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

Berhanu Boru Bifftu1, Berihun Assefa Dachew2, Bewket Tadesse Tiruneh1, Tesfaye Demke Ashenafie1, Eleni Tesfaye Tegegne1, Worku Zemene Worku1

1Department of Nursing, University of Gondar College of Medicine and Health Science, Gondar, Ethiopia
2Department of Epidemiology and Biostatistics, University of Gondar College of Medicine and Health Science, Institute of Public Health, Gondar, Ethiopia

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 3.92 (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.

Citation: Bifftu BB, Dachew BA, Tiruneh BT, Ashenafie TD, Tegegne ET, Worku WZ. Effective clinical teaching behaviors: views of nursing students and nurse educators at University of Gondar, Northwest Ethiopia: cross-sectional institution based study. J Caring Sci 2018; 7 (3):119-25. doi: 10.15171/jcs.2018.019

Introduction

Nursing is both an art and science. 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 area and make nursing students prepare for future generation.5,6 In this regard, clinical instructors are the most important and have the opportunity and potential to influence their students’ learning in clinical education.7,8 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 relationships5,9 and the success of these well-directed clinical education is depends up on effective clinical instructors.9 Nurse instructors are directly responsible for developing students’ abilities in clinical reasoning, decision making, critical thinking, and developing successful interpersonal relationships during clinical education.7,9 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. 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). In the present study, innovation is defined as implementation of new or significantly improved classroom-based teaching, learning and assessment. 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. 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). This scale has been widely used including Africa. 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)
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.\textsuperscript{25,28} 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.\textsuperscript{25,27}

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 ability\textsuperscript{28} as reported by 96% of the participant and clinical (professional) competence as well.\textsuperscript{29}

Related review of literature also revealed that the best clinical teachers are clinically competent and have teaching knowledge.\textsuperscript{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.\textsuperscript{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.\textsuperscript{3} 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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{5,26} This difference could be

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|}
\hline
Category of ECTB & Mean (SD) & SEM & t & df & P-value \\
\hline
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 & & & \\
\hline
\end{tabular}
\caption{Students and instructors perceived ECTB, at the University of Gondar Northwest Ethiopia, 2016 (n=178)}
\end{table}
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. 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, 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-assessment 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.

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. 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.

Acknowledgments

First of all we would like to thank Nursing Education Partner Initiatives (NEPI) for the inspiration, motivation and financial support to conduct this research. Funder had no role in study design, data collection, analysis and decision to publish. The corresponding author had full access to all the data in the study and had final responsibility for the decision to prepare the manuscript and submit for publication. Second we would like to thank the study participants for their willingness to participate in the study.

Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

References

1. WHO Expert Committee on Nursing Practice Geneva, Switzerland (1995) & World Health Organization. Nursing practice: report of a WHO expert committee [Internet]. 1996 [Cited 25 Feb 2017]. Geneva: World Health Organization. Available from: http://www.who.int/iris/handle/10665/38190.

2. Zabat Kan E, Stabler-Haas S. Fast/acts/or the clinical nursing instructor: Clinical teaching in a nutshell. 2nd ed. New York: Springer Publishing Company. 2009.

3. Toelke LD. The clinical nurse instructor: best practices in orienting newly ill red clinical faculty 2012.

4. Boyd P, Lawley L. Becoming a lecturer in nurse education: The work-place learning of clinical experts as newcomers. Learning in Health and Social Care 2009: 8 (4); 292-300. doi:10.1111/j.1473-6861.2009.00214.x

5. Lee WS, Cholowski K, Williams AK. Nursing students’ and clinical educators’ perceptions of characteristics of effective clinical educators in an Australian university school of nursing. J Adv Nurs 2002; 39 (5): 412-20.

6. Nahas VL, Nour V, al-Nobani M. Jordanian undergraduate nursing students’ perceptions of effective clinical teachers. Nurse Educ Today 1999; 19 (8): 639-48. doi: 10.1054/ndet .1999.0376.

7. Heshmati-Nabavi F, Vanaki Z. Professional approach: the key feature of effective clinical educator in Iran. Nurse Educ Today 2010; 30 (2): 163-8. doi: 10.1016/j.nedt.2009.
Effective clinical teaching; view points from Ethiopia

8. Kelly C. Student's perceptions of effective clinical teaching revisited. Nurs Educ Today 2007 (8); 27: 885-92. doi: 10.1016/j.nedt.2006.12.005.

9. Johnson-Farmer B, Freenn M. Teaching excellence: what great teachers teach us?. J Prof Nurs 2009; 25 (5): 267-72. doi: 10.1016/j.profnurs.2009.01.020.

10. Wolf ZR, Bender PJ, Beitz JM, Wieland DM, Vito KO. Strengths and weaknesses of faculty teaching performance reported by undergraduate and graduate nursing students: a descriptive study. J Prof Nurs 2004; 20 (2): 118-28. doi:10.1016/j.profnurs.2004.03.003

11. Johnsen KO, Aasgaard HS, Wahl AK, Salminen L. Nurse educator competence: a study of Norwegian nurse educators' opinions of the importance and application of different nurse educator competence domains. J Nurs Educ 2002; 41 (7): 295-301. doi:10.3928/0148-4834-20020701-05

12. Knox JE, Mogan J. Important clinical teacher behaviors as perceived by university nursing faculty, students and graduates. J Adv Nurs 1985; 10 (1): 25-30. doi: 10.1111/j.1365-2648.1985.tb00488.x

13. Allison-Jones LL, Hirt JB. Comparing the teaching effectiveness of part-time & full-time clinical nurse faculty. Nurs Educ Perspect 2004; 25 (5): 238-43.

14. Bergman K, Gaitskill T. Faculty and student perceptions of effective clinical teachers: an extension study. J Prof Nurs 1990; 6 (1): 23-44. doi:10.1016/S8755-7223(05)80187-5

15. Brown ST. Faculty and student perceptions of effective clinical teachers. J Nurs Educ 1981; 20 (9); 4 -15

16. Merriam-webster online dictionary. Definition of effective [Internet].1828 [Cited 2012 Oct 9]. Available from: http://www.merriam-webster.com/dictionary/effectiveness

17. Ibry DM, Papadakis M. Does good clinical teaching really make a difference? Am Med J 2001; 110 (3): 231-2.

18. Zimmerman L, Westfall J. The development and validation of a scale measuring effective clinical teaching behaviors. J Nurs Educ 1988; 27 (6): 274-7. doi:10.3928/0148-4834-19880601-08

19. Aston L, Mallik M, Day C, Fraser D. Collaborative Research Group. An exploration into the role of the teacher/lecturer in practice: findings from a case study in adult nursing. Nurse Educ Today 2000; 20 (3): 178-88. doi: 10.1015 /nedt.1999.0455.

20. Rogers M. The definition and measurement of innovation. Melbourne Institute Working Paper 1998; 10 (18): 1-27.

21. Looney JW. Assessment and innovation in education. 1st ed. France: OECD Publishing. 2009.

22. Morris E. Re-assessing innovative assessment [Internet]. 2014 [Cited 2015 Jun. 2]. United Kingdom: Higher Education Academy. Available from: https://www.heacademy.ac.uk/blog/re-assessing-innovative-assessment

23. Warwick study. Re-assessing innovative assessment [Internet]. [Cited 2015 Oct 14]. United Kingdom: warwick study. Available from: http://www.warwick.ac.uk/study/c/e/l/currentstudents/undergraduatemodules/reinventingeducation/coursepages/mowl_-_innovative_assessment.pdf.

24. Mohamed-Nabil Ismail L, Mohamed-Nabil Aboushady R, Saad Eswi A. Clinical instructor’s behavior: nursing student’s perception toward effective clinical instructor’s characteristics. J Nurs Educ Pract 2016; 6 (2): 96-105. doi: 10.5430/jnep.v6n2p96.

25. Wafa A. Caring and effective teaching behavior of clinical nursing instructors in clinical area as perceived by their students. Journal of Education and Practice 2012; 3 (7): 1-13.

26. Madhavanprabakaran GK, Shukri RK, Hayudini J, Narayanan SK. Undergraduate nursing students’ perception of effective clinical instructor: Oman. Int J Nurs Sci 2013; 3 (2): 38-44. doi:10.5923/j.nursing.20130302.02.

27. Gangadharan P, Ali Abdu AlWahed M, Mobarak Ali Assiri M. Effectiveness of clinical teacher behaviors as perceived by nursing students, graduates and faculty of King Khalid university, college of applied medical science, Mohail, Kingdom of Saudi Arabia . International Journal of Current Advanced Research 2016; 5 (3): 651-656.

28. Okoronkwo IL, Onyia-PUT JL, Agbo MA, Okpala PU, Ndu AC. Students’ perception of effective clinical teaching and teacher behavior. Open J Nurs 2013; 3 (1): 63-70. doi: 10.4236/ojn.2013.31008.

29. BG Demissie A, Kidane. Nursing students and instructors perception of effective clinical teaching behaviors. Ethiopian Journal of Health Science 1999; 9 (1): 9-16.

30. Andrews D. Appraisal of clinical teaching behaviours by diploma nursing students and their clinical instructors: a comparative study [master’s theses]. Canada: Memorial University, Newfoundland and Labrador’s University, School of Nursing; 2000.

31. Virya K. Perceptions of nursing students on effective clinical preceptors in Phnom Penh National Hospitals, Cambodia. Int J Res Med Sci 2015; 3 (7): 1605-10. doi: 10.18203/2320-6012.jrms20150237.

32. Weissmann PF, Branch WT, Gracey CF, Haidet P, Frankel RM. Role modeling humanistic behavior: Learning bedside manner from the experts. Acad Med 2006; 81 (7): 661-7. doi: 10.1097/01.ACM.0000232423.81299.fe

33. Rademakers J, Delnoij D, de Boer D. Structure, process or outcome: which contributes most to patients’ overall assessment of healthcare quality? BMJ Qual Saf 2011; 20 (4): 326-31. doi: 10.1136/bmjqs.2010.042358.

34. Fraser BJ, Aldridge JM, Soerjaningsih W. Instructor-student interpersonal interaction and student outcomes at the university level in Indonesia. The Open Education Journal 2010; 3: 21-33.

35. Harden RM, Crosby JR. AMEE Education Guide No 20: The good teacher is more than a lecturer – the twelve roles of the teacher. Med Teach 2000; 22 (4): 334-47.

36. Firoozehchiana F, Taheri Ezbramia Z, Dadgaran I. Nursing-midwifery students and teachers’ views of effective factors in clinical education. Social and Behavioral Sciences 2012, 47: 1832 – 37. doi: 10.1016/j.sbspro.2012.06.908