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EVALUATION OF CLINICAL TRAINING IN NURSING IN KENYA

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Abstract

This research evaluated clinical training provided by academic institutions that offer the Bachelor of Science in Nursing (BScN) program. The purpose of the study was to describe the adequacy of clinical training and the graduates' preparedness for nursing practice. The research was conducted between September 2008 and March 2010.

The design of the research was a cross section survey using the questionnaire and focus group interview (FGI) methods to collect data. The sample comprised 232 subjects including pre-service BScN graduates and nursing supervisors. The study sites were four teaching and referral hospitals in Kenya. The research findings showed that the clinical training provided by the academic institutions was adequate. However, the quality of training varied widely among the training institutions.

Based on the research findings, the study concluded that clinical training provided by the baccalaureate nursing programs in Kenya was of high quality. This study recommends that urgent attention was required by nursing educators of the BScN programmes to address identified gaps in clinical training especially in clinical instruction and supervision of students.

Key Words: Nursing, clinical, training, performance

Introduction

Issues on clinical training and performance of Bachelor of Sciences in Nursing (BScN) graduates in nursing practice are critical issues to the quality of health care services in Kenya and elsewhere. There are many factors that should be considered in determining the quality of clinical training by BScN programmes one of which is the graduates' performance. The quality of clinical training is one of the major factors that should be considered in determining the overall effectiveness of the programme and specifically in making value judgement on the academic, competence and professional performance of nursing graduates in nursing practice. The quality of an educational programme contributes to the overall effectiveness of the institution in realizing its objectives, vision and mission.

In Kenya, all the pre-service BScN programmes share a common core syllabus that is provided by the Nursing Council of Kenya (NCK). At the end of training, the nursing graduates sit a common licensing examination administered by NCK. Additionally, all new BScN graduates undergo compulsory internship for one year before they are licensed as fully qualified nurses.

However, the training institutions have their unique philosophies, core values, and curricula which determine their approach to nursing education. Besides, the training programmes have varying clinical training hours, on top of the minimum recommended by NCK, which may lead to differences in the BScN graduates performance in nursing practice. The performance skills that were evaluated are nursing care, management, education and research.

Literature Review

Clinical Training in Nursing

Little agreement exists on what constitutes ideal clinical learning experiences in terms of the nature, extent, and duration of exposure as well as quality of experiences (N'ET, 2003). The issues of clinical education are even more challenging since there is no set formula or clear guidelines on which learning activities and clinical placement environments are most suited for students to develop competence in all domains of nursing care. However, it is evident that positive learning experiences in varied and supportive clinical practice environments are essential for quality clinical training and development of competence for nursing practice (N'NET, 2003).

Ascertaining whether the programme is providing quality clinical training is of great concern to educators. According to Weber (2005a), National Nursing and Nursing Education Taskforce of Australia (N'ET) (2006) and Draper (2006), the quality of clinical education in nursing is reflected by well structured and co-ordinated clinical experiences, the number of hours of clinical placements, the type of placements, required experiences, demonstration of competence by students, assessment criteria and supervision arrangements. Quality learning experiences leads to graduates being proficient in performing nursing care skills.

Evaluation of Clinical Training in Nursing

Education programmes for health professionals have been criticized for not producing graduates with adequate and relevant skills. Greiner and Knebel (2003) argue that academic programmes and institutions need to reform their approach to education and training of all health professions students. Concerns about patient safety present the need to change health care practice and professional education and training including nursing. The quality of nursing care to patients is determined by the extent education and training outcomes are achieved and are consistent with current research evidence (Sherwood & Drenkard, 2007). Despite their practice preparedness, pre-service BScN graduates cannot become experts overnight upon graduation. The graduates need adequate orientation and support from their more experienced colleagues to develop confidence in nursing practice.

According to Williams (1997) and Strikanthan and Dalrymple (2003), evaluation of clinical training serves various important purposes including:-

Promoting quality nursing practice through identifying and eliminating weaknesses in the nursing education curriculum.

Comparing with similar academic programmes while positive evaluation results are useful for publicity and marketing of the programme.

Evaluation of utilization of resources by determining programme performance. Resources are effectively utilized to deliver acceptable quality of education.

Providing evidence that an educational program is of high standard to guarantee the graduates competitive advantage in the job market and positive career prospects.

Assuring the public that the students receive quality training and are competent to handle future

work responsibilities in nursing practice.

It is evident that evaluation of clinical training is essential for ensuring high standards of education and performance of the graduates in nursing practice. Identifying factors that facilitate effective learning during clinical practice will lead to developing strategies that ensure attainment of learning out-comes.

Quality in Clinical Training in Nursing

In clinical training, quality refers to the match between practical experiences and stated out-comes of the programme (Rohlin et al., 2002). The practical experiences should be carefully selected and well organized to be capable of transforming students into competent nursing practitioners. An effective nursing programme ensures that clinical training is well structured for enabling students to acquire essential skills that are critical for graduates to provide safe and quality nursing care.

The quality of clinical training is critical to effective development of competence by students which is essential for providing safe nursing care (Lofmark, Snide, & Wikblad, 2001, Price et al., 2000). According to Weber (2005b), N'ET (2006), and Draper (2006), the indicators of quality in clinical education include (1) nature of the curriculum (2) quality of clinical supervision (3) student orientation and preparation for placements (4) mentoring and role modeling for students (5) positive clinical environments that link theory with practice (6) collaborative and clear clinical assessment processes and feedback (7) use of innovative clinical teaching models (8) periodic and responsive evaluation of clinical practice environments and (9) variety of patient care experiences. The need for close collaboration between academic programmes and health care institutions which provide clinical experiences is great if the programme is to meet the challenge for outcome based competence in nursing practice.

Research Design and Methodology

The design for the study was a descriptive survey and which was best siuted in describing characteristics of clinical training and performance of BScN graduates in nursing practice. Survey design is useful in describing characteristics, opinions, attitudes and bahaviors existing in a population (Polit & Beck, 2004). The questionnaire and focus group interview methods were used to collect data. The study sites included Moi Teaching and Referral Hospital and Rift Valley provincial General Hospital in Rift Valley province as well as Kenyatta National Hospital and Mathare Hospital in Nairobi Province of Kenya.

The Study Sample

Two hunderd and thirty two (232) eligible subjects comprised the sample. These were 164 pre-service BScN graduates, the four chief nurse of the study sites, 24 nurse managers and 40 nursing officers in-charge of wards/units.

The Research Instruments

A self administered questionnaire based on a Likert-type scale and interview guide were developed for this research. The questionnaire were filled by the BScN graduates and nursing officers in-charge of wards/units. The interview guide was used during the focus group discussion.

Validity and reliability: Construct and content validity of the instruments were supported by literature and guided by research objectives.

Reliability of the instruments was ensured by pilot testing at a District hospital using the test-retest procedure of which the reliability coefficients were 0.81 for the graduates' and 0.98 for the ward/unit in-charges' questionnaire.

Data Analysis

Data analysis was done using the SPSS version 13. The returned questionnaire were coded, entered in the SPSS programme and analyzed by descriptive and inferential statistics. Variation of responses among graduates from the three universities were analysed by the Kruskal-Wallis test. Variations between two respondent groups was analyzed by The Mann-Whitney test while categorical values were analysed by χ^2 (Chi-square). Kruskal-Wallis and Mann-Whitney tests were used in analysing skewed data.

Qualitative data from focus group interviews was analysed thematically and clear narratives were developed. The results were presented descriptively and by percentages, tables, graphs, pie charts, and tables.

Ethical Considerations

Approval to conduct the research was obtained from the Institutional Research Ethics Committee (IREC) of Moi University. Informed consent was obtained from the subjects. The questionnaires were anonymous while the focus groups participants were not identified to protect their identity.

Results

Questionnaire Rate of Returns

Two hundred and four questionnaires were distributed of which one hundred and sixty five were returned while 26 nursing managers participated in the focus group discussion. The participation rate was 82.3%.

Findings on Quality in Clinical Training

There were 14 items that were used to measure the adequacy and quality of clinical training. The data from BScN graduates of the three universities were analyzed separately for ease in comparing. The three academic institutions were coded as X, Y and Z in this study for confidentiality. The responses were tabulated and quantified. The "strongly agree" and "agree" were considered as "agree". Similarly, "strongly disagree" and "disagree" were combined as "disagree". The percentage of "agree" in each item per training institution is presented in tables.

As shown by the overall mean scores in Table 1, there was marked variation in the quality of clinical training provided by the three training institutions. Notably, the overall mean scores for adequacy in clinical training by respective universities showed broad variation. The perceived quality of clinical training is an important factor in predicting the performance of BScN graduates in nursing practice. Furthermore, there was concurrence between the BScN graduates and the nursing supervisors on the quality of clinical training based on focus group interviews.

Statistical analysis of variance of scores presented in Table 1 by the Krusskal-Wallis test indicated significant differences in quality of clinical training across the three training institutions in several aspects as shown in Table 2. The results suggest that the quality of clinical training varied widely among the three universities and which may be apparent in the BScN graduates performance in nursing practice.

Table 1

Quality of clinical training by training institutions: X, Y and Z

Factors in Influencing Clinical Training	**Level of Agreement by institution (%)**		
	X	Y	Z
1. Emphasis on clinical skills was given similar to knowledge	83.3	55.6	50.0
2. Nursing lecturers were always involved in clinical teaching	67.3	34.5	18.8
3. Clinical instructors displayed adequate professional experience	66.0	51.9	21.4
4. Nursing lecturers displayed competence in demonstrating procedures	88.7	61.8	43.8
5. Variety of clinical experience s during training was adequate	90.4	72.7	25.0
6. Procedure manuals were always available to guide students	47.3	22.2	37.5
7. Adequate supervision was given during clinical practice	73.5	45.5	18.8
8. Methods used in clinical training was adequate	83.3	63.0	56.3
9. Research culture was encouraged during training	66.7	64.8	86.7
10. Clinical skills learned are relevant to current nursing practice	92.6	85.2	68.8
11. Hospital staff provided adequate support to students during training	75.9	75.9	37.5
12. Clinical objectives were always met at each clinical placement	76.4	63.6	43.8
13. Clinical practice settings provided a positive learning environment	86.8	63.6	75.0
14. There were adequate opportunities for hands-on practice	85.5	68.8	68.8
Overall Mean (%)	***77.4***	***59.7***	***46.5***

Table 2

Variance in clinical training among BScN programmes

Factors Influencing Quality in Clinical Training	P Value
1. Emphasis on practical skills was given by lecturers	*.001*
2. Nursing lecturers were always involved in clinical teaching	*<.001*
3. Clinical instructors demonstrated adequate nursing experience	*.004*
4. Nursing lecturers demonstrated adequate clinical competence	*<.001*
5. The variety of experiences during clinical training was adequate	*<.001*
6. Procedure manuals were available at clinical sites for reference	*.007*
7. Adequate supervision was provided during clinical practice	*<.001*
8. Hospital nursing staff provided adequate support to students	*.006*

The variation in clinical training by the three training programs was corroborated by the focus group discussion nursing supervisors. It was observed that clinical instructors were often unavailable to support students' learning, leaving instructional responsibilities to nurses in practice. Nurses in the hospital wards could not be relied to entirely instruct students amid their heavy patient load.

Adequacy of Clinical Practice Placements

The BScN graduates of the three training programmes were asked to indicate the extent to which their clinical practice was adequate in 10 different placements comprising the entire clinical training.

As shown in Table 3, the adequacy of clinical practice ratings across the three training institutions was generally similar according to overall mean scores (X= 86.5%, Y=76.5%, Z=71.9%). The scores in Table 3 were further subjected to the Krusskal-Wallis test. Significant differences were found in the adequacy of two clinical placements which were nursing foundations/fundamentals ($p<.001$) and mental health/psychiatric nursing ($p=.006$). The differences indicate the need for improvement in length and quality of experiences.

Table: 3: Adequacy of clinical placements

	Highest Adequacy Rating by institution (%)		
	X	Y	Z
1. Nursing foundations/fundamentals	96.4	63.6	56.3
2. Medical-surgical nursing	87.3	76.4	81.3
3. Community health nursing	87.3	94.5	81.3
4 Childbearing family nursing	94.5	85.5	87.5
5. Child health and pediatric nursing	92.7	81.8	81.3
6. Critical care nursing	81.8	67.3	56.3
7. Nursing management	81.8	74.5	62.5
8. Mental health and psychiatry nursing	87.3	61.8	87.5
9. OPD/Casualty	83.6	80.0	68.8
10. Teaching practice	72.7	80.0	56.3
Mean Scores (%)	***86.5***	***76.5***	***71.9***

Discussion

A significant proportion of BScN graduates showed dissatisfaction with training in three aspects including unavailability of faculty during clinical practice, inadequacy of clinical supervision and unavailability of procedure manuals for reference at clinical sites. The graduates however, indicated that they were able to take initiative in their training and meet clinical objectives.

Studies have shown that constant faculty involvement in clinical teaching and adequate supervision of students during practice significantly increased their feeling of satisfaction with clinical training (Reid-Searl & Dwyer, 2005). In contrast, only 67.3%, 34.5% and 18.8% of nursing faculty from the three training institutions, respectively, were involved in clinical training. This raises serious concern that nursing being a practice profession is taught by faculty with limited contact with clinical practice settings. Effective clinical training of BScN students must be based on realities in health care. Non-involvement of nursing faculty in clinical training is potentially injurious to nursing education and the graduates' performance in practice.

The results of this study indicate that the BScN graduates from the three academic institutions believed that their clinical practice in various placements was generally adequate (Table 3). However, the level of adequacy varied among the three training institutions. Significant differences in the adequacy of clinical practice were found in psychiatric nursing and fundamentals/foundations of nursing placements. A related study by Li and Kenward (2006) showed that students received least clinical practice in psychiatry and critical care compared to other practicum placements. The nursing programs educators must therefore, ensure quality of clinical experiences and optimum time allocation for each placement.

The study concluded that based on the results, clinical training by the three BScN programmes was adequate. However, the quality of clinical training varied among the three academic institutions. Similarly, clinical placements were found to be adequate although there were significant differences in the adequacy in psychiatry and fundamentals of nursing placements.

Recommendations

1. The nursing faculty should increase their involvement in students' clinical practice to ensure adequate supervision of students, discipline, clinical instruction and guidance as well as keep current with changes in health care.
2. The Nursing Council of Kenya should provide direction on nursing faculty clinical practice requirements as part of continuing licensure.
3. The Ministries of Health should consider increasing job positions and immediate employment of BScN graduates upon completing internship. The graduates would serve as mentors for BScN students and new graduates besides improving the quality of patient care.

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