STUDENT NURSES’ PERCEIVED GAPS IN CLINICAL INSTRUCTION AT MACHAKOS LEVEL-5 HOSPITAL AND CHOGORIA MISSION HOSPITAL, EASTERN REGION OF KENYA: A CROSS SECTIONAL STUDY

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ABSTRACT

Background: Clinical instruction involves teaching students in the clinical area by qualified nurses (clinical instructors) focusing on the care of patients’ needs. It is a personal relationship between a student and clinical instructor. As opposed to classroom teaching which involves learning theory in a classroom setting, clinical instruction prepares students to integrate their previously acquired classroom knowledge with clinical skills and competencies.

Purpose: The purpose of this study was to establish level of clinical Nurses’ preparedness in clinical instruction skills at Machakos level-5 and Chogoria Mission Hospitals, Eastern Region of Kenya.

Design: A descriptive cross-sectional study done at Machakos Chogoria Mission Hospitals.

Methods: The target population included all student nurses from Chogoria School of nursing and KMTC Machakos. A sampling frame of nursing students from the two training institutions to obtain a random sample of 113 senior nursing students to participate in this study. Self-administered semi-structured questionnaire was used to collect data.

Results: Student nurses perceived gaps in nurses’ ability to demonstrate a number of effective clinical instruction skills such as timely constructive feedback, response to students’ questions, and nurses’ organization in their work among others.

Conclusion: Findings from this study demonstrate that lack of supervision, delayed feedback and unavailability of nurses to respond to student questions contributed to inadequate clinical instruction among nursing students.

Key words: Clinical nurse instructor, preparedness, nurse student

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CHAPTER ONE: INTRODUCTION

Introduction

Clinical instruction involves teaching students in the clinical area by qualified nurses (clinical instructors) with focus on patient care and needs.\(^1\). It is a personal relationship between the student and clinical instructor. As opposed to classroom teaching which involves learning theory in a classroom setting, clinical instruction prepares students to integrate their previously acquired classroom knowledge with clinical skills and competencies \(^1\). Successful clinical instruction involves the student in patient care and embraces a wide range of teaching techniques appropriate for different level of learners \(^2\), for example modeling method whereby the instructor demonstrates the skills with patients as the students observe. It is appropriate for less experienced students as they begin the transition from classroom to clinical setting. Effective clinical instruction is also characterized by use of effective clinical instruction skills by the clinical instructor such as provision of opportunities for learners to participate in patient care, timely constructive feedback and friendly supportive learning environment among others \(^3\). In addition the clinical instructor should be knowledgeable, experienced in his field and possess positive personal characteristics such as being approachable, available confident among others \(^4\).

In the recent past cases of professional negligence have been on the increase in Africa, Kenya included \(^5\). This too has been partly blamed on educational programs for health professionals for graduating health workers with inadequate relevant skills thus making them encounter difficulties in role transition especially soon after graduation \(^6\).

For a long time, nurse training hospitals in Kenya used to have trained clinical instructors whose sole responsibility was to conduct clinical instruction for student nurses. However, since early 2000 to date the training of clinical instructors no longer goes on. Those who were trained earlier were added other nursing roles as stipulated in their job description that registered nurses should instruct students in addition to their other roles \(^7\).

Materials and Methods

Study design: A descriptive cross-sectional study design was used to establish perceived gaps on clinical instruction among senior nursing student drawn from Machakos Level 5 and Chogoria Mission hospitals.

Population: The target population were senior nursing students drawn from Chogoria school of nursing and Machakos Kenya Medical Training College (KMTC). Senior nursing students were selected on the basis of having had a longer clinical experience compared to junior student nurses from the training institutions.

Sample size: The sample size was determined using Fishers et al., (1998) formula cited by \(^8\). Thus a total 113 student nurses (71 from KMTC Machakos on clinical placement at Machakos level 5 and 42 from school of nursing Chogoria on clinical placement at Chogoria Mission Hospital).

Sampling: Simple random sampling was used to sample the senior student nurses. Table of random numbers, was used to determine the participants per institution from list students provided by respective institution. We then sought and obtained written consent from randomly selected students who were then issued with study questionnaire to complete.

Data collection: Self-administered semi-structured questionnaire was used the questionnaire was organized in to sections. Section ‘A’ covered demographic information while section ‘B’ covered concepts related to perceived gaps in clinical instruction. A five point Likert scale to obtain information on senior student nurses’ perceived gaps in clinical instruction was part of section b of the questionnaire. The reliability of the instrument was tested coefficient of
reliability of .05 was obtained. Content validity of the instrument was ascertained by pre-testing with student nurses who were not part of the target population.

**Data Analysis:** The data collected was cleaned, coded and analysed using Statistical Package for Social Sciences, SPSS-software Version. Inferential statistics specifically Chi-square and Pearson correlation were used to test for association between variables on clinical instruction. A P value of less than 0.05 was considered to be statistically significant.

**Ethical consideration:** Ethical clearance was obtained from the Kenya Methodist University’s Ethical Research Committee (ERC) and respective institution’s administration where the study was carried out. In addition, a written informed consent was sought.

**Results**

The researcher had targeted a sample size 113 student nurses. However 6 students representing 6.1% declined participation without giving reasons. Table 1, shows that 64.5 % (n=69) of student nurses were females while 35.5% (n=38) were males. In addition 96.3 % (n=103) were in the age group 18 to 25 of which 54.2% (n=58) were in age group 18-21 years and 42.1%(n=45) in age group of 22-25 years.

**Table 1: Gender and age distribution of student nurses**

<table>
<thead>
<tr>
<th>Gender</th>
<th>frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>69</td>
<td>64.5</td>
</tr>
<tr>
<td>Male</td>
<td>38</td>
<td>35.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age distribution in years</th>
<th>frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18-21</td>
<td>58</td>
<td>54.2</td>
</tr>
<tr>
<td>22-25</td>
<td>45</td>
<td>42.1</td>
</tr>
<tr>
<td>Above 25</td>
<td>4</td>
<td>3.7</td>
</tr>
</tbody>
</table>

**Presence of clinical instruction**

![Bar chart showing presence of clinical instruction in Chogoria and Machakos](image-url)
Figure 4.2: Presence of clinical instruction
Figure 4.2 shows that 97.1 % (n=34) of senior nursing student from Chogoria and 88.9 % (n=64) from Machakos that clinical teaching was being done.

- Not present in all the wards: 12.5%
- Shortage of nurses: 37.5%
- Not done daily: 12.5%
- No lecturers/clinical instructors to follow up students: 12.5%
- Nurses don’t teach but make students work: 25%

Figure 4.3: Students’ reasons for absence of clinical instruction sessions
Figure 4.3 shows 37.5 % (n=3) student nurses from Machakos indicated that clinical teaching sessions were lacking because of staff shortage.

Table 4.2: Provision of clinical objectives

<table>
<thead>
<tr>
<th>Chogoria</th>
<th>Machakos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>Frequency</td>
</tr>
<tr>
<td>Yes</td>
<td>28</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 4.2 shows 80% (n=28) and 94.4% (n=68) of student nurses from Chogoria and Machakos respectively reported that they were provided with objectives per placement. Students who were not issued with objectives indicated they consulted other senior students 45.5% (5), followed what nurses did 23.3% (3), got familiar with ward placement 9.1% (1) and used theory learnt in class 18.2% (2) to inform them of their expectations.
Figure 4.4: Showing Nurses’ availability to answer questions

Figure 4.4 shows that a total of seventeen n=17 (48.6%) students from Chogoria agreed that nurses were readily available to answer questions compared to 26.4% (n=18) from Machakos agreed.

Table 4.3: Shows nurses’ supervision of student nurses and provision of feedback to

Chi-square test on nurses’ supervision and provision of feedback.

<table>
<thead>
<tr>
<th></th>
<th>Nurses always observe students as perform various tasks</th>
<th>Nurses provide timely constructive feedback to students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Machakos</td>
<td>Chogoria</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>21.750\textsuperscript{a}</td>
<td>8.543\textsuperscript{a}</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.036</td>
</tr>
</tbody>
</table>

Table 4.3 shows that supervision of student nurses was significant in Machakos evidenced by Chi-square significance level of p=<0.01 while in Chogoria supervision of students was not significant as evidenced by Chi-sqaure significance level of p=>0.01.

Table 4.3 Also shows that provision of constructive feedback to students was significant both at Machakos and Chogoria as evidenced by Chi-square significance level of p=<0.01.
Table 4.4: Pearson’s correlations between effective clinical instruction and independent variables

<table>
<thead>
<tr>
<th></th>
<th>Machakos</th>
<th>Chogoria</th>
<th>Machakos</th>
<th>Chogoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective clinical teaching Correlation</td>
<td>.452**</td>
<td>.523**</td>
<td>.434**</td>
<td>.548**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>72</td>
<td>35</td>
<td>72</td>
<td>.35</td>
</tr>
</tbody>
</table>

Table 4.4 shows that there was positive significant correlation between effective clinical instruction and friendliness of nurses.

Table 4.5: Clinical instructors evaluative role in clinical instruction

<table>
<thead>
<tr>
<th></th>
<th>Chogoria</th>
<th>Machakos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>14.000a</td>
<td>55.651a</td>
</tr>
<tr>
<td>Df</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.003</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4.5 shows nurses played evaluative role both at Chogoria and Machakos as evidenced by Chi-square of p=<0.01 level of significance.

Discussion

All the students were above the age of 18 years. This shows that the nursing training colleges were compliant to Nursing Council of Kenya criteria for nurse trainees to be 18 years and above. Majority of senior student nurses attested that clinical instruction sessions were present with 97.1 % and 88.9 % from Chogoria and Machakos responding positively. The findings show that probably clinical instruction was taking place in both private and public nurse training hospitals. This could be attributed to Ministry of Medical Services job description which specifies that registered nurses working in training hospitals should participate in clinical instruction in addition to their normal nursing duties. On the other hand although majority of students attested that clinical instruction sessions were present a few were of the contrary opinion and gave reasons such as staff shortage, and students being made to work as reasons for clinical instruction not being done. These findings concur with who in a study in South observed that students were being regarded as part of workforce, however, in contrast to their findings, this study observed that there was lack of adequate clinical instruction in the hospital wards.

We observed in this study student reporting that registered nurses were not portraying a number of characteristics of an effective clinical teacher. There was inadequate response to students’ questions by as evidenced by 51.5% of students, from Chogoria and only 36.5% Machakos. This was contrary to general consideration that willingness of clinical instructors to respond to students and provide support and guidance to encourage students to engage in new learning activities as important in effective clinical learning. Quality of clinical instruction among respondents from Machakos, while in Chogoria supervision of students...
was not significantly related to quality of clinical instruction. This means supervision of students was not adequate at Chogoria mission hospital. This could probably be associated with shortage of staff and congestion of students in clinical sites especially in public hospitals. However the findings were contrary to study findings by 13 who reported that effective supervision of students emerged among the most important teacher behavior in clinical instruction. In addition, 14 emphasized that if students are to acquire knowledge and skills in clinical practice, someone must be present to supervise and demonstrate how theoretical knowledge is integrated to practice.

We observed that student nurses both from Machakos and Chogoria considered provision of timely and constructive feedback as being important in clinical instruction. Students also perceived gap provision of a supportive learning environment as evidenced by positive significant correlation relationship between effective clinical instruction and independent variables in both hospitals of Pearson’s correlation of p<=0.01. This means that in both hospitals, nurses did not provide friendly supportive learning environment nor were they approachable. This was contrary to study findings by 15 who said that educators have a fundamental role to play in creating and improving learning environment in a clinical setting. The findings could probably be linked to lack of knowledge on skills that make clinical instruction effective and enjoyable to students as highlighted earlier under educational preparedness of nurses in clinical instruction.

Moreover, they also felt that majority of nurses were unapproachable and unfriendly evidenced by positive significant correlation relationship between effective clinical instruction and independent variable. This was contrary to the study findings by 16 whereby behaviors such as clinical instructor being approachable, encouraging and friendly were found to have the greatest influence on learning. Unfriendly and unapproachable behavior could probably be attributed to burnout due to shortage of staff leading to high workload as cited by respondents in the study findings.

In this study we observed that majority of nurses played more evaluative role than instruction role both at Chogoria and Machakos. This concurs with finding by 17 where students reported that they perceived their clinical instructor’s role to be more evaluative than teaching. This could be associated with the fact that evaluation of student is mandatory and is also a requirement of the regulatory body that in every clinical assessment there must be a clinical staff and a tutor.

Limitations

Conclusion: In line with study findings the researcher concluded that student nurses perceived gaps in clinical instruction at Machakos level-5 and Chogoria Mission Hospitals such as lack of supervision, timely feedback and availability of nurses to respond to questions among others.

Recommendation: Based on the above research findings the authors recommend that the training colleges and hospitals management should invest more in nurses’ educational preparation in clinical instruction skills.

Competing interest
The authors wish to declare that they have no competing interests.

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7 May, 2014

Ms. Luciana N. Kaloki
MSN-3-4119-3/2012
Kenya Methodist University

Dear Sir/ Madam,

SUBJECT: ETHICAL CLEARANCE OF A MASTER’S RESEARCH PROJECT

Your request for ethical clearance for your masters’ research project titled “Evaluation Of Clinical Teaching of KRCHN Students in Machakos Level Five Hospital and Chogoria Mission Hospital in Eastern Province of Kenya” has been provisionally granted to you in accordance with the content of your project proposal subject to tabling it in the full Board of Scientific and Ethics Review Committee (SERC) for ratification.

Thank You,

[Signature]

Dean, SERC

[Stamp]

[Signature]

Chair, SERC