

Training for Competent Human Resources to Improve Health Systems: A Case of Nurse Training at Kmtc Garissa, Garissa County

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Abstract

The efficiency of health systems largely depends on the working conditions, knowledge, skills, and motivation of health workers. This study looks at the assessment of human resource competence in nurse training for the improvement of health systems. The objectives of this study were to assess the role of orientation programs in nurse training; to establish the role of clinical mentorship in nurse training; and to determine how the learning environment affects students' competence in training. It adopted a cross-sectional descriptive study strategy. The sample population consisted of 105 student nurses. The study found that through a training orientation program, student nurses are able to gain comprehension and knowledge in the course of the practical application lessons. The training orientation program not only introduces student nurses to the actual clinical environment, but is also essential in enabling student nurses to be passionate about their future careers. An operational mentorship program would encourage the transfer of knowledge from experienced professionals to nursing students. The study also found that the clinical environment at the institution is not fruitful for learning. Recommendations were made to KMTC that included providing students with effective orientation programs in the practice area, facilitating a mentorship program for students' effective learning, and creating an environment that will favor students' learning process.

Keywords: Orientation program, Clinical Instructors, Competence, Clinical mentorship, learning environment.

Introduction

Health systems management is viewed as among the most challenging tasks worldwide. Through the management of health systems, job growth in the health industry is projected to go beyond 25 percent over the coming several years. The challenges of health systems administration seem even more complex in developing countries; they include preventing the spread of diseases and adjusting to low funding levels. Poor health systems management contributes to reductions in reimbursement and increased numbers of workers with insufficient skills in developing countries such as Kenya. Hence, better health systems management is conscious that the successful execution and development of new care delivery models may require employees with a great educational foundation that enables them to navigate and understand such challenges. Effective interventions exist for many common health problems in low-income countries; prices are falling, and funds are rising. However, due to poor health systems management, progress toward agreed-upon health goals remains slow. There is an increasing consensus that stronger health systems management is key to achieving improved health outcomes (Sundewall et al., 2011). There seems to be generally inadequate staffing of nurses in rural areas in comparison to the cities. The priority programs for diseases seem to be competing for scarce nursing staff, to the detriment of the integrated development of health systems (Tulchinsky & Varavikova, 2014). In the World Health Organization (WHO) 2004 report on the future of nursing, it was noted that the realization of the millennium development goals for third world countries depended on improvements in health care provision and management. However, many countries lack the required nursing expertise for the realization of such goals.

Statement of the Problem

The importance of quality nursing services has necessitated the need for reforms in the health sector. However, these reforms should not only focus on increasing the number of nursing personnel, but should also incorporate aspects of quality training and skill development. This involves the formulation of plans and policies that enable the nursing fraternity to work in their best possible capacity.

Concerns about the quality of education have been raised in regard to the upsurge of nursing students while infrastructure, training facilities, and staff at medical training institutions stagnate in development. The incompetent healthcare graduates they produce not only offer low-quality health services; but may subject patients to serious medical complications in the future.

In addition, the clinical teaching programs in the training hospitals have not been effective in monitoring, evaluating, and assisting students while performing the various nursing interventions in the wards. The Nursing Council of Kenya (2007) found that students were allocated tasks according to patient needs, as opposed to providing them with all-around learning opportunities in all case scenarios. This implies that on completion of the clinical placement program, a given nurse would be incompetent in certain areas of the nursing practice. Moreover, a 2012 report by the KMTC Quality Management Service showed that there was no organized teaching and training of students on most of its campuses. The report further recommended that some nurses should be urgently trained as clinical instructors, the infrastructure of medical training institutions should be improved, and the teachers should constantly follow up to boost the quality of training. Thus, due to the increasing demand for knowledge and concerns about the competence of health workers and the quality of medical training offered, this study was undertaken to evaluate the nurse training process at KMTC-Garissa, understand the challenges, and make relevant recommendations for the improvement of health care provision.

General Objective

The general objective of the study was to assess human resource competence in nurse training to improve health systems.

Specific Objectives

- To assess the role of orientation programs in nurse training for competent human resources for health.
- To establish the role of clinical mentorship in nurse training for competent human resources for health.
- To determine how the learning environment affects students' competence in service delivery.

Literature Review

The Role of Orientation Programs in Nursing Training

The development of formal orientation programs in health is critical in the recruitment of nursing students. Effective programs are especially important for student nurses undertaking their placement in a clinical environment. Literature demonstrates that a comprehensive, well-thought-out program can minimize dropouts and establish a solid foundation for competent and productive nurses after their nursing education graduation (Marcum & West, 2004). Evidence from the field of nurse training indicates that nursing education can be a stressful and difficult time for many nursing students, particularly during the placement period (Connelly & Hoffart, 2002). Nursing students are required to consolidate existing knowledge and skills, develop additional skills, and become accustomed to the organizational environment (Heslop, McIntyre, & Ives, 2001). Health care providers (nurse administrators) who mismanage the early professional experiences of student nurses during their clinical placement run the risk of failing to retain them within the service (and could potentially discourage them from pursuing a career in nursing). Australian health care providers are facing a shortage of new graduates and experienced practitioners in both specialty areas and general nursing due to poor orientation of student nurses in the last century (Weber, 2005). Recruitment, as well as failure to retain student nurses recruited to nursing training institutions, is a costly enterprise for the health care sector. Evidence suggests that high dropout rates for student nurses are associated with the structure and content of basic educational programs and hospital orientation programs as well as the organizational context of the hospital setting (Heslop et al., 2001).

The Role of Clinical Instructors in the Clinical Environment

According to the Nursing and Midwifery Council (NMC) (2008), a mentor is mandatory for pre-registration nursing and midwifery students in the UK. Mentors are accountable to the NMC for their decision that students are fit for practice and that they have the necessary knowledge, skills, and competence to take on the role of registered nurse or midwife. Since September 2007, all new entrants to mentor and practice teacher preparation programs must meet the requirements outlined in the NMC's standards to support learning and assessment in practice (Li & Kenward, 2006). In addition, only sign-off mentors can make the final assessment of practice and confirm to the NMC that students have met the relevant standards of proficiency leading to NMC registration.

The NMC standard defines a mentor as a registrant who has successfully completed an accredited mentor preparation program from an approved Health Effects Institute (HEI). The NMC standard also states that registrants holding a teaching or comparable qualification—for example, National Vocational Qualifications (NVQ) assessor—can be considered as mentors or practice teachers, but should map their qualifications or experience against the new NMC standard and meet outstanding outcomes through continuing professional development, or undertake any further education as required by program providers to ensure they meet the standard. A mentor is therefore an individual who has achieved the knowledge, skills, and competence required to meet the defined outcomes of stage two of the developmental framework to support learning and assessment in practice (Weber, 2005). Mentors must be on the same part, or sub-part, of the register as the student they are to assess and must be registered for at least one year before taking on this role.

Learning Environment

A clinical learning environment includes everything that surrounds the nursing student: the clinical setting, the staff, and the patients (Papp, Markkanen, & Von Bonsdorff, 2003). LaFauci (2009) describes a learning environment as constituted by psychosocial, physical, and organizational factors. The learning environment is furthermore described as the conditions, forces, and external stimuli that affect the individual. The environment is regarded as providing a network of forces and factors that surround, engulf, and play on the individual (Bandura, 2001). In clinical placements, nursing students enter new settings for learning purposes. In order to learn, the students depend upon a supportive atmosphere based on psychological and pedagogical aspects (Saarikoski & Leino-Kilpi, 2002). This includes staff-student relationships and meaningful learning situations constituting a pedagogic atmosphere (Saarikoski & Leino-Kilpi, 2002). Ward managers have many responsibilities. The main task is to assess patients' need for care. Leadership is a catalyst for transforming potential into action and reality, and includes responsibilities for allocating clinical placements for nursing students (Pfeiffer, 2002).

Leadership within nursing is based upon the ability to influence the staff toward the achievement of goals through motivation and support. Regarding the clinical learning environment, the ward manager holds a pivotal role in creating a positive ward atmosphere that is conducive to learning. In general, ward managers in Norway are not directly involved in clinical teaching or in the supervision of nursing students (Pfeiffer, 2002). Good interpersonal relations, support, and feedback have an impact on the clinical learning environment, and they create and maintain a positive clinical learning environment for students (Levett-Jones, 2008). The concept of supervision is used with a unifying meaning and includes different aspects of supporting nurses in their clinical learning, e.g., teaching practical skills, assessing and facilitating learning, supporting the nurses in obtaining clinical knowledge, giving feedback, facilitating the fusion of theory and practice, role modeling, and engaging in critical reflection with the student. Furthermore, the supervisor helps students become socialized to the nursing profession. According to Löfmark and Wikblad (2001), staff nurses' negative attitudes and behaviors have an impact on nursing students' learning in clinical placements.

Theoretical Framework: The Social Cognitive Theory by Bandura

Underpinning the social cognitive theory, Bandura claimed that human functioning is influenced by the surrounding environment, personal factors, and behavior (Reid-Searl & Dwyer, 2005). Li and Kenward (2006) further elaborated on this theory by stating that human functioning is the product of a dynamic interplay of personal, behavioral, and environmental influences. Hence, the process of learning occurs as a result of an individual's constant interaction with the environment. In the training of nurses, the clinical environment plays a crucial role in the motivation of students and their skill acquisition. This is because environmental factors have psychological effects that shape aspirations, standards, and other factors that might influence nursing students (Reid-Searl & Dwyer, 2005).

According to the social cognitive theory, human functioning is not influenced solely by environmental functioning, but rather by the interplay of various complex factors. Personal traits such as level of commitment, cognition, personal choice, and motivation to enter the field of nursing also influence a student's ability to achieve goals in clinical practice (Bandura, 2001). A student's belief or self-efficacy in his or her ability to perform better determines the possibility of behavior being initiated, the amount of effort expended, and the sustainability of such effort. Nursing students who are assured of their capabilities approach complex tasks as challenges that require mastery, rather than threats to avoid (Bandura, 2001).

The social cognitive theory views vicarious, cognitive, self-reflective, and self-regulatory processes as playing a central role in students' adaptation to a given learning environment. Students become viewed as self-reflecting, proactive, self-regulating, and self-organizing, as opposed to reactive organisms that are shepherded and shaped by the forces of the environment or driven by inner impulses that have become concealed (Bandura, 2001).

Conceptual Framework

Independent Variables

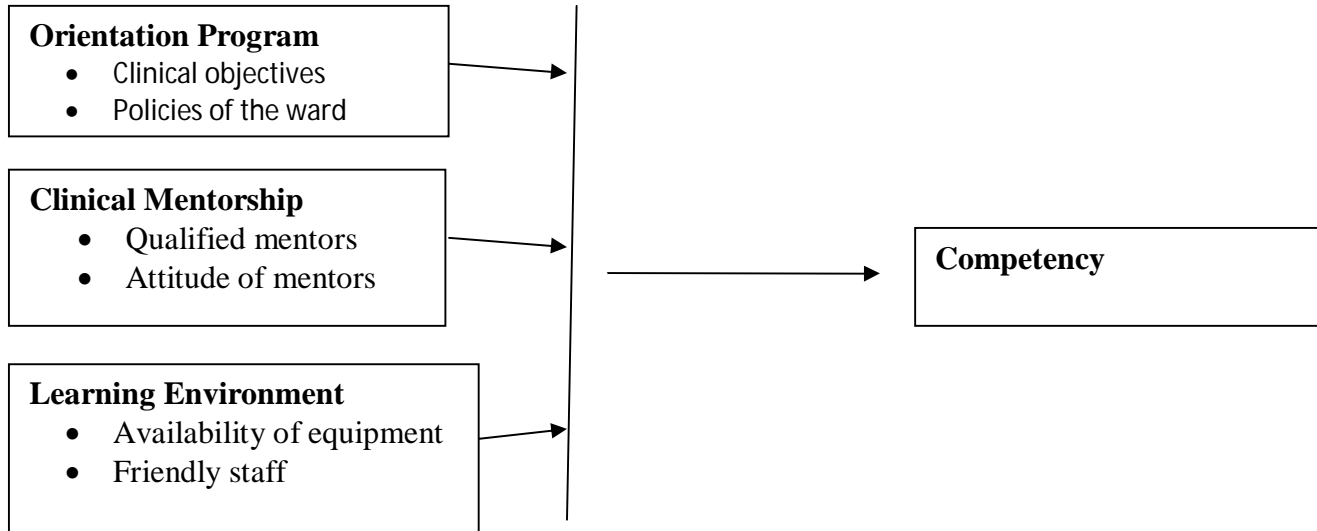


Figure 2.1. Conceptual framework for training of competent human resources for health.

Materials and Methods

Study Design

A descriptive cross-sectional design was employed in this study.

Study Area and Population

This study was carried out at Kenya Medical Training College (KMTC), located off Sankuri Road in Garissa County, a registered and recognized medical college in the North Eastern province of Kenya that was established in 1980 to offer certificate courses in nursing and upgrading diplomas in nursing. The study targeted KMTC Garissa, which has a total of 246 nursing students, of whom 135 are pre-service students and 111 are distance learners.

Sampling

The researcher used simple random sampling to select a section of student nurses from the population because the objective population was easily reached.

Data Collection Procedures

Data from student nurses and clinical instructors were collected through questionnaires that contained both open-ended and closed-ended questions. Together with the aforementioned specific objectives, the questionnaire included three objectives and four sections based on the demographics of the respondents. The questionnaires were filled out by the respondents and were cross-examined to ascertain correctness and completeness.

Data Analysis

The data were organized for analysis, including editing, coding, and entering the data into the analysis tool, after which the data were cleaned for compatibility with the study objectives. Both expressive and inferential measurements were used to analyze the qualitative data. Measures of central tendency and measures of dispersion were employed in the analysis of quantitative data. Relationships between variables were determined through regression analysis. Investigation was done using the Statistical Package for the Social Sciences (SPSS). Results are presented in tables, discussion, and graphs.

Ethical Considerations

Each participant was informed of the purpose of the study, that it was voluntary in nature, and that they had the right to withdraw at any time without penalty, and was assured that all information provided would be treated in a non-identifiable, confidential manner. The identities of the participants were known only to the researcher. Permission to carry out the study was sought from the Ethical Review Committee of the Kenya Methodist University.

Results and Discussion

Characteristics of Respondents

Of the respondents, 65.5% were female and 34.5% were male. This may lead to the conclusion that nursing is extensively preferred by females. Additionally, 95.2% were certificate students and 4.8% pursued diplomas. The analysis also shows that 77.4% of respondents were second-year students, 11.9% first-year, 9.5% third-year, and 1.2% fourth-year.

Role of Orientation Program in Nursing Training

Likert-scale questions were used to attain precise, accurate, and standardized responses in order to figure out the role played by orientation in nursing training. The scale was from 1 to 5, where 1= very much disagree, 2= disagree, 3=not sure, 4=agree, and 5=very much agree. The findings show that 86.9% of respondents agreed that it was easy to reach the nurses and medical staff, while 37 respondents disagreed and 36 strongly agreed. Furthermore, 46.4% agreed that the learning institution emphasized the acquisition of clinical skills and knowledge for nursing, and 42.9% strongly agreed. 35.7% and 20.3% of respondents respectively disagreed and strongly disagreed that there were competent clinical instructors at the institution. Consequently, over 80% of incompetent graduates are incompetent due to unprofessional clinical instructors.

47.6% and 29.8% of the respondents respectively disagreed and strongly disagreed that various clinical encounters and training were sufficient and adequate to learn relevant techniques and know-how in nursing. This suggests that 80% of the practical skills and knowledge delivered may be irrelevant to trending issues emerging in practical health. Responses were 86.9% positive regarding the ease of approaching nurses and medical staff, and 84.4% positive regarding emphasis on clinical skills and knowledge, although 9.5% disagreed. This is in line with the other findings of this study, as 72.7% of the respondents felt that educational programs were not sufficient or adequate. Figure 4.1 shows the answers regarding whether training orientation contributed to students' proficiency in nursing fields.

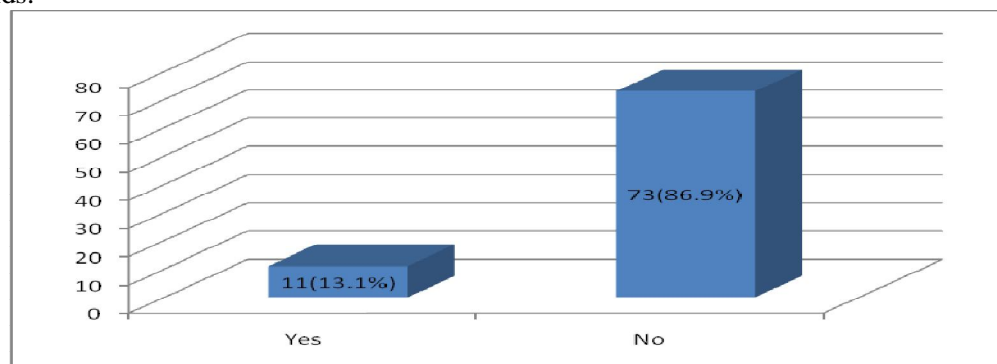


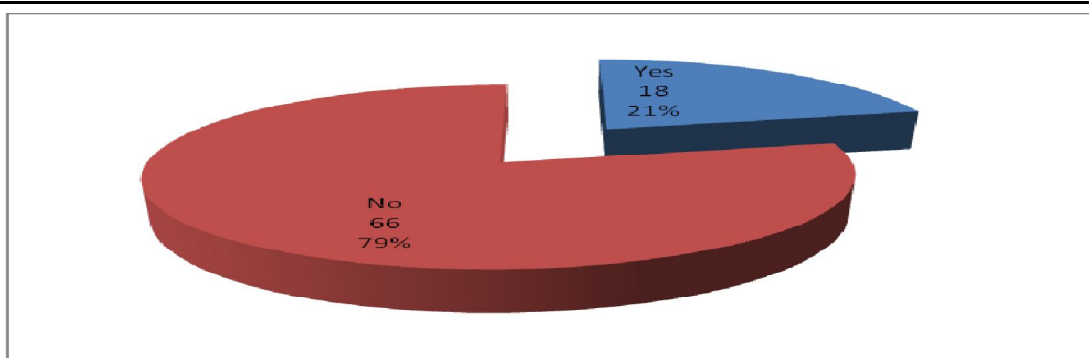
Figure 4.1: Influence of training orientation programs in nurse training.

Role of Clinical Instructors in Nursing Training

Of the respondents, 82.1% stated that the clinical instructors were not usually involved in their clinical teaching; and 76.2% felt that supervision was not satisfactory during the practical period. More or less, students worked individually to enhance their skill base. The lack of sufficient supervision during clinical teaching is a chief hindrance to the creation of proficient nursing graduates. The respondents' assessments of whether adequate supervision was provided are shown in Figure 4.2.

Table 4.1: Clinical Instruction and Competence of Nursing Students

	Very Disagree	Much Disagree	Not Sure	Agree	Very Agree	Much
	1	2	3	4	5	
	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
Clinical instructors were always involved in clinical teaching	32 (38.1)	37 (44)	2 (2.4)	9 (10.7)	4 (4.8)	
Adequate supervision was given during clinical practice	29 (34.5)	35 (41.7)	4 (4.8)	1 (13.1)	5 (6)	
Clinical skills learned are relevant to current nursing practice	32 (38.1)	46 (54.8)	2 (2.4)	2 (2.4)	2 (2.4)	
Clinical instructors are competent in demonstrating procedures	16 (19)	9 (10.7)	8 (9.5)	3 (35.7)	21 (25)	
Emphasis on practical skills was given by lecturers	37 (44.1)	35 (41.7)	2 (2.4)	9 (10.7)	1 (1.2)	
Clinical instructors demonstrated adequate nursing experience	17 (20.2)	9 (10.7)	6 (7.1)	2 (34.5)	23 (27.4)	
Clinical instructors demonstrated adequate clinical competency	35 (41.7)	34 (40.3)	5 (6)	5 (6)	5 (6)	

**Figure 4.2.**Supervision during clinical placement.

Student–Clinical Instructor Relationship

Even though the supervision of practical lessons is a necessity in nursing, 79% of respondents agreed that the level of supervision they received was insufficient, as opposed to 21% who felt that it was sufficient and proficient. Universally, the inability of institutions to provide suitable clinical instruction has contributed to the lack of skill among nurses in the workforce. The study found that 85.7% of respondents felt their cordial relationships with clinical instructors helped in the development of their skills; while 14.3% reported that their interaction with instructors had no influence on their learning results. This is demonstrated in Table 4.2.

Table 4.2.Student–Clinical Instructor Relationship

	Frequency	Percent
Yes	72	(85.7)
No	12	(14.3)
Total	84	(100.0)

Influence of Learning Environment on Students' Training Competence

The results regarding the influence of the learning environment on students' competence are shown in Table 4.3.

Table 4.3. Learning Environment and Student Nurses' Training Competence

	Very Disagree		Much Disagree		Not Sure	Agree	Very Much Agree
	1	2	3	4	5		
	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
Availability of procedure manuals to guide students	0 (0)	3 (3.6)	1 (1.2)	20 (23.8)	60 (71.5)		
Provision of adequate support to students by hospital staff during placement	30 (35.7)	37 (44)	4 (4.8)	9 (10.7)	4 (4.8)		
Encouragement of research culture during training	28 (33.4)	36 (42.9)	7 (8.3)	10 (11.9)	3 (3.6)		
Clinical objectives were always met at each clinical placement	38 (45.2)	30 (35.7)	4 (4.8)	9 (10.7)	3 (3.6)		
Clinical practice settings provided a positive learning environment	34 (40.5)	38 (45.2)	5 (6)	5 (6)	2 (2.4)		
Availability of adequate opportunities for hands-on practice	27 (32.2)	40 (47.6)	6 (7.1)	8 (9.5)	3 (3.6)		
Ease of approaching nurses and medical staff	2 (2.4)	8 (9.5)	3 (3.6)	36 (42.9)	35 (41.7)		
Clinical instructors accompanying students to the wards	11 (13.1)	10 (11.9)	8 (9.5)	27 (32.1)	28 (33.4)		

As shown in the table, 71.5% and 23.8% of respondents strongly agreed and agreed respectively that student manuals were available to guide students. Addressing placement in different hospitals, 44% and 35.7% of the respondents respectively disagreed and strongly disagreed that the institution delivered satisfactory support in partnership with the hospital during clinical programs. Table 4.3 also indicates that the majority of student nurses felt that the clinical setting at the institution was not a positive learning environment.

Conclusions

The study found that through training orientation, student nurses are able to gain comprehension and knowledge in the course of the practical application lessons. Training orientation programs not only introduce student nurses to the actual clinical environment, but are also essential in enabling student nurses to be passionate about their future careers. This plays an important role in the enhancement of competence in clinical service delivery. The study also found that the ease of approaching teaching staff affected whether student nurses made substantial skill gains. In this regard, an operational mentorship program at the institution would encourage the transfer of knowledge from experienced professionals to nursing students. Finally, the study found that the clinical setting at KMTC is not a fruitful environment for learning. Based on these conclusions, the following recommendations were made.

Recommendations

The study recommends that Kenya Medical Training College provide students with effective orientation programs in the practice area. Additionally, KMTC should ensure that practice placement opportunities are clearly described and reflect current practice and available experiences. Furthermore, KMTC has to establish the role of clinical instructors and ensure that they demonstrate adequate nursing experience and clinical competency. This will help to facilitate better mentorship for students' effective learning. KMTC needs to ensure the availability of a conducive learning environment. This will be accomplished through the presence of qualified clinical instructors, required equipment, and appreciation of students, including the creation of learning opportunities.

References

- Anand, S., & Bärnighausen, T. (2007). Health workers and vaccination coverage in developing countries: An econometric analysis. *The Lancet*, 369, 1277–1285.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
- Connelly, L. M., & Hoffart, N. (2002). A research-based model of nursing orientation. *Journal of Nursing Staff Development*, 14(1), 31-39.
- Heslop, L., McIntyre, M., & Ives, G. (2001). Undergraduate student nurses' expectations and their self-reported preparedness for the graduate year role. *Journal of Advanced Nursing*, 36(5), 628-634.
- Kenya Medical Training College Quality Management Service. (2009). *Report on clinical teaching in KMTC Garissa*. Nairobi: Longhorn Kenya.
- LaFauci, F. (2009). *Second year associate degree nursing students and nursing faculty attitudes towards clinical educational experiences*. Ed.D. dissertation, Dowling College, New York.
- Levett-Jones, T. (2008). *Fundamentals of nursing: Concepts, process and practice*. Australia: Pearson Education.
- Li, S., & Kenward, K. (2006). *Report of findings from the National Survey on Elements of Nursing Education*. Chicago: National Council of State Boards of Nursing.
- Löfmark, A., & Wikblad, K. (2006). Facilitating and obstructing factors for development of learning in clinical practice: A student perspective. *Journal of Advanced Nursing*, 34(1), 43-50.
- Marcum, E. A., & West, R. D. (2004). Structure orientation for new graduates: A retention strategy. *Journal for Nurses in Staff Development*, 20(3), 118-124.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: Acts Press.
- Nursing Council of Kenya. (2007). *Report on the evaluation of the standard of nursing care and training*. Nairobi: Longhorn Kenya.
- Nursing and Midwifery Council. (2008). *Standards to support learning and assessment in practice*. Retrieved from <http://www.nmc-uk.org/Documents/NKC-Publications/NKC-Standards-to-support-learning-assessment.pdf>
- Papp, L., Markkanen, M., & Von Bonsdorff, M. (2003). Clinical environment as a learning environment: Student nurses' perceptions concerning clinical learning experiences. *Nurse Education Today*, 23(4), 262-268.
- Pfeiffer, R. (2002). *Nurse and leader*. Slovenia: Fagbokforlaget.
- Reid-Searl, K., & Dwyer, T. (2005). Clinical placements for undergraduate nursing students: An educators' guide. *Australian Nursing Journal*, 12(9), 21-23.
- Saarikoski, M., & Leino-Kilpi, H. (2002). The clinical learning environment and supervision by staff nurses: Developing the instrument. *International Journal of Nursing Studies*, 39(3), 259-267.
- Sen, G., Ostlin, P., & George, A. (2007). *Gender inequity in health: Why it exists and how we can change it*. Report prepared for the WHO Commission on the Social Determinants of Health.
- Sundewall, J., Swanson, R. C., Betigeri, A., Sanders, D., Collins, T. E., Shakarishvili, G., & Brugha, R. (2011). Health-systems strengthening: Current and future activities. *The Lancet*, 377(9773), 1222-1223.
- Tulchinsky, T. H., & Varavikova, E. A. (2014). *The new public health: An introduction for the 21st century*. Academic Press.
- Weber, S. (2005). Ensuring clinical education outcomes: A call for reevaluation and reform. *Journal of the American Academy of Nurse Practitioners*, 17(12), 499-500.
- World Health Organization. (2007). *Towards better leadership and management in health: Report on an international consultation on strengthening leadership and management in low-income countries*. Retrieved from http://www.who.int/management/working_paper_10_en_opt.pdf