ORIGINAL ARTICLE

Nursing students and instructors perception of an effective clinical teaching behaviours

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Abstract: This study was conducted to (1) investigate whether the perception of effective clinical teaching behaviour differ among nursing schools; (2) identify whether or not discrepancies existed between the perception of students and instructors on teaching effectiveness; and (3) identify which characteristics of the clinical instructor are deemed most important by subjects' institution and status. A modified research tool developed by previous investigators, was circulated among the nursing students and instructors found in Jimma, Gondar, and Addis Abeba. The tool listed 25 characteristics of clinical teachers to be rated, using a 5 point Likert-type scale, from "of most importance" to " of no importance". For statistical analysis the items were categorically placed under 3 factors that would be most interpretable in terms of a common theme. To compare the responses of subjects, analysis of variance was applied to the data. Results revealed while all the schools agreed on the importance of all the factorized items (mean≥3.5) they differed significantly (P<0.05) with regard to their degree of importance, where it was maximum for Gondar (mean=4.4) and least for Jimma (mean=3.6). The study also suggests that while both students and instructors agreed on the importance of all the factorized items (mean≥3.5), they differed significantly (P<0.05) with regard to the degree of importance where they are maximum for instructors (mean=4.3). Although respondents valued the skills involving nursing competencies (factor-1) and teaching competencies (factor-3) more than consideration for students (factor-2), there was no significant difference between the means of these factors (P>0.05). This study shows that the clinical teaching characteristics specified in the survey tool can at least serve two functions: (1) guide or direct nursing instructors in the endeavour to improve the quality of practical teaching practices; and (2) evaluate the nursing, teaching, and interpersonal behaviours of practical instructors.

Introduction

Much research has been conducted on characteristics that the effective class-room teacher should possess, from both the faculty and student perspective. Yet little research has been carried out regarding faculty and student perception of the effective clinical teacher (1).

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Nursing is indeed a practice discipline with experiential learning in clinical practice areas comprising an overwhelming portion of a nursing student's education. This statement is used to provide a basis for discussion of some issues involved in relation to clinical nursing education. However, the lack of substantial research in the area of clinical nursing education would suggest that this "heart" of the nursing student's professional education has long been ignored (2).

An extension study conducted by Bergman & Gaitskill (3) on characteristics of effective clinical teachers at the University College of Nursing in South-Western Ohio suggest that both faculty and students favour articulate, knowledgeable clinical instructors who are "objective and fair" in student evaluation. However, faculty respondents appeared to place a higher value in instructor interest in patients, and students were more concerned with communication-related attributes.

Another study has shown that the perceived most helpful teaching behaviour was providing information through feedback (4). The perceived most hindering behaviours were intimidating, questioning and correcting student errors in the presence of patients.

Surveillance on 403 students in their clinical years for their perceptions of the quality of clinical clerkships have shown that two-thirds of tutors were regarded as friendly and helpful, the remaining one-third were perceived as unconcerned, discouraging, derogatory and hostile. Overall, only half the clinical tutors were rated as effective teachers. Almost two-thirds of the students had predominantly positive reactions to interactions with their tutors, in terms of being motivated to learn, enthusiasm about the subject and having their self-confidence increased. Finally, one-third of students had experienced at least some form of mistreatment by their tutors, including gender, appearance, religion, and racial discrimination, unfair grading and public humiliation. These findings suggest that the clinical instruction may not be providing an optimal learning environment for the student (5).

In another study, Loftus, Mclead and Snell (6) interviewed faculty members to determine their perceptions of what constitutes effective teaching in ambulatory setting. The results identified similarities as well as important differences between inpatient and outpatient teaching. Questioning, role modelling, and emphasizing general principles and concept comprehension were considered effective in both settings. On the other hand the two settings differ strikingly in the teaching of problem solving, bedside teaching, and provision of feedback. Many characteristics of the setting influence outpatient teaching, but the tutors offered different viewpoints about whether these characteristics were beneficial or detrimental.

Dunlevy and Wolf (7) surveyed the perceived differences in the importance and frequency of practice of clinical teaching behaviours. Results revealed that while both students and preceptors agreed on the importance of the listed clinical behaviour items, they differ significantly (P< 0.05) with regard to the frequency with which effective clinical teaching behaviours were practised.

Irby, et al (8) surveyed 165 senior medical students and 60 medical residents on the characteristics of effective clinical teachers of ambulatory care medicine. Results indicated that the most important characteristics of the ambulatory care teachers were that they actively involved in the learners autonomy and demonstrate patient care skills.

In almost all studies, students have been used, and often faculty along with students. The premise has been that the students, who are receiving the instruction, are the best judges of what effective teaching behaviours are.

Throughout the literatures, there was widespread consensus that showed the need for educational institutions to implement programs to foster and to promote uniformly identified effective clinical teaching behaviours. These literatures, however, have clearly noted that there are no commonly accepted clinical teaching behaviours to enable instructors to synthesize the knowledge and develop the skills to function as effective teachers in their educational environment. This may be due to the influences of differences in the studies educational environment such as the curricular goals the teacher expertise, health needs of populations, and the characteristics of the learner (9,10). It was also suggested that further research is needed in this area and the development of tools for measurement is needed.

Thus, we believe that it is imperative to investigate and identify what characteristics of the clinical instructor in the Ethiopian educational environments are regarded as important by subjects' institution (nursing schools), subjects' status (student Vs instructor), and see how the groups compared in their perception of effective clinical teaching behaviours. Identification of similarities and differences in the subjects' perception may provide insight into the important clinical teaching behaviours to consider. This knowledge would add to the information base for establishing a foundation for the improvement of the traditional clinical teaching in nursing and, ultimately, of course, the improvement of quality of client-care delivered in this country.

Therefore, this paper builds on previous work by empirically addressing three related purposes: (1) investigate whether the perception of effective clinical teaching behaviours differ among nursing schools: (2) identify whether or not discrepancies exited between the perception of students and instructors on teaching effectiveness; and (3) identify which characteristics of the clinical instructors are deemed most important by subjects' institution and status.

Methods

This study was conducted in three nursing schools, namely the Jimma Institute of Health Sciences Nursing School, Gondar Medical Sciences College Nursing School, and the Addis Ababa Centralized Nursing School. These schools have a national significance in the training of senior clinical and public health nurses within a two-year course period.

Study Subjects:

The respondents were 134 final year senior nursing students of the three nursing schools who had been supervised by at least six clinical instructors during their clinical practice.

The study also included 34 full-time instructors who had been involved in clinical teaching for at least six semesters in the same schools.

Instrument:

Twenty-five clinical teacher characteristics items whose reliability and validity documented were identified in a review of the literature (1,4,14) were used as the basis for data collection.

This list included competencies that are related to professional, interpersonal and teaching skills. (List of the factorised competencies, with explan-

atory text can be obtained from the Journal's secretary.)

In order to more accurately assess perceived participants variability in ranking the importance of the 25 items, each item was linked to a five-point Likert type scale from 5(of most importance, one of the most effective teaching behaviour) to 1(of no importance, one of the least effective teaching behaviour).

In a preliminary study (pretest) of the instrument, the participants were encouraged to add any omitted clinical teaching behaviours and to give any suggestions for improvement of the tool. None of the participants requested any addition or omission of phrases to the tool.

Data Collection:
The data collection instrument, consisting the list of clinical teacher characteristics was administered between January 25/1998 and February 15/1998 to convenience samples of final year students and instructors involved in clinical teaching.

The tool was administered in classroom settings using standardized explanations and procedures for administration. All questionnaires were completed independently and anonymously. Participants were advised to rank each item as to the level of importance that would be expected in the actual situation.

At the end, the completed instruments were placed in an envelope by representatives of students and instructors group and returned to the researchers.

Data Analysis:
Based on previous research (14) findings the 25 items were placed into their factors for statistical analyses and interpretation in

terms of their common theme: factor-1, nursing competencies with 9 items; factor-2, consideration for students also with 9 tems; and factor-3, teaching competencies with 7 items.

Then data from the questionnaire were entered into a computer system using SPSS/PC PLUS software. All the necessary coding, data validity checking, data cleaning and analyses was performed using analysis of variance.

Analyses were structured with three types of comparison: first, between the 3 participant schools; second, between students and instructors; and third between the 3 factorized items. P values were used to decide whether observed differences are statistically significant or not.

Results

The nursing students completing the questionnaire represented both the senior public health nursing and clinical nursing final year programs. Out of the one hundred thirty four student respondents 39 were from Jimma, 46 from Gondar, and 49 from Addis Ababa nursing schools. Among nursing instructor respondents (n=34), 12 were from Jimma, 6 from Gondar, and 16 from Addis Ababa.

The subjects responded to each question on a five-point rating scale which varied from "of most importance " [5] to" of no importance" [1]. When each individual perceived rating score for the 25 scaled items (questions) had been obtained the data was tabulated in a two-way fashion, i.e., by factors and nursing schools, as in table 1, and by factors and status, as in table 2, where the group means and F-ratio with the P-values are presented.

Table 1. Nursing Schools Perceived Rating Means, F-ratio, and P- value to the factorized items of an Effective Clinical Teaching Characteristics..

FACTORS	MEAN				F	P
	JIHSNS n=51	GCMSNS n=52⁻	AACNS n=65	OVERALL MEAN		
1. Nursing competencies	3.71 (9)	4.48 (9)	4.09 (9)	4.09 (27)	32.315	0.000
2. Considerations for students	3.52 (9)	4.14 (9)	3.92 (9)	3.86 (27)	7.361	0.003
3. Teaching Competencies	3.54 (7)	4.46 (7)	4.16 (7)	4.05 (21)	11.481	0.001
Overall mean	3.59 (25)	4.35 (25)	4.05 (25)	4.00 (75)		

- Number of items under each factor are given in parentheses
- JIHSNS, Jimma Institute of Health Sciences Nursing School
- GCMSNS, Gondar College of Medical sciences Nursing School
- AACNS, Addis Abeba Centralized Nursing School

Table 2. Students and Instructors Perceived Rating Means, F-ratio, and P-Value to the Factorized items of an Effective Clinical Teaching Characteristics.

FACTORS	M E A N			F	P
	STUDENTS n=134	INSTRUCTORS n=34	OVERALL MEAN		
1.Nursing Competencies	4.01 (9)	4.32 (9)	4.17 (18)	14.593	0.002
2. Considerations for Students	3.78 (9)	4.19 (9)	3.98 (18)	9.028	0.009
3. Teaching Competencies	4.01 (7)	4.27 (7)	4.14 (14)	1.786	0.208
Overall Mean	3.93 (25)	4.26 (25)	4.09 (50)		

- P<0.05 level of significance
- Number of items under each factor are given in parentheses

The number of responses, rating scores, and mean for each item under the main factors were calculated. Findings indicated that the respondents rated everyone of the items under the 3 main factors in favour (mean ≥ 3.5). Then, in order to find out whether there were significant variation in the degree of importance between the mean ratings of the nursing schools and the mean difference between student and instructor respondents a two-way analysis of variance was performed and summarized in tables 1 and 2. Since the interaction effects between the institutions versus respondent groups for the variables of interest was not statistically significant the results of F-tests on the main effects were interpreted in a straight forward fashion. It can be seen in table-1 that there were statistically significant differences ($P<0.05$) between the three nursing schools for the items under the factors 1-3 where it is maximum for Gondar nursing school (mean=4.4) and least for Jimma (mean=3.6).

In a separate analysis of differences between the mean scores of student and instructor groups (Table-2) there were statistically significant differences ($P<0.05$) between the student and instructor groups means for the items under factor 1 and 2, where as , there was no statistically significant difference between the student and instructor groups means for the items under factor 3 (teaching competencies).

A follow-up analysis of the variables means by factor (1-3) was carried out using Tukey-HSD procedure (multiple range test) in order to determine if there were statistically significant difference between the mean of the three major factors. The result showed that there were no statistically significant differences between the three factor means ($P>0.05$).

Discussion

The findings of this study reveal that while all the participant nursing schools agree on the importance of all the items, they differ significantly with regard to the degree of importance with which effective teaching behaviours are perceived. This may suggest that environmental variables may have a substantial influence on these ratings. While our synopsis of the nursing schools' strategy merely indicates differences in approach of an educational nature, other less overt factors are likely to have played some part for the differing degree of perceived importance. Bowmann, et al (11) stress the importance of the social system, organizational development, leadership patterns, and intervention teachniques within smaller groups in instigating institutional influences on the perception of the subjects.

Findings of this study have also clearly indicated a favourable view of both students and instructors towards all the factorized items. There is some degree of similarity between the responses of the student and instructor groups. Both value skills involving nursing competencies and skills centering on the teaching competencies over personal attributes of the instructors (consideration for students). The results when compared with Brown's (1) findings, appear largely paralleled and transferable, but significant differences appear with that of Bergmann and Gaitskill (3) findings. For example, students rated characteristics dealing with the clinical instructors' professional competencies to be more important than those dealing with consideration for students, the opposite of Bergmann and Gaitskill results.

The significantly higher ratings of the instructors towards the skills involving

nursing competencies and consideration for students paralleled the findings reported by Sweeney and Regan (12). Instructors may have sufficient appreciation of the complexities of the professional tasks or better insights into student functioning as presented in actual clinical practice. While indicating agreement on the importance of the items, the students' relatively lower rating suggest that students may be underestimating the true complexities of the professional tasks. They may have been attempting to live up to perceived expectations of the clinical instructor in attaining some level of competence. They may also have viewed satisfactory performance in the clinical course as indicating competence in nursing practice.

The insignificant difference between the means of the three factorized items reflects Reeve's (13) findings that they all are proved important for consideration. Given the special challenges of clinical nursing education, all programs should seek to teach the skills identified as important, and persons with the skills perceived as effective should be urged to enter clinical instruction and should be rewarded for success in this important area.

Clearly, there are limitations of this study such as differences in respondents environment and level of understanding of the specified items in the questionnaire. The survey tool used in this study measured perception and not actual behaviours. Structured observations of behaviours could provide validating information. Concurrent validity was not done in this study due to time and cost limitations.

Nonetheless, this study raises important questions for both research and practice. Reasons for higher and significant ratings by instructors compared with students are at issue. The significant variation in perceived ratings by schools is of direct relevance to the interpretation of findings and to the design of clinical curricula and clinical teaching.

Finally, it is proposed that this study be replicated to gain further validation of the important clinical teaching behaviours and control for specific evaluator and environmental variables.

Acknowledgement

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