



Original Article

Effective Clinical Teaching Behaviors Views of Nursing Students and Nurse Educators at University of Gondar, Northwest Ethiopia: Cross-Sectional Institution Based Study

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ABSTRACT

Introduction: Clinical teaching behavior is a critical determinant for quality of clinical learning. Nursing students' and instructor's perception of effective clinical teaching behavior (ECTB) is important to modify and facilitate clinical education. Thus, the main purpose of this study was to assess the effective clinical teaching behavior (ECTB) as perceived by students and nursing instructors.

Methods: Facility based cross-sectional descriptive study design was conducted among 178 participants. Data were collected using pre-tested and self-administered questionnaire. Effective clinical teaching behaviors were measured by Nursing Clinical Teacher Effectiveness Inventory. Data were analyzed using descriptive and independent sample t-test. An adjusted odds ratio with 95% confidence interval computed to determine the level of significance.

Results: The most important rated ECTB as perceived by students was teaching ability. For instructors, nursing competences was the most rated ECTB. The overall mean of ECTBs of the students and instructors were 4.26 (0.52) and 3.52 (0.74) respectively. There was statistically significant mean difference between them ($t = 5.888$).

Conclusion: There was a statistically significant mean difference between the students' and instructors' perception of ECTBs. Thus, authors suggest nursing instructors to consider the presence of students who prefers different teaching methods.

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Introduction

Nursing is both an art and science.¹ The science of nursing involves a body of abstract knowledge and the art of nursing involves the creative use of this knowledge to serve people.^{1,2} When educating nursing students, a balance is needed between the knowledge obtained in the theory class and application of that theory in the clinical setting.³ It is through clinical teaching that students learn how to apply the abstract concepts of nursing theory into the real situations.^{4,5} Thus, Nurse Educators play a pivotal role in the applications of these abstract concepts in the real area⁴ and make nursing students prepare for future generation.⁶⁻⁸ In these regard, clinical instructors are the most important and have the opportunity and potential to influence their students' learning in clinical education.⁷⁻⁹ A well-directed clinical education promotes students' critical thinking, clinical judgments, decision making, clinical skills, clinical knowledge, and attitudes.

It also influences the students' socialization, professionalization, satisfaction, competency, and interpersonal relationships^{5,6} and the success of these well-directed clinical education is depends up on effective clinical instructors.⁶ Nurse instructors are directly responsible for developing students' abilities in clinical

reasoning, decision making, critical thinking, and developing successful interpersonal relationships during clinical education.⁷⁻¹³ Therefore, instructors need to be aware of effective teaching practices and be equipped with the necessary competencies to play their crucial roles.⁸ The instructor effectiveness is more difficult to be evaluated in complex clinical situations.¹⁴ Nevertheless, this evaluation helps instructors and administrators to improve the quality of their teaching and practice continuously.¹⁵

Effectiveness is defined in the Merriam-Webster Online Dictionary as a capability of producing a decided, desired, or intended effect.¹⁶ So, an effective nursing instructor is the person who has the ability to direct the students' clinical goal achievement.¹⁷ Therefore, it is important to identify what sort of behaviors or characteristics of instructor is effective, as perceived by students and instructors to modify and facilitate effective clinical instruction.¹⁴

Despite the need for effective clinical education, clinical teaching effectiveness is difficult to be evaluated in diverse, often fast-paced and highly complex clinical settings compared to more controlled environments such as seminars, laboratories and classrooms for theoretical teachings. Most researches on the effectiveness of clinical instructors have compared students and faculty

perceptions of effective clinical teachers. Though students and faculty differ on their views on the effectiveness of clinical instructors, overall they agreed that the best clinical teachers should have sound interpersonal skills, good at providing feedback, clinically competent and know how to teach effectively, evidence of good role modeling and mutual respect are widely accepted or needed by the students.^{18,19} Thus, instructors are expected to teach based on the situation and students need. In other words, this is what we considered innovation, which is the introduction of something new” or significantly improved: process (methods, practices, and organization) and product (good or service).^{20,21} In the present study, innovation is defined as implementation of new or significantly improved approaches to classroom-based teaching, learning and assessment.^{22,23} Therefore, the main purpose of this study was to assess Nursing students’ and instructors’ perception of effective clinical teaching behavior and identify the mean significant difference between students and instructors.

Materials and methods

Facility based cross-sectional descriptive study design was employed from March, 15 to 18, 2016 at University of Gondar among 178 participants by convenience sampling method. Of these 178 participants, (n=138) were undergraduate nursing students, in which [(n=66) were from third year and (n=72) were from fourth year] and (n=40) were instructors.

For the assessment of Effective Clinical Teaching Characteristics, the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) was used.¹² The NCTEI consist of 48 items describing important instructor characteristics. The NCTEI are divided into 5 sub-scales such as teaching ability, interpersonal relationships, personality, nursing competence, and evaluation. This scale was designed to assess nursing students’ perceptions toward effective clinical instructor’s characteristics that facilitate learning process. It also assessed the nursing educators ECTB. The 48 teaching behaviors were ranked on a five-point scale from 1 (never important) to 5 (always important).¹² This scale has been widely used including Africa.^{18,24} In this study, the overall reliability of the ECTI questionnaire was measured by Cronbach's alpha and it was found to be 0.96.

Data were collected by self-administered method using a pre-tested semi-structured questionnaire consisted of socio-demographic and NCTEI Questionnaire. Data clean up and cross-checking were carried out before the analysis. EPI info version 3.5.3 statistical software for data entry and SPSS version 20 programs for analysis were utilized. The data were analyzed using descriptive (mean and standard deviation) and independent sample t test statistics. Descriptive statistics was used to analyze study variables and to determine which characteristics students and instructors perceive as most important ECTB. A simple comparison of means scores used to examine the highest score categories among the five main subscales: Teaching ability, interpersonal relationship, personality traits, nursing competence, and evaluation. Category

scores were obtained by the summed scores of all items within a category. The overall Sum of all five category scores provided the overall perception of ECTB of the student and instructors. In order to see the significance of mean difference, the independent sample t-test was performed. Levene’s test and Shapiro-wilk were performed in order to check the assumptions of homogeneity of variance and normality with the result 0.023 and 0.128 respectively. In addition to this, in this study the dependent variable occurred at the interval level and the samples were independent of one another. $P < 0.05$ was used to identify the significance of mean differences.

Results

A total of 178 participants participated in this study with a response rate of 87.7%. Overall, the majority of the participants were men 113 (63.5%). The mean (standard deviation) ages of the students and instructors were 21.99 (2.20) and 27.60 (3.40) respectively (Table 1).

Table 1. Socio demographic characteristics of the respondents, at The University of Gondar Northwest Ethiopia, 2016 (n=178)

Characteristics	Study group	
	Student N (%)	Instructors N (%)
Sex		
Female	53(38.4)	12(30)
Male	85(61.6)	28 (70)
Age*(Year)	21.99 (2.2)	27.57(3.4)
19-24	129(93.5)	8 (20)
25-34	9(6.5)	30 (75)
>=35	-	2(5)
Religion		
Orthodox	105 (76.1)	33(82.5)
Muslim	14 (10.1)	3(7.5)
Protestant	19 (13.8)	4(10)
Marital status		
Single	131(94.9)	22(55)
Married	5 (3.6)	17(42.5)
Divorced/widowed	2 (1.5)	1(2.5)
Year of study		
Third year	66 (47.8)	-
Fourth year	72 (52.2)	-
Educational status		
BSc in nursing	-	24 (60)
MSC in nursing	-	16 (40)
Work experience in year		
<1	-	6(15)
1-3	-	4(10)
4-5	-	13(32.5)
>5	-	17(42.5)

*Mean (SD)

A student’s response to the ranking order of ECTB revealed teaching abilities’ as the most important characteristics followed by nursing competence. But instructor’s response revealed nursing competences’ as the most important characteristics followed by personality trait. As to the mean difference between students and teachers ECTB, the independent sample t-test result revealed that overall there was presence of 0.75 means difference between students and teachers and this difference was statistically significant ($t=5.888$, $P<0.001$) (Table 2).

Table 2. Students and instructors perceived ECTB, at the University of Gondar Northwest Ethiopia, 2016 (n=178)

Category of ECTB	Mean (SD)	SEM	t	df	P-value
Teaching abilities					
Students	4.29 (0.54)	0.086	6.35	96.65	<0.001
Instructors	3.58 (0.83)	0.071			
Interpersonal relationship					
Students	4.15 (0.69)	0.109	4.39	84.54	<0.001
Instructors	3.56 (0.94)	0.080			
Personal trait					
Students	4.31 (0.63)	0.100	6.98	86.15	<0.001
Instructors	3.43 (0.87)	0.074			
Nursing competence					
Students	4.34 (0.67)	0.106	6.04	76.03	<0.001
Instructors	3.57 (0.82)	0.070			
Evaluation					
Students	4.25 (0.64)	0.102	6.34	86.91	<0.001
Instructors	3.44 (0.89)	0.076			
Overall ECTB					
Students	4.26 (0.52)	0.082	7.24	90.31	<0.001
Instructors	3.52 (0.74)	0.063			

Discussion

The purpose of this study was to identify effective clinical teaching behavior as perceived by student, instructors and compare whether there is a significant difference between these two groups. The clinical teaching categories are a function of the clinical teaching behaviors and provide a broader view of the overall use of the teaching behaviors than do the individual response items.^{25,24} In the present study, students' response revealed that the teaching ability category rated the highest mean score followed by evaluation and nursing competence respectively. This result is similar with the previously studies.²⁵⁻²⁸

From this it is observed that teaching ability and professional competence are the top preferred ECTB for this participants. A recently published study in the Saudi Arabia and Africa revealed that among the Nursing students, the most effective teaching behavior was teaching ability²⁸ as reported by 96% of the participant and clinical (professional) competence as well.²⁸

Other review of literature also revealed that the best clinical teachers are clinically competent and have teaching knowledge.²⁹ Teacher's knowledge about the curriculum, clinical setting, the learner and teaching/learning theory appeared very important to students' views of effective clinical teaching. Clinical teachers with effective clinical teaching characteristics are always appreciated as good role models.³⁰

On the other hand, the findings of this study was differed from studies done in Australia where students rated interpersonal relationship as the highest followed by personality trait and evaluation respectively. Nursing competency and teaching ability were the first and second lowest scored categories respectively.⁵ This difference may be due to the focus of nursing education and the most common nursing diagnosis students' encounters during the clinical attachments. In the present study, evaluation and personal trait ranked the lost mean score. This result is in line with the previously study in Egypt where personality trait had the lost mean score.²⁴

Regarding the instructors response to the effective clinical teaching behavior, the response revealed that nursing competences' as the most important clinical teaching behavior followed by personality trait. This result is similar with the previous study.^{7,26,29} This can be supported by studies that revealed teaching and nursing competence as the most important nurse educator competence than evaluation skills, personality factors and relationships with students.^{11, 28-30}

Personality trait and teaching ability are the second and third most important in this study. The finding of this result was supported by other study, as instructors a personality trait was rated as the highest rated by instructors. Research on effective teaching skills points out that, aside from professional knowledge, a good tutor needs to possess positive personality traits.³¹ Personality qualities identified by the study participants for teacher effectiveness in a clinical setting include having the motive to teach and being a good role model. This finding suggests that in addition to clinical teaching skills, the personality of a lecturer plays an important role in the preparation of students. Therefore, clinical teachers' pay more attention to their characteristics.^{26,31} Study revealed that clinical expertise was seen by students as a requirement, but not sufficient in itself; to establish one's validity as a role model rather it is more effective when it combined with personality characteristics that attract the students.³²

In the present study, evaluation and interpersonal relationship ranked the least mean score respectively in this study this is differed from others study done elsewhere. A study from Australia revealed that interpersonal relationships were the most highly valued characteristic rated by both students and clinical educators, and both groups ranked the subset of personality as the lowest.² Another comparative study among students and clinical educators also showed a consistent result in the ranking of effective clinical teaching characteristics as interpersonal relationships, evaluation and nursing competence ranked the first, second and third respectively.^{5,26} This difference could be

attributed to the variations of the socioeconomic status of the country, personal character and environment. This can be supported by the study that revealed technological advancement, personal character and environment are barrier for effective interpersonal relationship.^{33,34} The other possible reason for the variation may be due to the currently implementations of the student center teaching methods in Ethiopian higher education that may require role change and this role changing is uneasy for those who familiarized with the traditional teaching methods (teacher center teaching). This explanation is supported by other studies as the integrated teaching, problem-based learning, community-based learning,³⁵ and the increasing emphasis placed on performance assessment techniques such as: the objective structured clinical examination, the use of standardized patients, log books, portfolio assessment and self-assessment³⁶ and student center teaching methods increased attention to the learner that may be seen by teachers as a loss of control and power that consequently lead to feelings of uncertainty, inadequacy consequently lead the instructors to give less values to the interpersonal relationship.³⁵

As to the mean difference between students and teachers ECTB, the overall mean of ECTBs of the students were higher than their instructors. The independent sample t-test revealed overall there was a presence of 0.75 means difference between students and teachers and this difference was statistically significant ($t = 5.888, P < 0.001$).

This result is consistent with other study.³² This variation indicated that the students give more values than their instructors to all categories of ECTB. In other words instructors are selective and they did not consider all categories of ECTB are important.

This study has some important limitations that should consider when interpreting the results. These limitations include: the small sample size may affect representativeness, lack of similar studies compromise the comparison of this finding. The other limitation, since the study was based on self-reported information provided by students and their instructors, it may mislead them because of the respondents' interpretation of the questions.

Conclusion

Overall the most important ECTB as perceived by student and their instructors were: teaching abilities followed by nursing competence and nursing competences followed by personality trait respectively.

The overall mean of ECTBs of the students was higher than their instructors. The independent sample t-test revealed there was a presence of means difference between the students and instructors. Therefore, Nursing instructors are suggested to consider the presence of student that prefers different teaching methods during clinical supervision and seek feedback to have a common understanding on ECTB. Nursing students are also suggested to use different clinical teaching behaviors that enhance their clinical competence at different clinical site and they are also suggested to improve the culture of their feedback to the concerned body to incorporate or have common ECTB. In order to achieve the stated goal, mission

and vision of higher education, higher officials (such as ministry of: education, health) and school of nursing also suggested to do more on ECTB to have common understanding among instructors and their students. Finally, authors recommend other researcher in order to replicate this finding.

Replication of this study is strongly recommended with larger sample that involving majority of nursing school in Ethiopia in order to be the representative of the country as the same time to identify the preferred ECTB for the country.

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Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

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