Factors Hindering Integration of Theory Into Practice by Bachelor of Science in Nursing Students at Thika Level Five Hospital, Kenya

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ABSTRACT

Background: The Bachelor of Science in Nursing programme involves both theoretical and practical approaches to ensure that nursing students become competent graduate nurses, who can provide evidence based care. Although integration of theory into practice has been identified as a major problem in the Bachelor of Science in Nursing programme across the globe, information on how such training procedures have well been integrated in the Kenyan nursing curriculum is scanty.

Objective: We sought to determine the factors that hinder integration of theory into practice by Bachelor of Science in Nursing (BScN) students at Thika Level 5 Hospital in Kenya.

Method: the study adopted a descriptive cross-sectional design in a study comprising 80 purposely sampled respondents between May and June 2014. These were 72 third year BScN students from Jomo Kenyatta University of Agriculture and Technology and Kenyatta University and eight nurse-supervisors at Thika level five hospital. Third year students were selected because they had gone through at least two clinical placements at Thika level five hospital. All data were analysed in SPSS version 19.

Results: Results showed that there was inadequate clinical equipment such as dressing packs, treatment trays and trolleys. Other factors hindering integration of theory to and practice included nursing staff not role modelling professional practice in which 25.4% of the students reported that qualified nurses wrote nursing care plan; 36.7% implemented and 33.9% evaluated nursing care plans. Majority (7) 87.5% of the nurse supervisors had not had any training on clinical teaching skills and only 12% were BScN holders while the 88% were diploma holders.

Conclusion: The study revealed that there existed various clinical setting factors that hindered BScN students' integration of theory into practice that needs to be addressed.

Keywords: Nursing; theory; practice; integration; clinical setting.

BACKGROUND

The undergraduate nursing education program primarily centres on integrating theory into practice.

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Nursing students acquire necessary nursing skills and attitudes associated with nursing practice through integration of knowledge learnt in classroom into practice in the clinical setting. Therefore, it is the integration of theory to practice that enables student nurses to become competent practitioners. (6) However, the problem of theory-practice gap has been identified in many nursing studies globally.(2) Studies on factors that hinder integration of theory into practice have identified the concept as a major problem in the clinical learning of BScN students despite the efforts to reduce the theory – practice gap. (4) In a study done in Australia on transfer of university knowledge to clinical setting, Maginnis and Croxon, (7) found that there is disparity between the learnt knowledge in the university and the experience students get in the clinical setting. Cheraghi et al (3) found that shortage of nursing staff was a reason for inadequate supervision of students during clinical practice. Sharif & Masoumi, (11) in their study reported that clinical supervisors lacked teaching skills for clinical teaching. Ehrenberg and Haggblom (5) observed in Sweden that diploma nurses lacked in both academic and preceptor training likewise Eta, et el in Cameroon. (6)

For over two decades, Kenya has been running the undergraduate nursing programme in more than thirty universities. (8) The aim of BScN program is to enable the students to acquire the nursing knowledge, clinical skills, right attitudes and competencies necessary for the scope of practice of this level. (8) The nursing education programmes follow a common core syllabus prescribed by Nursing Council of Kenya (NCK). (10) In that regard, the study sought to determine factors that hindered integration of theory into practice among the BScN students during their clinical placement at Thika Level 5 Hospital in Kenya.

The practical clinical experience acquired within hospital and related health facilities enables the student nurses to learn and acquire necessary professional skills. It is therefore, the integration of theory into practice that enables student nurses to become competent practitioners. (6) Consequently, it is important to determine the factors that contribute to the existence of the gap between nursing knowledge taught in the classroom and skills acquired during clinical practice in order to implement effective learning strategies.

METHOD OF THE STUDY

The study adopted descriptive cross-sectional design. The study population comprised 80 respondents. These were 72 third year BScN students from Jomo Kenyatta University of Agriculture and Technology, Kenyatta University and 8 nurse supervisors. The study was carried out between May and June 2014. Third year students were selected because they had gone through at least two clinical placements at the study site. The

study also sought to establish the opinions of ward nurse supervisors on BScN students' integration of theory into practice to corroborate the data collected from the students.

Sampling Procedure and Sample Size Determination

The sample determination formula by Yamane, (12) was used to achieve a sample size of 61 students of which 42 were from KU and 19 from JKUAT. In addition, all the eight (8) nurse supervisors in the wards were enlisted in the study because of the small number so as to minimize sampling error and bias. The total sample size was sixty nine (69) respondents. To determine students who were included in the study, quota-sampling method was used to select the sample proportionate to the subgroup population. For this study, KU had 50 students in the sampling frame while JKUAT had 22 making the total students population of seventy two (72).

The sample size for KU and JKUAT was calculated as follows:

KU:
$$\frac{50}{72} \times 61 = 42$$

JKUAT: $\frac{22}{72} \times 61 = 18.9$

Total sample size = 61

Convenience sampling was used to pick the respondents where those students who were at the clinical setting were given the questionnaire based on their availability and willingness to participate in the study.

DATA COLLECTION PROCEDURE

Authority to carry out the study was sought from Kenya Methodist University Research and Ethics Board and from Thika Level 5 Hospital Research and Ethics Committee before data collection began. Confidentiality and the right to withdraw from the study at any time were assured to the participants. Data collected was by self-administered structured questionnaire. All the 69 respondents gave consent for the study and confidentiality maintained.

Self-administered questionnaires were given out to the respondents and collected in a period of two weeks.

DATA ANALYSIS

The data collected from structured and semistructured questions were coded cleaned and Data was analysed by use of SPSS version 19.

RESULTS AND DISCUSSION

Demographic Data for students

Age Analysis for the students

The students were asked to indicate their ages in the questionnaires. The study revealed that 50 % of the nursing students were between 20 and 21 years old, followed by 41.7% who were between 22 and 23 years old. Those who were above 24 years were 8.3%.

Nurse supervisors' findings

The nurse supervisors (100%, n=8) were wards, male and female medical wards, casualty.

Nurse supervisors were asked to state their ages. 50.0%: 31-40; 25.0% 41-45 and between 46-55 years old were 25%.

Clinical setting practice: Initial Assessment of Patient

On the issue of writing nursing care plans for patients, majority of the students indicated that qualified nurses did not always wrote, implement or evaluate nursing care plans to determine the achievement of patients care outcomes (Table 1 presents these findings).

Table 1: Initial Assessment of Patient

| Statement | Agree % | Disagree % |
|--|---------|------------|
| Always wrote care plans for patients | 24 | 76 |
| Always implemented nursing care as written | 37 | 63 |
| Always evaluated nursing care plans | 34 | 66 |

Application of Aseptic technique in Patient Care

In section two of the students' questionnaire, the nursing students were asked their views on the application of aseptic technique in patient care where majority indicated that dressing packs did not have all equipment as described by Nursing Council of Kenya clinical procedure manual (Table 2)

Table 2: Application of Aseptic technique in Patient Care

| Statement | Agree (%) | Disagree (%) |
|--|-----------|-----------------|
| Qualified nurses always apply aseptic technique | 51.6 | 48.4 |
| Enough dressing packs in surgical wards for each patient | 33.4 | 66.6 |
| Dressing packs have all the equipment as described by NCK | 21.7 | 78.3 |
| Qualified nurses always disinfect trolleys during wound dressing | 58.3 | 41.7 |

Students' Experience in the Clinical Setting

The students were asked to give their opinion on their experience in the clinical settings. From the study, majority agreed that nursing students always applied aseptic technique as described by NCK clinical procedure manual and that qualified nurses were not good role models in professional practice (table 3).

Table 3: Students experience in Clinical Setting

| Statement | Agree (%) | Disagreed (%) |
|--|-----------|---------------|
| Nurses are willing to demonstrate care procedures to students | 66.3 | 33.7 |
| Students always apply nursing process approach in patient care | 65.0 | 35.0 |
| Students always write nursing care plans for patients before giving care | 58.3 | 41.7 |
| Students always apply aseptic technique as described by NCK | 63.4 | 36.6 |
| The nurses role model professionalism for nursing students | 63.4 | 36.6 |

BScN students' opinions on nurse supervisors support and supervision

An item was included in the questionnaire, which sought for information on BScN students' opinions on the nurse supervisors' facilitation of clinical learning. The findings were based on support and supervision by nurse supervisors. The nursing students were asked in the questionnaires to indicate the support they received from nurse supervisors (Table 4).

Table 4: opinion of BScN students on nurse supervisors Support and Supervision

| Statement | Agree (%) | Disagreed (%) |
|---|-----------|---------------|
| Nurse supervisors understanding of clinical learning objectives | 65.0 | 35.0 |
| Nurse mangers often give feedback to students | 58.4 | 41.6 |
| Nurse managers promptly respond to requests on learning needs | 56.7 | 43.3 |
| Nurse supervisors provide students with learning opportunities | 61.7 | 38.3 |

Qualitative analysis of students' data

Downloaded From IP - 41.89.112.3 on dated 24-Oct-2024 Further information gotten from the semi-structured and open questions, the students said that nurse supervisors were not prepared to work as bedside nurses as they preferred other work like doing doctors' ward round and clerical work.

Nurse Supervisors opinion on clinical Support for the BScN Students

The study revealed that majority of nurse supervisors had not received training on clinical teaching. The study further revealed that a great number of nurse supervisors did not used nursing research evidence to make clinical decisions and were not always willing to supervise students in their clinical practice.

Supervisors' opinion on Students' application of Theory

On BScN students' understanding of clinical skills as per the study programme level, the nurse supervisors informed this study that students appeared well prepared theoretically as compared to practical skills. However, the supervisors had time constraints as staff did not have enough contact time to interact with students because they performed other administrative and clinical tasks as well.

Majority nurse supervisors agreed that students

were able to make correct patient initial and subsequent assessment. However, a big number of the nurse supervisors acknowledged that BScN students were not able to make correct nursing diagnosis; 75.0% agreed that students demonstrated pharmacology knowledge for patients' medication and 62.5% that BScN students eagerly asked questions to clarify specific care problems.

Qualitative analysis for the nurse supervisors data

Nurse supervisors were asked in the questionnaires to state their qualifications and the findings revealed that 87.5% (n= 7) were diploma in Kenya Registered Community Health Nurse and 12.5% (n=1) had BScN. Nurse supervisors suggested that they should be properly oriented and offered seminars on clinical teaching skills for BScN students.

DISCUSSION

The study findings showed BScN students' respondents identified clinical environmental issues that hindered their integration of theory into practice at Thika Level 5 Hospital as inadequate clinical equipment, for example dressing packs and those that were available were incomplete. This resulted to compromise in application of aseptic technique during wound dressing. Other cited problems were; application of nursing process in patient care where only 25.4% agreed that qualified nurses always wrote nursing care plans for patients; 36.7% indicated that qualified nurses always implemented nursing care plans as written and 33.9% said that qualified nurses always evaluated nursing care plans to determine the achievement of patients care outcomes. This meant that though they got the data from the patients they did not utilize it to plan care for the patients. A significant percentage (36%) of students agreed that qualified nurses were not good role model in nursing professionalism. This was similar to a study done in Europe and Australia by Maginnis and Croxon, (7) which showed that what university students found in practice at the clinical areas differed from what they learnt at the universities. The nursing supervisors and the BScN students agreed to the question on relevance and adequacy of the university theoretical preparation as opposed to a study done in Iran in which the qualified nurses said that the BScN students were inadequately prepared for the clinical practice. (3) This study further revealed that only 37.5% of nurse supervisors used research evidenced nursing to make clinical decisions and only 25.0% agreed that, they were always willing to supervise students in their clinical practice. The nurse supervisors identified the issue of nurses' shortage, overload of students, and shortage of time in relationship to their clinical duties and supervision of BScN students. This was similar to a study done by Cheraghi et al ⁽³⁾ which cited shortage of staff as reason for inadequate supervision of students during clinical practice.

BScN students (35%) said that nurse supervisors did not demonstrate understanding of nursing students' clinical learning objectives during clinical practice. However, from the demographic data only 12.5% (n=1) of the nursing supervisors was BScN while the rest were diploma holder. Majority (75%) of them said that they had not received any clinical teaching training and recommended training on BScN students' clinical teaching and supervision. This was in agreement with a study by Sharif & Masoumi, (11) which reported that clinical supervisors lacked teaching skills, as well as strategies for clinical teaching. Ehrenberg & Haggblom (5) observed the same scenario in Sweden where diploma nurses who lacked in both academic and preceptor training supervised clinical teaching. Eta, Atanga, Atashili and D'Cruz found the same in Cameroon, (6) in their study on nurses and challenges faced as clinical educators where by the BScN students were supervised by nurses who had not received any formal training on clinical teaching and supervision.

Most of the nurse supervisors' opinion on BScN students' integration of theory into practice showed that the students were able to demonstrate pharmacological theoretical knowledge. However, 62.5% of the supervisors observed that BScN students were not accurate in formulation of the nursing diagnosis.

CONCLUSION

In conclusion, this study was able to identify clinical environmental factors that hindered integration of theory into practice as inadequate patient care equipment, nursing staffs not being good role models in professional practice. Nursing supervisors did not give students feedback on their performance and were not willing to supervise students. Shortage of nursing staff was given as a reason for their inability to have enough time for student supervision. The nursing supervisors also cited their deficiency in the clinical teaching skills.

University teaching staff did not avail themselves to help in clinical teaching effort. Nurse supervisors who were BScN holders were very few compared to diploma holders. This study found out that theory practice gap exists in this clinical setting just like in many other clinical setting in the world. And with the knowledge of how important integration of theory into practice is in the training of competent nurses, all stake holders need to address these factors in the clinical setting that hinder integration of theory into practice.

CONSENT

Informed consent was obtained from the respondents. The respondents had right to withdraw from the study at any stage and the information given was used for educational purpose and there was no victimization. The questionnaires were anonymous for confidentiality of the respondents.

Conflict of Interest: The authors declare no conflict of interest.

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REFERENCES

- Alkema, J. Perceptions of Bachelor of Nursing students' ability to apply theory into practice in clinical setting: Groningen; Hanze University of applied sciences: 2012.
- Brien, S. Literature review
 nursing beyond competence: Southampton; University of Southampton: 2012.
- Cheraghi, M. A., Salsali, M., &Safari, M. Ambiguity in knowledge transfer: The role of theory-practice gap: Iran Journal of Nursing & Midwifery; 2010; 15(4):155–166.
- Dadgaran, I., Parvizy,S., Peyrovi, H.,. A global issue in nursing students' clinical learning-theorypractice gap: Procedia - Social and Behavioral Sciences 47 (2012) 1713 – 1718
- Ehrenberg, A.C., & Haggblom, M. Integrating theory and practice; Problem-based learning in clinical learning education: Nursing education in practice; 2007; vol. 7, 67-74
- Eta, V. E. A., Atanga M.B.S., Atashili, J. & D'Cruz,G. Nurses and challenges faced as clinical educators. Pan African Medical

- Journal, v.8; 2011.
- 7. Maginnis, C., & Croxon, L. Transfer of learning to the nursing clinical practice setting. International electronic journal of rural and remote health, 2010; 10:1313, Dubbo, New South Wales, Charles Sturt University. Retrieved on 27/8/2013 from //www.rrh.org.au
- Nursing Council of Kenya, Bachelor of Science in Nursing Student's training file. Nairobi, 2011; Nursing Council of Kenya
- 9. Nursing Council of Kenya. Manual of Clinical Procedures (3rd Ed); Nairobi: Nursing Council of Kenya 2009.

- 10. Nyangena, E., Mutema, A., &Karani A. Evaluation of clinical training in nursing in Kenya; Interdisciplinary Research Journal (2011) 1 (2), 22 -30
- Sharif, F., & Masoumi, S. A qualitative study of 11. nursing student experiences of clinical practice: BMC Nursing 2005, 4:6 doi:10.1186/1472-6955-4-6.
- 12. Yamane, T. Statistics: An Introductory Analysis, 2nd Ed., New York: Harper and Row: 1967.