Nurse trainees' perception of effective clinical instructor characteristics

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ABSTRACT

Objectives: Clinical education and experience in the clinical environment play an important role in shaping the clinical experience. Effective clinical teaching improves the clinical practice of the nursing trainees which in turn improves the quality of patient care. It mandates for the clinical instructor with desired qualities, to have a positive influence in clinical education. This study examined nurse trainees' perceptions of clinical instructor characteristics.

Methods: The current study was conducted in a multi-cultural tertiary setting using a cross-sectional descriptive design. Using convenience sampling, 302 trainees were chosen as participants for the study, and there were 296 respondents. The data were collected from the participants using the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) tool.

Results: The findings of the study revealed that the clinical instructors have scored high in personality (scoring percentage = 84.0%) and relatively low in teaching ability (scoring percentage = 81.3%). Also, the overall perception was almost the same among all the trainees though there was a slight variation in their rating of each dimension.

Conclusions: Nursing trainees indicated the instructors as having good personality and relatively low teaching ability. This mandates the clinical instructors in the clinical environment to empower themselves in this area of improvement. This helps the teaching institutions to consider all the domains of effective clinical instructor characteristics while recruitment and also organize programs giving emphasis on building and developing these characteristics to create effective instructors.

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What is known?

- Clinical instructors must possess certain characteristics in order to effectively impart clinical education.
- Evaluation of the clinical instructor is a prerequisite to ensuring the quality assurance of the nursing education.

What is new?

- Nurse trainees' perceptions of clinical instructor characteristics in a hospital in Saudi Arabia were evaluated. The overall perceptions indicated by different categories of nursing trainees were similar.
- Nursing trainees' perceptions indicated that the clinical instructors had good personality and relatively low teaching ability based on scoring percentage, though the mean scores of these aspects showed a reverse order.

1. Introduction

Clinical education and experience in the clinical environment plays an important role in shaping the clinical experience. Effective clinical teaching improves the clinical practice of the nursing trainees which in turn improves the quality of patient care. It mandates for the clinical instructor with desired qualities, to have a positive influence in the clinical education.

Moreover, the nursing trainees of today need to be adequately prepared for professional nursing practice in a complex clinical
environment. This requires improvement in clinical instruction and experience in order to meet the current practice standards [1]. Additionally, it is necessary that clinical instructors realize their desired expected qualities in clinical education [2]. Clinical instructors are key stakeholders in the learning process. Studies have proved that effective instructors are needed to facilitate learning and to maximize the educational experience in a multifaceted world of clinical practice [4]. Clinical instructors must possess certain characteristics. The themes that marked effective clinical instructors were personality, teaching ability, evaluation, nursing competence, interpersonal relationship, and realism [5]. Also, supervision with professional relationships reflected in the development of skill in the learner [6].

Literature suggests that features of the faculty and the clinical learning environment can affect the efficacy of the clinical education [7].

Factors such as humanistic behaviors, need-based supervision, and empowerment that can create worthiness and respectability in students were found to contribute to the improvement of clinical abilities in the learners [8]. Moreover, teacher and student empowerment play an important role in the teaching-learning environment [9,10].

Studies on this topic rated the interpersonal relationship-being supportive-as most important during the clinical practice [11–13]. Factors such as supervisory relationship, acceptance within the nursing team, and pedagogical atmosphere contributed to the satisfaction of students and the development of competence in the clinical environment [14].

Different studies have emphasized different characteristics as the most important character trait for a clinical instructor. Literature identified teaching ability as the most important character trait for a clinical instructor [15,16]. Other studies identified clinical competence and teaching ability as the most valued and essential character traits for a clinical instructor [17,18]. Also, literature revealed the need for clinical educators to develop greater confidence in their knowledge, teaching strategies, and clinical behaviors according to the needs of the students in the clinical setting [19]. Clinical instructors who stay clinically current and have a collaborative relationship with other health care professionals in the clinical environment create trust and remain effective in the clinical setting [20]. The skill required in the clinical teaching staff was identified as reflexive learning, where the clinical instructor guides the learner through changes and uncertainties, as well as engages in the social environment and moves the cognitive resources in the practice of nursing [21]. There is a need to optimize the clinical learning environment and make clinical education effective [22].

A nursing student’s perception of their actual clinical teaching environment has an impact on clinical performance [23]. The challenges faced by students in the clinical area were identified as ineffective communication, inadequate readiness, and emotional reactions. The instructor should therefore focus on these aspects in order to make the clinical training effective [24]. Also, students expect to be treated with respect and for clinical instructors to be available to guide and manage their problems [25]. Awareness of the constraints in the clinical context that impact the instructor-student relationship helps clinical instructors to manage the clinical situation in an effective manner [26,27].

Clinical instructors need to be adequately prepared to make clinical education productive. Effective orientation regarding the institution, clinical environment, and the clinical teaching roles—through workshops and seminars—make the clinical instructors competent and function efficiently [28–30]. The quality of nursing education can be improved by improving the quality of the dimensions, such as teaching strategies, and the quality of the nursing instructors [31].

Educational administrations use student opinions and ratings as criteria for judging the clinical teacher. An essential prerequisite to accurate evaluation is the availability of reliable and valid assessment tools. Researchers have relied on the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) as it is an effective tool to study clinical teacher effectiveness. This tool is a 47-item scale that is composed of five subscales: teaching ability, interpersonal relationships, personality traits, nursing competence, and evaluation [32].

Evaluation of the clinical instructor is a prerequisite to ensuring the quality assurance of the nursing education. Also, the most effective way of assessing a clinical teacher is by assessing the students in the clinical setting [3].

The literature suggests that the clinical instructor must possess certain characteristics in order to effectively impart clinical education. The present study on the trainees’ perceptions of their clinical instructor can provide valuable information regarding the nursing trainees’ actual expectations of their clinical instructors. This will help to identify the gaps in clinical teaching and give an insight into how clinical teachers can make their roles more effective. This will help to develop valid statements on clinical teacher expectations and make improvements in clinical teaching. Also, the findings of this study will provide evidence to the nursing education and administrative department to initiate strategies to improve the quality of clinical education.

Although studies have been done on the topic, most either studied only the teaching behavior or were done in an academic setting. As nurse trainees are in a better position to effectively evaluate the clinical instructor characteristics during the clinical training, it is important to know about their perception regarding the same. Our study aimed to assess effective clinical instructor characteristics from the perspective of trainees.

2. Methods

2.1. Research design

A cross-sectional design were used to examine the nurse trainees’ perception of clinical teacher effectiveness.

2.2. Setting

The setting for the study was a multicultural tertiary hospital—one of the biggest health care settings in the Middle East—with 1095 beds in the heart of the Kingdom of Saudi Arabia. The hospital provides extensive clinical training for nearly 500–600 nursing trainees each year from different institutions and universities. Thorough training and supervision of different categories of nursing trainees are conducted by qualified clinical instructors who are distributed throughout the clinical units in the hospital.

2.3. Sample and sampling method

All the 302 trainees who were available in the units during the data collection period were the population for the study. Due to the limited sample size, all the trainees were chosen as samples for the study by convenience sampling method. The inclusion criteria were the trainees those willing to participate in the study and available during the time of the study.

2.4. Data collection instrument

The data collection tool, NCTEI, is a standardized tool used to measure the clinical teacher instructor effectiveness. Permission
was obtained from Wiley Global Permissions to use the instrument. The data collection instrument consisted of two sections, demographic data, and a questionnaire to examine the trainees’ perception of their clinical instructors.

The demographic data included age, gender, the category of training, and the duration of training. The NCTEI developed by Knox and Morgan (1985) consists of 47 items, which are categorized under five dimensions: teaching ability, nursing competence, evaluation, interpersonal relationships, and personality. The items were rated on a 7-point scale ranging from 1 (never) to 7 (always) based on their perception of their clinical instructor for each item. The reliability was measured using the Cronbach’s $\alpha$ coefficient of the total (47) questions, which was equal to 0.972.

2.5. Data collection

The data were collected using the survey questionnaire from April 2018 to July 2018. To collect the information permission was first obtained from the Head of the training section, then the list of the trainees working in the units. The study was explained to the trainees and they were asked to participate in the study. Then the questionnaires were distributed to the trainees who met the inclusion criteria and later were collected by the researcher from the participants. Two hundred and ninety-six questionnaires were returned to the researchers bearing a response rate of 98%.

2.6. Statistical analysis

The data were entered and analyzed using the statistical pack-age SPSS 22 (SPSS Inc., Chicago, IL, USA). Categorical variables such as gender, level of training, and length of training were presented in frequencies and percentages, whereas continuous variables such as age and clinical instructor characteristic scores were expressed as Mean $\pm$ SD. Independent sample $t$-test/ANOVA was applied to test mean significant differences between clinical instructor characteristic scores and demographic characteristics. A two-tailed $P$-value $< 0.05$ was considered as statistically significant.

2.7. Ethical considerations

Approval for the study was obtained from the Nursing Research Committee and the Institution Review Board of the hospital. Informed consent was obtained from the subjects after explaining the purpose of the study. Participation in the study was purely voluntary. Confidentiality was maintained throughout the study.

3. Results

3.1. Basic demographic characteristics of participants

Basic demographic characteristics of participants are shown in Table 1. Males ($n = 160, 54.1\%$) were more in number compared with females ($n = 136, 45.9\%$), and the mean age of the trainees was $24.35 \pm 4.42$ years. Majority of the participants were nursing students ($n = 114, 38.5\%$).

3.2. Nurse Trainee’s perception of effective clinical instructor characteristics

Scores of each domain of NCTEI are shown in Table 2. Comparison of each domain of effective clinical instructor characteristics between gender groups and age groups are shown in Tables 3 and 4.

There were wide variations between the scores obtained by the different trainees in all the domains of effective clinical teacher characteristics with statistical significance ($P < 0.001$). The highest score was from the on-the-job trainees, whereas the lowest score was from the postgraduate diploma trainees in all the domains of effective clinical teacher characteristics (See Fig. 1).

The trainees who had training for less than 6 months gave the highest scores, whereas the trainees who had training for more than 12 months gave the lowest scores in all the domains of effective clinical teacher characteristics. The scores were statistically significant for teaching ability ($P = 0.005$), nursing competence ($P = 0.040$), and interpersonal relations ($P = 0.007$). They were not statistically significant for other domains, such as evaluation and personality (See Fig. 2).

In summary, among the different trainees, on-the-job trainees gave the highest scores and postgraduate trainees gave the lowest scores for all the domains. Trainees who had 1–6 months of training gave the highest scores, and those with more than 12 months of training gave the lowest scores for teaching ability, nursing competence, and evaluation. Personality was scored highly by all the trainees, except those who had 7–12 months of training.

4. Discussion

Clinical education is a topic of interest in nursing education. Several researchers have made efforts to study the different aspects of clinical education and to develop strategies to improve the practice environment.

Clinical teachers must possess effective characteristics to promote clinical teaching, as learners consider their teachers to be the best role models of learning [15]. The present study examined the perception of trainees about their clinical teacher, in the clinical environment, in all domains relevant to their teaching objectives. This is in alignment with the study that indicated the need for the evaluation of clinical instructor by the learner, as a prerequisite for quality assurance of nursing education [3].

The present study examined the clinical instructor characteristics in different dimensions. The overall finding indicated that personality had the highest scoring percentage of 94.0%, while the teaching ability had the least one of 81.3%. This is in alignment with a study finding, which reported personality as the highest-rated domain and teaching ability as the lowest [31].

This finding is contradicting with other studies that rated teaching ability as the highest scored domain [15,17,18,32]. It is interesting to note that all the trainees have the same ratings in rank order. This is in alignment with the study findings that revealed that trainees have similar ratings [15].

The current study rated personality and interpersonal relations as the top two characteristics of the clinical instructor. The current study rated interpersonal relations as the second top characteristic of the clinical instructor. Studies also emphasized
the importance of establishing support through various routes in clinical nursing education. An integrative review revealed interpersonal relations as the most valuable skill of a clinical instructor, and the student's positive experience of interpersonal relations is achieved with effective communication [11,12].

The evaluation was ranked third in the current study which contradicts a study which indicated that the domain of "evaluation of students" ranked first and also had the highest expectation from the student [34].

Nurse competence is also another trait that was looked into from the perspective of the trainees. Nursing competence had a comparatively low score similar to teaching ability, which indicated the need to look into the competence of the clinical instructors. The overall findings indicate low perception regarding the domains compared with personality and need more attention. This is in congruence with a previous study finding that recommended that the efficacy of the nursing instructor needs to be improved in the clinical areas [31].

Concerning the different categories of trainees, a significant difference was found among the different categories in the evaluation, interpersonal relationship, and personality domains. This is in alignment with the finding that reported significant differences between all groups regarding the perception of the clinical instructor [32]. This contradicts a study finding, which reported no difference between groups based on total NCTEL scores and NCTEI category [17]. A varying perception was also reported by the different groups of learners, which agrees with other studies [35].

Another article reported that various teaching behaviors showed statistically significant scores between the groups. It was found that teaching ability, nursing competence, evaluation, and interpersonal relations were significant [15].

Similarly, in our study, there was a significant association between the duration of training and rating of teaching ability, nursing competence, evaluation, and interpersonal relationship. One explanation for these findings may be the duration and the exposure to different clinical instructors.

In summary, the results highlight the need to investigate clinical education, as the quality of clinical education lies in the hands of clinical instructors who demonstrate effective characteristics.

**Limitation:** The study is limited to a particular setting and a limited sample size, thereby limiting the generalizability of the findings.

### Table 2
Domain scores of participants' perception of effective clinical instructor characteristics (n = 296).

| Domains          | Score range | Minimum | Maximum | Mean ± SD | Scoring percentage (Mean/Maximum, %) |
|------------------|-------------|---------|---------|-----------|-------------------------------------|
| Personality      | 7–49        | 10      | 49      | 41.16 ± 6.29 | 84.0                               |
| Interpersonal relations | 6–42    | 6       | 42      | 34.76 ± 5.48 | 82.8                               |
| Evaluation       | 8–56        | 11      | 56      | 45.95 ± 7.21 | 82.1                               |
| Nursing competence | 9–63      | 20      | 63      | 51.38 ± 8.00 | 81.5                               |
| Teaching ability | 17–119      | 39      | 119     | 96.73 ± 14.69 | 81.3                               |

### Table 3
Comparisons of scores for each domain of effective clinical instructor characteristics between gender groups (Mean ± SD).

| Domains              | Male         | Female       | t   | P    |
|----------------------|--------------|--------------|-----|------|
| Teaching Ability     | 96.16 ± 12.19| 97.40 ± 17.19| −0.705 | 0.481|
| Nursing Competences  | 53.09 ± 6.44 | 51.72 ± 9.53 | −0.658 | 0.511|
| Evaluation Score     | 45.27 ± 6.42 | 46.76 ± 7.99 | −1.745 | 0.082|
| Interpersonal Relations | 34.11 ± 5.19| 35.52 ± 6.45 | −2.048 | 0.042|
| Personality          | 40.08 ± 5.73 | 42.43 ± 6.68 | −3.230 | 0.001|

### Table 4
Comparisons of scores for each domain of effective clinical instructor characteristics between age groups (Mean ± SD).

| Domains             | >25 years        | ≤25 years        | t   | P    |
|---------------------|------------------|------------------|-----|------|
| Teaching Ability    | 93.44 ± 17.14    | 99.21 ± 11.56    | 3.079 | 0.002|
| Nursing Competences | 50.21 ± 8.69     | 52.51 ± 6.76     | 2.341 | 0.020|
| Evaluation          | 44.10 ± 8.40     | 47.43 ± 5.10     | 3.699 | <0.001|
| Interpersonal Relations | 34.18 ± 6.64 | 35.44 ± 4.58     | 1.723 | 0.087|
| Personality         | 40.57 ± 7.49     | 41.87 ± 4.72     | 1.612 | 0.109|

Fig. 1. Comparisons of domain scores of effective clinical instructor characteristics among trainees at different levels.
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5. Conclusions

Our findings give an overview of the perception and overall picture regarding the desired clinical instructor qualities. The nursing trainees rated personality as the highest and teaching ability as the lowest trait possessed by the clinical instructor. Accordingly, there is a need to investigate and develop effective strategies to fill the gap in the role. Clinical educators need to be oriented to the domains of effective clinical characteristics to present themselves as role models. The findings can assist clinical educators in identifying their roles, as well as facilitate clinical education by further enhancing professional nursing health care delivery and the health care environment. This study also paves the way to help to establish mutual and well-defined expectations among the students and clinical instructors. This can help to create a healthy clinical learning atmosphere that is conducive to learning.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jnms.2020.06.006.

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