

ORIGINAL RESEARCH

Clinical instructor's behavior: Nursing student's perception toward effective clinical instructor's characteristics

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ABSTRACT

Background and Aim: Clinical training as the core of nursing education is a significant and essential component for development of professional nurses. The quality of clinical instructor's behavior plays a significant role in the learning process of the students, especially in clinical practice. The aim of the study was to assess the clinical instructor's behaviors and nursing students' perceptions toward effective clinical instructor's characteristics that facilitate learning process.

Methods: Setting: The current study was conducted at Faculty of Nursing, Cairo University. Design: Descriptive, correlational design was utilized for the current study. Sample: A convenient sample of 333 was drawn from nursing students in different levels of baccalaureate nursing programs who had finished at least two clinical rotations with patient care. Tools: The Nursing Clinical Teacher Effective Inventory (NCTEI) was used for data collection.

Results: Findings of the current study revealed that the highest ranked clinical instructor's behavior as reported by the student's was teaching ability category followed by evaluation and nursing competence respectively. Regarding effective clinical instructor's characteristics as perceived by students, the highest ranked one was teaching ability category followed by nursing competence and evaluation respectively. The personality and interpersonal relationship among nursing student set as the fourth and fifth factors that affect learning process in the clinical settings.

Conclusions: Effective clinical instructor's characteristics that affect learning process as perceived by nursing student include matching clinical teaching abilities, nursing competence and evaluation to student understanding and experience. Also, the nursing students considered the personality and interpersonal relationship is very important characteristics to provide support and encouragement to the student during clinical practice. Recommendation: Workshops/seminars should be organized and also orientation program for all newly clinical instructors on their roles in clinical teaching. These findings may help faculty to be pleased about students' views and acknowledge the areas of success as well as areas that needs improvement.

Key Words: Clinical instructor's behaviors, Nursing student, The nursing clinical teacher effective inventory

1. INTRODUCTION

Clinical instructors have the opportunity to greatly influence the students' learning who eventually graduate and shape nursing practice. The behavior of clinical instructors plays a significant role in the development of professional nursing

who are knowledgeable and skillful within health care system, deliver safe quality nursing services to all categories as patients, families and communities to attain, maintain and recover optimal health.^[1,2]

So, clinical instructors must possess effective teaching char-

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acteristics such as professional knowledge, role modeling and clinical competence. In addition, the teacher's personality is essential because experiencing the proper pattern of clinical instructor's behavior is a motivation for educating students. Furthermore, student-teacher communication affects students' attitudes. Researchers have reported different views on the characteristics of a good teacher as teaching skills, communication skills and effective teacher's characteristics.^[13]

Exploration of effective clinical instructor's characteristics provides insight into enhancement of educational programs for developing professional nurses. Nursing students' perception and experiences is the method of measuring effective clinical instructors' characteristics in nursing education. Evidence suggested that student ratings can be reliable and valid indicator of effective teaching.^[4,5] Critical incident research about clinical teaching behaviors of faculty began with Barham's (1965) and Jacobson's (1966). The behaviors that the researcher identified were deemed actions that equated with effective teaching. Over the next four decades, studies of clinical teaching effectiveness focused primarily on the clinical instructor's characteristics.^[6]

On the other hand, clinical instructors' characteristics play a crucial role since clinical instructor not only enables students to integrate the knowledge and skills associated with caring for patients, but also gives learners the opportunity to internalize the role of the nurse as caregivers.^[7] To achieve high quality in clinical nursing education, variables as the relationship of clinical teaching behaviors to student learning must be identified. Also, nursing students' perception of effective clinical instructor behavior is an important indicator to modify and facilitate effective clinical instruction.^[8] So, the researchers were interested to assess the clinical instructor's behaviors and nursing students' perceptions toward effective clinical instructor's characteristics that facilitate learning process by undergraduate nursing students at Faculty of Nursing –Cairo University.

1.1 Significance of the study

Clinical practice remains a significant component and critical part of nursing education which considered as the "heart" of professional practice and bridging the theory-practice divided. The quality clinical practice delivered through clinical instructor is dynamic to the success of clinical education and has direct impact on the quality of nursing to ensure students achieve positive outcomes in the clinical settings as well as in future practice. Therefore, the clinical instructors as a cornerstone of nursing education plays an essential role in preparing nursing graduates for their role as competent, capable and caring nurses. In nursing, several research recognized

that clinical instructors' knowledge, giving immediately feedback on students' performance, remain accessible, having active listening to students and demonstrating a breadth of knowledge in nursing are efficient clinical instructors' characteristics to change nursing education.^[9] Therefore, the purpose of this study was to assess the clinical instructor's behaviors and nursing students' perceptions toward effective clinical instructor's characteristics that facilitate learning process.

The finding of the current study will provide base for all clinical instructors to examine and change their own clinical instructor characteristics regarding clinical practice and to realize teaching behaviors that are effective in clinical practice. Consequently, it could help to establish reciprocal and clear expectations among the students and clinical instructor which could help to create a healthy academic atmosphere contributing to effective learning. This will give evidence that the body of knowledge related to clinical instructor's behaviors and effective clinical instructor's characteristics. As well, they will add grounds for looking at clinical teaching in a new glow.

Nursing education administrator must examine orientation programs for newly clinical instructor regarding effective clinical instructor's characteristics to improve the learning process. In addition, it will maximize opportunities for nursing students to learn, and succeed in becoming professional nurses throughout learning process.

1.2 Aim of the study

The aim of the current study was to assess the clinical instructor's behaviors and nursing students' perceptions toward effective clinical instructor's characteristics that facilitate learning process.

1.3 Research questions

To fulfill the aim of the current study the following research questions are formulated: (1) Which clinical instructors' behaviors used frequently among nursing students? (2) What is the nursing student's perception toward effective clinical instructor's characteristics? (3) What is the relationship between clinical instructors' behaviors and nursing students' perceptions toward effective clinical instructor's characteristics?

1.4 Definition of terms

- **Clinical instructor behaviors:** Differential behaviors demonstrated by the clinical nursing instructor that facilitate learning process as delineated on the NCTEI.^[10]
- **Characteristics:** A distinguishing trait, behaviors per-

ceived by a nursing student as contributing to a positive learning experience in the clinical setting.

- **Perception:** An individual's awareness, understanding, opinion or insight.

2. SUBJECTS AND METHODS

2.1 Design

A descriptive correlational design was utilized. The current study was focus on clinical instructor's behavior and nursing student's perception toward effective clinical instructor's characteristics. Descriptive designs are useful to gain additional information about characteristics within a particular area of study.^[11] A correlational study determines whether or not two variables are correlated. This means to study whether an increase or decrease in one variable corresponds to an increase or decrease in the other variable.^[12]

2.2 Setting

The current study was conducted at Faculty of Nursing; Cairo University. It was established in 1963, the main purpose of establishing to start the study of nursing at the university level in order to graduate a qualified professional nurse who is competent and capable to work among the health care team at different health and educational organizations in the community. Faculty of Nursing, Cairo University obtained national accreditation from the National organization of quality improvement and accreditation. There are 130 clinical instructors who are responsible for clinical training of 1,000 students in different academic levels.

2.3 Sample

A convenience sample of 333 was drawn from nursing students in different levels of baccalaureate nursing programs in faculty of nursing at Cairo University. Researchers select the student who met the following inclusion criteria: (a) Nursing students had finished at least two clinical rotation with patient care in hospital before participate in the study; (b) Nursing students who exposed to at least five clinical instructors in order to have experience to entire the study. The students in first academic levels excluded because they don't have hospital training experience to assess clinical instructor's behaviors in clinical area.

Clinical time is important to successfully apply the theoretical concepts of nursing to clinical situations. Nursing students complete clinical rotations at appropriate health-care agencies under the direct guidance of qualified clinical instructors, in a group of 8-15 students with clinical instructor. Students complete 480 credit hours during 8 rotations (4 credit hours per week over 15 weeks for each clinical rotation). The first clinical rotation of the curriculum is

completed at Medical-Surgical I. Students plan and manage care for 1-2 patients every week, completing health histories, physical assessments, and performing specific nursing skills. The second clinical rotation of the curriculum is Medical-Surgical II, completed concurrently with Medical-Surgical II theory over 15 weeks. Also, pediatric, obstetric, emergency, critical care, mental health and community health clinical over 15 weeks for each clinical rotation.

2.4 Sample size

A convenience sample of 333 based on a power analysis. A Power of .95 ($\beta = 1 - .95 = .05$) at alpha .05 (one-sided) with medium effect size (0.3) was used as the significance level, because these levels have been suggested for use in the most areas of research. Although the minimum number of 302 students was required by power analysis, the researcher will aim to obtain 333 students in this study because ten percent of non-response rate was expected to be lost from the students.

2.5 Tools for data collection

To collect data pertinent to the study one tool was constructed and used by the researcher after reviewing related literature. It entails three main sections: (1) The first section included personal data such as age, gender as well as academic year in program. (2) The second section consisted of two part: the first part "Clinical instructor's behavior" using the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) that was developed by Knox and Mogan (1985).^[10] It consists of 48 important instructor characteristics divided into five subscales as following: (a) Teaching ability (TA): the process of transmission of skills and attitudes and the creation of an atmosphere that facilitate learning process; (b) Nursing competence (NC): the clinical teacher's theoretical and clinical knowledge used in the practice of nursing; (c) Evaluation (E): the type and amount of feedback the student receives from the clinical instructor regarding clinical performance and written clinical assignments; (d) Interpersonal relationships (IR): a state of reciprocal interest or communication between student and clinical instructor; and (e) Personality (P): the totality of the individual's attitudes, emotional tendencies and character traits, which are not specifically related to teaching, nursing or interpersonal relationships but may affect all three. A seven point, Likert-type scale ranging from 1 (Never) to 7 (Always); students ranked how frequently the clinical teaching behavior was demonstrated.

The second part: "Nursing instructor's perception toward effective clinical instructor's characteristics that influence learning process". Using the NCTEI that was developed by Knox and Mogan (1985).^[10] This scale was designed to assess nursing students' perceptions toward effective clinical

cal instructor's characteristics that facilitate learning process. The tool contained a five point Likert scale for each of the 48 NCTEI items; ranging from 1 (Never/No important), 2 (Slightly important), 3 (Important), 4 (Very important) to 5 (Always/Most important). Students rated how the frequency of use of the clinical instructor characteristic facilitated their learning.

The third section includes additional information as; overall rate of quality of the instructor in clinical setting and the best student-teacher ratio for clinical instructor.

2.6 Reliability and validity of the tool

The tool designed by the researcher and revised by experts in the field of medical surgical department and maternity nursing to content validity. The tool was translated into Arabic by professor experts who were fluent in both English and Arabic. The Arabic draft was then back translated into English by another two expert who are fluent in both Arabic and English. The back translated version was compared with the original English version to verify that the questions were properly translated. All of the back-translated items were worded similarly to the original ones and were comparable in their meaning. The Arabic draft was then discussed by two medical surgical nursing and maternity experts who found that it would aid understanding to rephrase the questions in the form of simple statements instead of question format without changing their meaning. Also, reliability and validity of the NCTEI was established through several methods. Initial reliability coefficients for each item ranged from .79 to .89 (Knox and Mogan, 1985). Reliability coefficients for the five categories during instrument development were: teaching .89, nursing competence .84, evaluation .82, interpersonal relationship .86, and personal traits .83. The reliability coefficients of both the individual items and the categories have remained stable during repeated use of the instrument. Test-retest reliability was reported to be acceptable (Knox and Mogan, 1985) with probability ranging from .76 to .93 (Knox and Mogan, 1987).^[10]

2.7 Procedure

An official permission was granted from the Dean of the Faculty of Nursing at Cairo University; all nursing students from various academic levels were invited to participate in the current study voluntarily. Data collection was carried out during the second semester of the academic year 2013-2014; through interviewing the nursing student and explaining the aim of the study. Each nursing student took nearly 10-15 minutes to complete the questionnaire.

2.8 Ethical consideration

An official permission was taken from the authoritative personal in the faculty. The researchers introduced themselves to student who met the inclusion criteria and informed them about the aim of the current study in order to obtain their acceptance to share in this study. Written consent was obtained from students who were willing to participate in the study. Confidentiality and anonymity of the student were assured through coding the data.

2.9 Statistical analysis

The collected data were scored, tabulated and analyzed using Statistical Package for the Social Science (SPSS) program version 19. Descriptive as well as parametric inferential statistics was utilized to analyze data pertinent to the study. Level of significance was set at $p < .05$. correlatebivariate Pearson test was used to analyze data.

3. RESULTS

Findings of the current study were presented as the following sequence: (a) Personal data of the nursing students; (b) Research questions; (c) Additional information.

(a) Personal data

The convenience sample consisted of 333 from three different levels of undergraduate nursing students at faculty of nursing, Cairo University. Most of the student were 162 (48.6%) from 2nd level, 95 (28.5%) from 3rd level and about 76 (22.8%) from 4th level. Student numbers in each level represent the majority of students enrolled in this level. All students were exposed to at least five clinical instructors. The age of the nursing student ranged from 19 to 23 years old. With the mean 20.71 ± 0.94 years old. More female were participated in the research than male. Out of 333 nursing students, 204 (61.3%) were female while 129 (38.7%) were male (Description of the personal data is displayed in Table 1).

(b) Research questions

Research questions of the current study were as follows:

The first research question: "Which clinical instructors' behaviors used frequently among nursing students?" are illustrated in Tables 2-4. Regarding the most clinical instructors' behavior mean score demonstrated as following: stimulates what is important; provides frequent feedback on students' performance; gears instruction to students' level of readiness and has a good sense of humor. The most clinical instructors' behavior means score of use were in the teaching ability, evaluation, personality and nursing competence category (see Table 2).

Table 1. Frequency and distribution percentage of personal data among the studied sample (n = 333)

Item	No	%
Age (years old)	M ± SD	
	20.71 ± 0.94	
Gender		
Male	129	38.7
Female	204	61.3
Academic year in program		
Second year:	162	48.6
Male	63	18.92
Female	99	29.72
Third year:	95	28.5
Male	31	9.31
Female	64	19.21
Fourth year:	76	22.8
Male	35	10.51
Female	41	12.31
Total:		
Male	129	38.74
Female	204	61.26

Regarding the least clinical instructors' behaviors mean score

were: is self-critical, recognizes own limitations, does not criticize students in front of others, demonstrates communication skills and shows a personal interest in students; in the personality, nursing competency, evaluation and interpersonal relation category (see Table 3).

Regarding teaching categories had the most and least mean score in use; presented in Table 4. The highest category mean score among the studied sample was teaching ability followed by evaluation and nursing competence respectively. Interpersonal relation and personality were the lowest scored categories.

The second research question: "What is the nursing student's perception toward effective clinical instructor's characteristics?" was displayed in Tables 5-7. The clinical instructors' characteristics with the mean score as perceived by students were: remains accessible to students, is a good role model, emphasizes what is important, demonstrates clinical procedures/techniques and directs student to useful literature in nursing. The clinical instructor's characteristics with the highest mean score as perceived by students were in the nursing competence, teaching ability, followed by personality and evaluation category respectively (see Table 5).

Table 2. The most clinical instructors' behaviors mean score among the studied sample (n = 333)

Items	Behavioral description	Category	M ± SD
2	Stimulates what is important.	TA	5.29 ± 4.97
28	Provides frequent feedback on students' performance.	E	5.26 ± 3.14
12	Gears instruction to students' level of readiness.	TA	5.07 ± 3.69
46	Has a good sense of humor.	P	5.06 ± 5.78
22	Directs students to useful literature in nursing.	NC	5.05 ± 4.65
18	Demonstrates clinical skill and judgment.	NC	5.04 ± 2.10
5	Demonstrates clinical procedures and techniques.	TA	5.02 ± 1.53
31	Communicates expectations of students.	E	5.01 ± 5.86

Table 3. The least mean score clinical instructors' behaviors among studied sample (n = 333)

Items	Behavioral description	Category	M ± SD
44	Is self-critical.	P	4.31 ± 1.86
24	Recognizes own limitations.	NC	4.34 ± 1.75
34	Does not criticize students in front of others.	E	4.42 ± 1.96
19	Demonstrates communication skills.	NC	4.44 ± 1.63
39	Shows a personal interest in students.	IR	4.45 ± 1.78
40	Demonstrates empathy.	IR	4.45 ± 1.82
33	Corrects students' mistakes without belittling them.	E	4.49 ± 1.89
32	Gives students positive reinforcement for good contributions, observations or performance.	E	4.52 ± 1.78
41	Demonstrates enthusiasm.	P	4.69 ± 1.69

Table 4. Rank order of teaching categories in frequency use among studied sample (n = 333)

No	Categories	Min	Max	M ± SD
1	Teaching ability	17	119	81.38 ± 20.35
2	Evaluation	8	56	67.29 ± 10.66
3	Nursing competence	9	63	42.41 ± 11.63
4	Interpersonal relation	6	42	28.08 ± 8.41
5	Personality	6	42	28.08 ± 8.41
Total score		52.27 ± 2.17		

Table 5. The most important clinical instructor's characteristics as students' perceptions among studied sample (n = 333)

Items	Behavioral description	Category	M ± SD
4	Remains accessible to students.	TA	4.21 ± 0.97
26	Is a good role model.	NC	4.21 ± 0.96
1	Emphasizes what is important.	TA	4.20 ± 0.94
5	Demonstrates clinical procedures and techniques.	TA	4.20 ± 1.05
22	Directs students to useful literature in nursing.	NC	4.20 ± 1.01
47	Appears organized.	P	4.19 ± 1.03
21	Discusses current development in his/her field.	NC	4.19 ± 1.01
34	Does not criticize students in front of others	E	4.18 ± 1.10
25	Takes responsibility of own actions.	NC	4.17 ± 0.97
23	Demonstrates a breadth of knowledge in nursing.	NC	4.16 ± 0.97

The clinical instructors' characteristics with the least mean score as perceived by students were: communicates expectations of students; provides support and encouragement to students; has a good sense of humor; shows a personal inter-

est in students and is approachable. The clinical instructor's characteristics with the least mean score as perceived by students were in the personality and interpersonal relation category (see Table 6).

Table 6. The least important clinical instructor's characteristics mean score as students' perceptions among studied sample (n = 333)

Items	Behavioral description	Category	M ± SD
19	Demonstrates communication skills.	NC	4.08 ± 1.07
13	Quickly grasps what students are asking or telling.	TA	4.08 ± 1.05
42	Is a dynamic and energetic person.	P	4.07 ± 1.10
11	Encourages active participation in discussion.	TA	4.07 ± 1.05
27	Demonstrates communication skills.	E	4.07 ± 1.08
36	Is approachable.	IR	4.05 ± 1.08
39	Shows a personal interest in students.	IR	4.05 ± 1.13
46	Has a good sense of humor.	P	4.05 ± 1.12
35	Provides support and encouragement to students.	IR	4.02 ± 1.11
31	Communicates expectations of students.	E	3.99 ± 1.18

Regarding rank order of clinical instructor behavior categories as perceived by students, teaching ability category rated the highest followed by nursing competence and evalu-

ation respectively. Personality and interpersonal relationship were the lowest mean score categories (see Table 7).

Table 7. Rank order of nursing student perception of effective clinical instructor characteristics among studied sample (n = 333)

No	Categories	Min	Max	M ± SD
1	Teaching ability	17	85	69.98 ± 14.95
2	Nursing competence	9	45	37.39 ± 7.92
3	Evaluation	8	40	32.88 ± 7.21
4	Personality	7	35	28.81 ± 6.74
5	Interpersonal relation	6	30	24.45 ± 5.80
Total score		38.67 ± 1.93		

The third research questions: What is the relationship between clinical instructors' behaviors and nursing students' perceptions toward effective clinical instructor's characteristics? Regarding correlation between clinical instructor behavior in use and as perceived by students that influencing learning process, a liner relationship was found. Positive correlation at $p < .0001$ was found between clinical instructor behaviors in use and influence on learning for all categories (see Table 8).

Table 8. Correlation between clinical instructor behavior in use and as perceived by students among studied sample (n = 333)

Categories	Pearson <i>r</i>	Significant (2-tails)
Teaching ability	0.37	0.000
Nursing competence	0.36	0.000
Evaluation	0.24	0.000
Interpersonal relation	0.23	0.000
Personality	0.23	0.000

(c) Additional information

Overall rate quality of the clinical instructors from student perspective was 6.69 ± 1.95 . In relation to the best student-teacher ratio for clinical instructor, from student's perspective a 5:1 ratio of student.

4. DISCUSSION

The clinical nursing instructor is responsible for managing, educating and supporting the student nursing during clinical practice that is most effective for facilitating learning process. Clinical instructor behavior and skills that enhance effective clinical instruction include: clinical teaching skills, having experience, having good communication skills, providing constructive feedback, facilitating a student-centered environment and give student chance for training during clinical practice. Correspondingly, students propose that supportive clinical settings have clinical instructors who provide constructive feedback, use good communication skills and help students develop self-confidence.^[14]

This study was designed to assess the clinical instructor's behaviors and nursing students' perceptions toward effective clinical instructor's characteristics that facilitate learning process. The discussion of this current study is two fold: (1) Research Questions; and (2) Additional Information.

Research questions of the current study were as follows:

The first research question: Which clinical instructors' behaviors used frequently among nursing students? In the current study, the teaching behaviors with the most frequency use were: stimulates what is important; provides frequent feedback on students' performance; gives instruction to students' level of readiness and has a good sense of humor. This study finding confirms results from studies conducted in Jordan.^[4] A number of researcher suggested that clinical instructors strive to create positive learning experiences for their students and to provide them with ongoing feedback on their clinical accomplishments and progress. This may be related to continuous feedback is intended to assess the extent to which clinical objectives are met and to motivate students to make desired behavioral changes over time. Clinical instructors need to develop innovative ways to overcome these considerable challenges and continue to make an effort to develop partnerships with students that promote effective interpersonal relationships.^[15] The findings of another research verified that student nurse perceived clinical instructors more frequently demonstrated caring behaviors highest in the following ways: (a) show personal interest in patients and their care; (b) create a climate of mutual respect; (c) acknowledge the limitations or mistakes; (d) realistic in expectations of students performance; and (e) promote student awareness of the professional responsibilities; especially for the future.^[2]

Regarding the clinical instructors' behaviors in the current study with the least frequency use were captured an aspect of: is self-critical, recognizes own limitations, does not criticize students in front of others, demonstrates communication skills and shows a personal interest in students. In addition to knowledge, some researcher confirmed that the teacher's personality is important to give positive reinforcement for

good performance during clinical practice. Furthermore, student–teacher communication affects students’ attitudes.^[3] The findings of this study differed from Western studies where students rated communication skills as the most important domains.^[26] In the clinical practice environment, faculty may interpret these behaviors to have potential to be less well received by students than in a classroom environment and therefore may have used them less frequently.

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. In the current study, teaching ability category rated the highest mean scored category followed by evaluation and nursing competence respectively. Interpersonal relation and personality were the lowest mean scored categories. A few researchers illustrate that according to nursing students, respecting students’ personality by giving attention and understanding, respecting time of the nursing students and supporting them are ethical characteristics of academic clinical instructors in nursing practice.^[3] These findings are consistent with previous studies, which revealed that closed relationship and supportive behavior with students encourage their motivation, their work in clinical practice, increase criticism acceptance, better adaptation to stress and giving attention to the educational content obtainable by the clinical instructor.^[16,17] Therefore, it is noted that the items in the teaching ability, evaluation and nursing competence respectively, interpersonal relations, and personality categories are nurturing actions consistent with the overall nursing principle of caring.

The second research question: What is the nursing student’s perception toward effective clinical instructor’s characteristics? The clinical instructor’s characteristics with the most frequency as perceived by students were: remains accessible to students, is a good role model, emphasizes what is important, demonstrates clinical procedures/techniques and directs student to useful literature in nursing. The clinical instructor’s characteristics with the highest frequency as perceived by students were in the nursing competence, teaching ability, followed by personality and evaluation. Awad^[18] found that the students perceived their instructors as having effective clinical instructors’ characteristics as creating environment with mutual respect, giving immediate feedback, motivating the students, being accessible all times for answering carefully and precisely questions raised by students, giving good instructions to student according to level of readiness, create a constructive learning environment, application of theoretical knowledge to clinical practice and demonstrate excellent role model.^[18]

Similarly, researcher found that five qualities rated by students as effective clinical instructor characteristics as: give specific suggestions for improvement honestly, enjoy teaching, active listening and having good communication skills, supervising students efficiently and being constructive role model.^[1] In medicine, Irby^[19] reported that lack of clear expectations for student performance, insufficient feedback, and inappropriate role models as obvious problems of effective clinical teaching. In nursing, Kelly^[9] recognized that teacher knowledge, giving immediately feedback, active listening to students and availability of teacher as effective clinical teacher characteristics.

In the current study, the clinical instructor’s characteristics with the least mean score as perceived by students were: communicates expectations of students, provides support and encouragement to students, has a good sense of humor, shows a personal interest in students and is approachable, this is in the personality and interpersonal relation categories. In the same line, Naji^[20] concluded that clinical instructors’ experience, knowledge and personality have a vital role and an influence on successful achievement of any clinical practice.

In the current study, regarding rank order of clinical instructor behavior categories as perceived by students, teaching ability category rated the highest followed by nursing competence and evaluation respectively. Knowledgeable, competent and fairly evaluator clinical instructors’ characteristics is the most important component for efficient clinical practice; this may make nursing student feel more secure and comfort in their ability to perform learned skills during the clinical practice. The study done on associated degree nursing students regarding their perception emphasized that teaching ability and nursing competence categories are the most effective clinical instructors’ characteristics to be a good clinical instructor for students in the clinical settings.^[21]

Regarding rank order of clinical instructor’s categories as characteristics perceived by students, personality and interpersonal relationship ranked as the lowest mean scores. This was disagreement with Ali mentioned that students perceive this characteristic as the second most effective teaching characteristic.^[2] Also, Awad reported that huge differences in scores between effective and ineffective teachers were observed in the interpersonal relationship category. Therefore, teachers’ attitudes rather than their professional abilities make crucial difference between effective and ineffective teachers.^[18] The study findings was supported by many researchers, reported that the most effective clinical instructors’ characteristics was personality traits which considered as the highest rating; such as provide immediate feedback and correct students mistakes without criticizing them, well ready

for teaching, a good role model, and create a climate of mutual respect, all of them create positive relationships with students that provide students with interpersonal support.^[22]

The third research questions: What is the relationship between clinical instructors' behaviors and nursing students' perceptions toward effective clinical instructor's characteristics? Regarding correlation between clinical instructor behavior in use and as perceived by students on learning. The findings indicated there was a positive correlation was found between clinical instructor behaviors in use and facilitating learning for all categories. The findings of this study provide initial confirmation that use of the clinical teaching behaviors facilitates learning. Further, the results indicated that as the frequency of use of behaviors went up, so too did the facilitation of learning. This result supported by a number of researcher, concluded that the correlations between frequency of use of the clinical teaching behaviors and influence on learning were highly significant.^[1,23] As well, another researcher indicating that it is the most effective clinical instructor's characteristics that students like to see in the clinical instructor.^[24]

Additional information: Overall rate of quality of the instructor in clinical setting; mean of the student perspective of rate quality was 6.69 ± 1.95 . In relation to the best student-teacher ratio for clinical instructor in student's perspective a 5:1 ratio of student. In the study of students' perceptions of effective clinical teaching in dental hygiene education, the researcher mentioned that individual rapport was the most effective clinical instructors' characteristics; this involves a closer physical proximity of instructor to student and much smaller and potentially intimate teacher-to-student ratio.^[25]

The clinical practice is the lifeblood of nursing education where students are allowed to provide selected aspects of care for patients. Clinical instructors are paramount in the process of clinical practice. The use of effective clinical instructors behaviors would facilitate learning. Therefore, the study results could help initiating change in the faculty staff regarding the teaching process, teaching methods, clinical practice, clinical setting and students evaluation. Also could help to establish mutual and well defined expectations among the students and faculty administrators and academic staff, which could help to create a healthy academic atmosphere conducive to learning. The information gained from this study can assist in improving clinical education.

Some researcher recommended that teachers should have the highest standards in education, research and management. Exploration of effective clinical instructors' characteristics provides insight into improvement of educational programs quality for developing nurses.^[3]

5. CONCLUSION

Clinical practice is a crucial role in undergraduate nursing education. So, there was a demand for highly skilled nurses with in depth knowledge that extended beyond mere technical competence. This contributed to the need for change in the clinical practice of nurses. Therefore, instructors during clinical area must be effective clinical instructor's characteristics if they want to facilitate student's learning in clinical practice. So, assessment of clinical instructors' behaviors and nursing students' perception toward effective clinical instructors' characteristics are important issues in improving nursing education to facilitate learning.

Recommendation

Based on the result of the present study, it was concluded that: (1) Set up an orientation program for newly clinical instructors regarding effective clinical instructors' characteristics; (2) Routine teacher evaluation to incorporate unused behaviors, into their practice; (3) Nurse educators should use the NCTEI as a self-assessment and seek to incorporate behaviors not previously used, or used infrequently, into their practice; (4) Graduate programs curricula for nurse educators should include courses on clinical education; (5) Workshops should be organized for clinical instructors on their roles in clinical teaching; (6) Exploring teachers' views; (7) Further research should compare clinical instructor characteristics with student success in mastering entry-level skills and competencies; and (8) Replication of this study with a broader student demographic and geographic area is needed to confirm and generalized the findings.

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CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there is no conflict of interest.

REFERENCES

[1] Okoronkwo IL, Onyia-Pat JL, Agbo MA, *et al.* Students' perception of effective clinical teaching and teacher behaviour. *Open Journal of*

Nursing. 2013; 3(63). <http://dx.doi.org/10.4236/ojn.2013.31008>

[2] Ali WG. 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): 15-27.
- [3] Ghiyasvandian S, Bolourchifard F, Parsa-Yekta ZP. Humanistic Approach to Nursing Education: Lived Experiences of Iranian. *Global Journal of Health Science*. 2015; 7 (2): 87-93.
- [4] Madhavanprabhakaran GK, Shukri RK, Hayudini J, *et al*. Undergraduate Nursing Students' Perception of Effective Clinical Instructor: Oman. *International Journal of Nursing Science*. 2013; 3(2): 38-44.
- [5] Sharif F, Masoumi S. A qualitative study of nursing student experiences of clinical practice. *BMC nursing*. 2005; 4(1): 6. PMID:16280087 <http://dx.doi.org/10.1186/1472-6955-4-6>
- [6] Kube M. The relationship of nursing faculty clinical teaching behaviors to student learning. A dissertation of doctorate, College of Saint Mary. 2010.
- [7] Tanner C. The art and science of clinical teaching. *Journal of Nursing Education*. 2005; 44 (4): 151-152. PMID:15862045
- [8] Ming L, Mingxia Z, Hongxia D, *et al*. Clinical nursing preceptors' perception of effective characteristics of clinical teaching: A qualitative study. *Journal of Macao Polytechnic Institute*. 2009; 18-27.
- [9] Kelly C. Students' perceptions of effective clinical teaching revisited. *Nurse Education Today*. 2007; 27: 885-892. PMID:17321013 <http://dx.doi.org/10.1016/j.nedt.2006.12.005>
- [10] Mogan J, Knox J. Characteristics of "best" and "worst" clinical teachers as perceived by university nursing faculty and students. *Journal of Advanced Nursing*. 1987; 12: 331-337. <http://dx.doi.org/10.1111/j.1365-2648.1987.tb01339.x>
- [11] Burns N, Grove S. *The practice of nursing research: Conduct, critique, and utilization* (5th ed.). St. Louis, MO: Elsevier; 2005. 232-233. PMID:15787860
- [12] Polit DF, Beck CT. *Essentials of nursing research: Appraising evidence for nursing practice* (7th ed.). Lippincott Williams and Wilkins. 2009. 189.
- [13] Gignac-Caille A, Oermann M. Student and faculty perceptions of effective clinical instructors in ADN programs. *Journal of Nursing Education*. 2001; 40(8): 347-353. PMID:11725992
- [14] Levy LS, Sexton P, Willeford KS, *et al*. Clinical instructor characteristics, behaviors and skills in allied healthcare settings: A literature review. *Athletic Training Educational Journal*. 2009; 4: 8-13.
- [15] Charania NA, Hagerty BM, Dansel LA, *et al*. Weekly Clinical Synopsis: Piloting an Innovative clinical Teaching Strategy. *Journal of Nursing Education and Practice*. 2015; 5 (3): 71-80. <http://dx.doi.org/10.5430/jnep.v5n3p71>
- [16] Smedley A, Morey P. Improving learning in the clinical nursing environment: perceptions of senior Australian bachelor of nursing students. *Journal of Research in Nursing*. 2010; 15(1): 75-88. <http://dx.doi.org/10.1177/1744987108101756>
- [17] Ramos FR, Brehmer LC, Vargas MA, *et al*. Ethics constructed through the process of nurse training: conceptions, spaces and strategies. *Revista Latino-Americana de Enfermagem*. 2013; 21: 113-121. <http://dx.doi.org/10.1590/S0104-11692013000700015>
- [18] Awad YM. Quality of Nursing Courses as Perceived by Students: Relationship with Their Academic Achievement in Palestine College of Nursing. *Open Journal of Nursing*. 2015; 5: 36-48. <http://dx.doi.org/10.4236/ojn.2015.51005>
- [19] Irby DM. Effective clinical teaching and learning: Clinical teaching and the clinical teacher. 2007. Available from: <http://www.med.cmu.ac.th/ssecret/meded/ct2.htm>
- [20] Naji E. Nursing Students' Perceptions of Effective Clinical Teacher in Al Majma'ah District, student poster. 2012.
- [21] Marie AA. Towards effective clinical teaching. *Journal Advanced Nursing*. 2001; 12(4): 505-513.
- [22] Berg CL, Lindseth G. Students' Perspectives of Effective and Ineffective Nursing Instructors. *Journal of Nursing Education*. 2004; 43: 565-568. PMID:15620072
- [23] Knox JE, Mogan J. Important Clinical Teacher Behaviors As Perceived By University Nursing Faculty, Students And Graduates. *Journal of Advanced Nursing*. 1985; 10(1): 25-30. PMID:3844410 <http://dx.doi.org/10.1111/j.1365-2648.1985.tb00488.x>
- [24] Al-Hamdan Z, Fowler J, Bawadi H, *et al*. Student Nurses' Perceptions of a Good Mentor: A Questionnaire Survey of Student. *International Journal of Humanities and Social Science*. 2014; 4(3): 248-256.
- [25] Schonwetter DJ, Lavigne S, Masurat R, *et al*. Students' perception of effective classroom and clinical teaching in dental and dental hygiene education. *Journal of Dental Education*. 2006; 70: 624-635.
- [26] Allison-Jones LL, Hirt JB. Comparing the teaching effectiveness of part-time & full-time clinical nurse faculty. *Nurs Educ Perspect*. 2004; 25: 238-43. PMID:15508563