.54(0.59)
		I ensure confidentiality and security of written and verbal information acquired in a professional capacity.	3.41(0.67)
		I respect the patient’s/client’s right to choose and self-determination in nursing and health care.	3.09(0.73)
<b>Dimension 5: Professional development</b>	3.07 (0.48)	I display self-direction in personal development.	2.98(0.74)
		I use learning opportunities for ongoing personal and professional growth.	3.05(0.73)
		I recognize own learning needs.	3.21(0.72)
		I demonstrate self-awareness of personal limitations & strengths.	2.94(0.77)
		I understand relevant and current information concerning health care system.	3.15(0.72)
<b>Dimension 6: Teaching-coaching</b>	2.81 (0.64)	I identify learning needs of others including patients, families, and junior nurses.	3.06(0.80)
		I initiate the appropriate orientation programs for new nurses.	2.63(1.06)
		I use opportunities for patient teaching when they arise.	2.81(0.87)
		I develop an explicit teaching strategy to teach patients and families.	2.75(0.85)
<b>Dimension 7: Critical thinking/Research aptitude</b>	2.79 (0.79)	I defend decisions using scientific knowledge principles.	2.62(0.93)
		I figure out more than one way to solve confronting clinical problems.	2.90(0.79)
		I assist in the clinical research data collection.	2.83(0.95)
		I use different ways to search for information.	2.78(0.79)
		I incorporate relevant research findings into nursing practice.	2.81(0.85)
<b>Total Clinical competency</b>	3.64 (0.45)		

Also, **Table III** shows the mean scores of the Condition for work Effectiveness Questionnaire (CWEQ) II. The mean overall score of (CWEQ) II was (M =3.64, SD = 0.45) and among the seven dimensions, Resources (M =3.93, SD = 0.71) obtained the highest mean score, followed by Support (M =3.70, SD = 0.68) Informal power (M =3.68, SD = 0.64), Opportunity (M =3.65, SD = 0.66), Information (M =3.65, SD = 0.73), 3.6, and the Formal power (M =3.24, SD = 0.73) is the lowest score. Among all items, lowest was the rewards for innovation on the job are (M = 2.23, SD = 1.33) and seeking out ideas from professionals other than physicians,e.g., physiotherapists, occupational therapists, dieticians (M = 2.88, SD = 1.22).

**Table III Condition for work Effectiveness Questionnaire (CWEQ) II**

Dimension	M (SD)	Items	M (SD)
Opportunity	3.65(0.66)	Challenging work	3.18 (1.09)
		Chance to gain new knowledge and skills on the job	3.99(0.78)

		Tasks that use all your own skills and knowledge	3.79 (0.85)
Information	3.65(0.73)	The current state of the hospital	3.72(0.81)
		The values of top management	3.56 (0.90)
		The goals of top management	3.67 (0.86)
Support	3.70(0.68)	Specific information about things you do well	3.58 (0.92)
		Specific comments about things you could improve	3.58(0.85)
		Helpful hints or problem-solving advice	3.95(0.77)
Resources	3.93 (0.71)	Time available to do necessary paperwork	3.61 (1.03)
		Time available to accomplish job requirements	3.61 (0.81)
		Acquiring temporary help when needed	4.13(0.89)
Formal power	3.24(0.73)	The rewards for innovation on the job are	2.23(1.33)
		The amount of flexibility in my job is	4.00(0.91)
		The amount of visibility of my work-related activities within the institution is	3.50 (0.94)
Informal power	3.68(0.64)	Collaborating on patient care with physicians	4.26 (0.70)
		Being sought out by peers for help with problems	3.93 (0.82)
		Being sought out by managers for help with problems	3.63(0.90)
		Seeking out ideas from professionals other than physicians,e.g., physiotherapists, occupational therapists, dieticians	2.88 (1.22)
Total Structural empowerment	3.64 (0.45)		

**Table IV** shows the correlation among the dimensions of clinical competency and the factors of the structural empowerment. The structural empowerment strong and positively correlated with clinical competency ( $r = 0.509, p < 0.01$ ). Among the six Structural empowerment factors, Support ( $r = 0.349, p < 0.01$ ) Resource ( $r = 0.466, p < 0.01$ ) Formal power ( $r = 0.383, p < 0.01$ ) Informal Power ( $r = 0.417, p < 0.01$ ) are moderate and positive correlation, and Opportunity ( $r = 0.212, p < 0.01$ ) Information ( $r = 0.181, p < 0.01$ ) demonstrated weak and positive relationship. The variables in the structural empowerment that had an impact on the clinical competency were identified by multiple regression analysis. After converting the data into a logarithm, we conducted a stepwise selection method.

The four Structural empowerment factors were included in the model. Unlike the “Information” ( $\beta = -0.278, p = 0.000$ ), the “Support” ( $\beta = -0.225, p = 0.001$ ) and “Formal” ( $\beta = 0.152, p = 0.033$ ) and “Informal” ( $\beta = 0.146, p = 0.035$ ) were significant predictor variables, thereby regarded as good candidate variables ( $R = .577, R^2 = 0.333, p = 0.035$ ).

However, none of the variance inflation factors showed multicollinearity ( $VIF = 1.32$ ).

**Table IV: Pearson’s Correlations**

Variable	1	2	3	4	5	6	7	8
1 Clinical competency								
2 Clinical care	.699** .000	1						
3 Leadership	.774**	.588**	1					
4 Interpersonal relation	.641**	.417**	.541**	1				
5 Legal/ Ethical practice	.620**	.319**	.470**	.348**	1			
6 Professional development	.781**	.432**	.526**	.380**	.476**	1		
7 Teaching-coaching	.711**	.287**	.372**	.332**	.351**	.502**	1	
8 Critical thinking/ Research aptitude	.791**	.454**	.427**	.276**	.362**	.619**	.663**	1
9. Structural empowerment	.509**	.261**	.325**	.140	.400**	.413**	.446**	.540**
10 Opportunity	.212**	.073	.065	.036	.202**	.178*	.182*	.305**
11 Information	.181*	.054	.047	-.083	.158*	.155*	.263**	.277**
12 Support	.349**	.154*	.247**	.032	.301**	.274**	.341**	.384**
13 Resource	.466**	.289**	.286**	.191*	.323**	.389**	.333**	.495**
14 Formal power	.383**	.223**	.217**	.132	.190*	.354**	.349**	.410**
15 Informal power	.417**	.231**	.395**	.223**	.398**	.291**	.305**	.295**
Variable	9	10	11	12	13	14	15	
1 Clinical competency								
2 Clinical care								
3 Leadership								

4	Interpersonal relation								
5	Legal/ Ethical practice								
6	Professional development								
7	Teaching-coaching								
8	Critical thinking/ Research aptitude								
9	Structural empowerment	1							
10	Opportunity	.670**	1						
11	Information	.670**	.478**	1					
12	Support	.695**	.445**	.449**	1				
13	Resource	.665**	.323**	.270**	.322**	1			
14	Formal power	.670**	.323**	.277**	.387**	.361**	1		
15	Informal power	.630**	.197**	.230**	.243**	.381**	.329**	1	

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

### III. Discussion:

Competence is a fundamental component of nursing care and plays an important role in the quality of services provided by nurses. The sociodemographic characteristics analysis in this study showed that most of the participants were female (87%), the mean age was 36 years, and over 70% of the participants had over 10 years of work experience monthly income 40,000/= taka (63%). Our participants reflect the reality of nursing in Bangladesh, where 87% of the nurses were female and the mean age was 36 years in a public hospital (Khatun, Akter, Muhammad, & Chowdhury, 2018).

Our participants perceived that “Legal/ethical practice” is the highest score (3.36 +0.46). In this study nurses have ability to respect the patient’s/client’s right to privacy, respect the patient’s/client’s right to privacy, ensure confidentiality and security of written and verbal information acquired in a professional capacity, and respect the patient’s/client’s right to choose and self-determination in nursing and health care. Verghese, Latha, & Jomon, (2016) suggested that in this era the patients are more educated and have higher expectations of the care which they receive and are aware of their rights. The patients have a right to expect their Nurses to provide the care that is consistent with the legal standards and principles.

Perceived “Leadership” is 2<sup>nd</sup> highest score (3.20 +0.53). Based on findings, researcher assumes that nurses have leadership activity, they recognize other’s contribution and achievement, accept, and uses constructive criticism, develop an atmosphere for teamwork and cooperation, resolve conflict in a positive way, coordinate the relation between nurses and all related personnel. Another researcher (Islam et al., 2014; Doherty, 2014) identified that Leadership skills are the essential component for nurses to provide quality patient care and the areas for improvement in advocating for patients and their families, motivate other members of the care team to act on patient care, policies and procedures, and lead change initiatives to solve problems that arise in daily clinical practice.

In this study “Critical thinking/Research aptitude” 2.79 (0.79) progressively lowest score and 34% participants have inadequate knowledge on critical thinking/research aptitude. In this study nurses have inadequate scientific knowledge in decision making, limited access of searching information capacity, incorporate relevant research findings into nursing practice, clinical research data collection, and solve clinical research problems. Another study Bibi, et al (2021) findings supported that most of the nurses have no interest in conducting research and even though nurses conduct researches including lack of time, nurses do not have authority to change patient care procedures, inadequate facilities, nurses lack the research knowledge, lack of research training were found the main barriers to practice in research of the hospital. One study indicated that 60% of registered nurses do not use research findings in patient care setting Bahadori, et al (2016).

In aspect “Teaching-coaching” 2.81 (+0.64), 2<sup>nd</sup> lowest score, researcher identified that (37%) nurses have a lot of barriers like aslack of initiate the appropriate orientation programs for new nurses, lack of develop an explicit teaching strategy to teach patients and families, and ineffective use opportunities for patient teaching when they arise. Another study (Harrabi, Ghamdi, & Alinah, 2016) identified that shortness of time, lack of common language and culture for communication with patient and the lack of patient's motivation for learning were the most important causes of insufficiency of patient education and others were functional and cognitive limitations, misconceptions, low motivation and self-esteem, patient's situation, and characteristics. Aghakhani, et. al, (2012) suggested that patient education is sophisticated skill that takes an essential nursing practice standard that meaningfully impacts a patient’s health and quality of life and long-term outcomes of effective health care.

In this study interpersonal relationship 2.83 (0.61) and (72%) stated that nurses cooperate with other care providers solving to meet patient needs, and show willingness to share workload when needed. On the other hand, nurses express their disagreements in a less constructive manner and ineffective adjusting capacity actions with other's. Another researcher Borges, Moreira, & Andrade (2017) highlighted that interpersonal relationship become paramount in the development of care with a view to its humanization, evaluate competence, improve communication process, strengthen nurses' skills which improved with clinical practice.

In perspective of "Professional development," (3.07 +0.48) current study nurses (80%) recognize own learning needs, understand relevant and current information concerning health care system, use learning opportunities for ongoing personal and professional growth, and they have incapable demonstrate self-awareness of personal limitations & strengths, and display self-direction in personal development. Another researcher (Oyetunde, & Olue (2015) identified that professional development in the hospital setting assumes a partnership between the institution and the individual that promotes lifelong learning and its activities can enhance knowledge and ensure that skills and abilities remain current and relevant. Professional developmental activities existing which makes the nurses self-motivated towards the improvement of their competencies (Stephen, Latha, & D'Souza Prima, 2015).

In this study Legal/ethical practice 3.36 (0.46) and reveals that nurses have ability to respect the patient's/client's right to privacy, respect the patient's/client's right to privacy, ensure confidentiality and security of written and verbal information acquired in a professional capacity, and respect the patient's/client's right to choose and self-determination in nursing and health care. Another study Maluwa, Maluwa, Mwalabu, & Msiska, (2022) showed that ethical competence should enable nurses in clinical practice to promote professional growth, facilitate reflective practice, think critically, make ethical judgements and decisions, solve ethical problems, prevent moral distress, and promote conducive work environment. It is showed that "Clinical care" (3.01 +0.51) are the moderate level and our study reflects that nurse can identify patient's needs, assess all health dimensions of client, i.e., physical, psycho-social, spiritual aspects, evaluate results of nursing care interventions, but they have inadequate knowledge advance health care technology.

The study reflects that nurse have leadership activities such as they recognize other's contribution and achievement, accept, and uses constructive criticism, develop an atmosphere for teamwork and cooperation, resolve conflict in a positive way, coordinate the relation between nurses and all related personnel. Hahn and Lapetra, (2019) heighted that leadership activities are the ability to inspire individual and organizational excellence, successfully manage change to attain an organization's strategic policy and improve quality care. According to Alomairi, Seesy, and Rajab. (2018), leadership competencies are the knowledge and ability to direct the operations of an organization using skills and behaviors to enlist the support of individuals or groups in the achievement of a shared goal.

## **SE**

The nurses perceived better empowerment on resources 3.93 (0.71), and support 3.70(0.68) which includes Nurses have "Resource" (73%) felt in his/ her present job temporary help each other when needed, have to do necessary paper work, nurses have available time to accomplish job related activities. Nurses (65%) have felt "Support" in present jobs are they were been got problem-solving advice, specific information about job, and specific comments where they can improve. In perspective of opportunity in this study nurses have chance to gain new knowledge and skills on the job, tasks that use all their own skills and knowledge and nurses' feels that their work is more challenging which congruent with (Moura, et al, 2020) study result. Based on the questionnaire, "Information" 3.65(0.73), and 70% nurses felt their present jobs were well known, goals, and value of present top management in the study. Based on the findings the researcher expected that nurses receive feedback on the work performed, as well as guidance from their colleagues, subordinates, and superiors to improve their quality of performance and to increase the safety and effectiveness of patient care. In this study, formal power 3.24 (0.73) was the lowest score and 43% participants have no knowledge on formal power including nurses' rewards for innovation on the job, less amount of visibility of their work-related activities in their institution, and less amount of flexibility in their present job. "Informal power" 3.68(0.64) and 35% nurses felt that nurse manager did not help for their problems, less opportunity to share idea with other health related profession e.g., physiotherapists, occupational therapists, dieticians. This result formal power and informal power supports with Eskandari et al, (2017).

The study shows that Opportunity, Information is the mild relation between clinical competency

In context of Bangladesh, another study revealed that the structural empowerment of nurses was at a moderate level (Khatun, et al, 2020).

The present study showed that the nurses perceived better structural empowerment on resources 3.93 (0.71), and information. The nurses perceived better structural empowerment on resources the domain of information and resource over 70% participants provided very good comment. Based on the questionnaire, information about present job of nurses were well known of their present job, goals, and value of present top



management in the study. In aspect of resource in their present job 70% participants well known about their resources in hospital along with they helped each other when needed, must do necessary paper work, nurses have available time to accomplish job related activities. Based on the findings the researcher expected that nurses receive feedback on the work performed, as well as guidance from their colleagues, subordinates, and superiors to improve their quality of performance and to increase the safety and effectiveness of patient care. In this study, formal power 3.24 (0.73) was the lowest score and 57% participants have very good recognizing their opinion including nurses are flexible to do their job, nurses are engaging in visible work-related activities in their institution, but they have less opportunity to reward system for innovation in present job. It is worth mentioning that, researcher assumes within an organization, formal power results showed that activities that allow for the achievement of organizational objectives.

#### **Relationship:**

By using one-way analysis of variance (ANOVA) Table 1 shows that significant and positive relationship between clinical competency and age ( $p= 0.043$ ;  $F = 3.20$ ), structural empowerment and monthly income ( $p= 0.05$ ;  $F = 3.082$ ), and independent-sample t-test clinical competency and religion ( $p= 0.05$ ;  $t = -2.012$ ). In our study, the total structural empowerment had relatively strong correlation with clinical competency of nurses ( $p= 0.01$   $r = 0.509$ ). These findings favour with nurse's empowerment regarding professional competence conducted by Kuokkanen, et al. (2016) and structural empowerment and nurse practitioner competence were significance and positive relationship (Duff, 2019). This reflects that nurses' clinical competency level will be enhanced with feeling of empowerment. Hence, structural empowerment influences nurses directly on nursing dimensions, and it plays an important role in nurses' satisfaction and enhances the provision of high quality of patient care (Bawafaa et al., 2015). Clinical competency promotes nurses' satisfaction and high-quality patient care.

Dimension of clinical competency including Clinical care ( $r = .699$ ), Leadership ( $r = .774$ ), Interpersonal relation ( $r = .641$ ), Legal/ Ethical practice ( $r = .781$ ), Professional development ( $r = .781$ ), Teaching-coaching, ( $r = .711$ ), and Critical thinking/ Research aptitude ( $r = .791$ ) were significant and positive relationship with clinical competency. In addition, dimension of structural empowerment along with Opportunity ( $r = .212$ ), information ( $r = .181$ ), support ( $r = .349$ ), resource ( $r = .466$ ), formal power ( $r = .383$ ), and informal power ( $r = .417$ ) and clinical competency. This finding showed that there were moderate and positive relationships between support, resource, formal power, informal power and clinical competency. On the other hand, Opportunity information and clinical competency were mild and positive relationship. As well as, dimension of structural empowerment along with Opportunity ( $r = .670$ ), information ( $r = .670$ ), support ( $r = .695$ ), resource ( $r = .665$ ), formal power ( $r = .670$ ), and informal power ( $r = .630$ ) and structural empowerment were significance, positive and high relationship. Moura, et al, (2020) identified that the ability to mobilize resources and achieve goals through access to information, support, resources, and opportunities.

Nurses can improve and develop their knowledge and skills in their assigned area, provide excellent nursing care, and execute positive performance through empowerment. Currently, the government of Bangladesh has taken many initiatives to improve female education (full free in BA or equivalent class, Husband desertion allowance, widow allowance) and nursing profession (scholarship in education, safety, security, work environment, various types special training etc.) Such initiatives include expanding the scope for a higher education in nursing by studying abroad, establishing a recent declaration for improving the nursing profession, and increasing the staff nurses in hospitals. Our results suggest that a high quality of clinical competency can be provided if authorities and organizations maintain the job resources such as organizational support, formal and informal power of nurses, as well as recruiting and training highly competent nurses.

Modifying place and shift of work and improving nurses access to opportunities (organizational support, information and resources) and power (resources needed for development, opportunities to increase employees' competence, skills, reward and appreciation for skills and expertise) by nursing managers can increase the different outcomes of nursing practice. (Eskandari, et al, 2017). The study found that more experience person ( $3.81+0.45$ ) has more empowerment which supports Laschinger et al, 2001. Laschinger et al, (2001) found that staff nurses experienced higher levels of empowerment nurses when managers used leadership behaviors that fostered employee perceptions of autonomy, confidence, and meaningfulness of their work.

#### **IV. Conclusion**

Clinical competency encloses nurse's knowledge, skills and attitude that should inform in order to provide a safe and quality care. It is the ability to solve complex problems using a combination of knowledge, attitude and practical skills and its goal is to assess the practical capabilities of nurses in various fields in order to meet the needs of public service. The study result indicated that a positive relationship between structural empowerment and clinical competency. Nurses must maintain their professional competence, and to improve

the health care system, they must continuously evaluate and prioritize their clinical competence in relation structural empowerment of nurses. The outcomes of this study will contribute to nursing education, nursing practice, nursing administration, and future nursing research in Bangladesh.

### **Limitation of this study**

Although this study provided valuable information, it has some limitations. One setting, small sample size and self-administered questionnaire were the main limitation of the study. The result of the current study cannot be generalized to other setting due to its signal features. It needs to more generalized if data collected from different area of Bangladesh.

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### **Conflict of Interest**

The authors declared no potential conflict of interests with regard to writing and/or publication of this article.

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