

# Factors Influencing Clinical Performance of Diploma Nursing Students in Kenya Medical Training Colleges in Western Kenya

Jedidah O. Kweya<sup>1</sup>, Dr. Silvenus Ochieng Konyole<sup>2</sup>, Dr. Maximilla Wanzala<sup>3</sup>

<sup>1,2,3</sup> Masinde Muliro University of Science and Technology, Kakamega, Kenya

<sup>1</sup>jedidanusu@gmail.com, <sup>2</sup>sochieng@mmust.ac.ke, <sup>3</sup>mwanzala@mmust.ac.ke

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**Abstract:** Kenya is facing challenges of unsatisfactory clinical performance attributed to inadequate clinical incompetence's among nursing students. Literature available locally indicate that the level of clinical perception of diploma nursing students to practice fully in clinical setting is low due to the ways they have been mentored, coached, supported and prepared for better clinical performance. The study was to determine factors that influence clinical performance of diploma nursing students in three Kenya Medical Training Colleges in Western Kenya. The study design was descriptive cross-sectional survey that used both quantitative and qualitative methods to collect information from the study population. The study participants were diploma nursing students in Kenya Medical Training Colleges in Western Kenya. A sample of 265 students was selected from a total population of 750 in three colleges. Pretesting of the data tool was done, informed consent and confidentiality maintained. Presentation of data was done in form of inferential statistics, frequency distribution and graphs. Quantitative data from the questionnaire was analyzed using Statistical Package for Social Sciences (SPSS) computer software (version 22.0) and qualitative data that was collected from focus group discussion was analyzed thematically. Results showed that clinical performance was rated at 56% as favorable, 26.1 % was perceived as unfavorable, while those unable to determine their perception (Not sure) were 41.5%. Majority of respondents 49.5% perceived theoretical knowledge preparation as favorable, while 35.6% perceived as unfavorable. those unable to determine their perception (Not sure) were 14.9%. On adequacy of clinical methods 57.9% was perceived as favorable and 42.1% as unfavorable. The results from qualitative data showed that students were not adequately prepared as they learned on their own. The study discussion identified poor student-staff relationships, shortage of clinical educators, insufficient resources and supplies. From these findings the following conclusions were drawn: Few studies have been done in the area of clinical performance among nursing students and of the few done the reported relationship between performance in theory courses and clinical practice courses were weak. Therefore, diploma nursing students in Kenya Medical Training Colleges in Western Kenya are inadequately prepared for the nursing profession. These findings may have implication on the Kenya Medical Training Colleges and Nursing Council of Kenya curriculums and policies on clinical training. A consistent and coordinated effort is recommended to ensure improvement in quality of clinical performance.

**Keywords:** Clinical Performance, Clinical learning environment, Experiential learning, Nurse Educator .

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## 1. INTRODUCTION

Clinical performance is an important part of nursing training. Understanding the factors that influence the quality and quantity of clinical performance is essential in solving the problems diploma nursing students face in clinical setting. In regard, clinical practice is conducted in various settings so that students may comprehensively and actively learn through nursing practice [2]. Even though, education for nursing varies from country to country. The existing clinical training does not meet the clinical skills competences of the nursing students, because of the large gap between theoretical and clinical nursing training. Following these studies, it has been postulated that clinical practice assists in preparing diploma nursing students to gain requisite knowledge to effectively and efficiently practice their nursing duties after they have

completed training [10]. [28] study which examined Nepalese nursing students' perception regarding theoretical knowledge preparation, clinical performance and adequacy of innovative methods in clinical practice showed that, the most influential factor explaining clinical practice was pedagogical atmosphere. The findings revealed that negative perception on theoretical knowledge preparation, clinical performance and inadequate innovative teaching methods influence theory- practice gap. Therefore, clinical nursing training ought to create conditions that enable the students to link theory to practice. In African countries, previous studies [29] revealed that students lacked clinical teaching while in clinical practice. For example, students may not only be incompetent in nursing skills but also may have negative attitude towards the profession. In addition, a study done by [30] on the theoretical and clinical practice competencies of new Bachelor of Science in nursing graduates post internship, 69% had inadequate theoretical knowledge and clinical skills. Sub-Saharan African countries are also suffering from the burden of unsatisfactory clinical performance among diploma nursing students. The trend has been reported to be attributed to inadequate clinical competencies exhibited by nursing students as an indicator that, there could be a problem in how they are being taught, how the clinical content is delivered, assessed or the ways diploma nursing students perceive clinical practices. This is in regard, with the presence of adequate and qualified clinical educators, clinical instructors support and coaching provided, availability of medical supplies and technological equipment [19].

In Kenya, especially for the diploma nursing programme, students are taken through theory and basic skills in the nursing school, before being released to continue learning and perfecting skills through the qualified nurses in the clinical setting. The burdens to assist students achieve their goals while handling a workload presents a major role conflict for the nurses. In addition, the clinical performance of Kenya registered community nursing students in various hospitals in Kenya entailed performing various tasks based on competencies acquired in clinical training. It reflected on the theoretical knowledge preparation, clinical performance, clinical learning methods and learning resources availed to them during their training.

## **2. EMPIRICAL REVIEW**

The elements that underpin clinical competencies are knowledge, skills, and attitude evidenced as practice [16]. In clinical setting competence is the ability to apply appropriate knowledge, skills and attitudes while performance is the translation of competence into action. A competent practitioner as [14] argues must have the ability to solve problems, think critically and effectively utilize evidence on which to base their practice and work within multidisciplinary team. Assessment of clinical performance received greater attention over the past few years [13] This stated that clinical performance was the combination and integration of different competencies such as knowledge, clinical skills, attitude and professionalism. In regard, studies performed in Iran by [27] showed that there was relatively wide gap between nursing education process and clinical practice. The study findings revealed that, despite existence of clinical education, students were unable to gain the ability required for authenticating their merits, clinical skills and education which did not have required effectiveness.

The researcher postulated that, there were some problems that hindered students in learning effectively, in clinical practice, which led to incompetency. A study by Rakhudu [24] claimed that, implementation of concept maps in theory to practice influenced the development of critical thinking skills, organization of theoretical knowledge, clinical performance, use of innovative methods in clinical learning and prioritization of patient care. In contrast, [11] qualitative study conducted in East Turkey, results disputed the findings of other studies on transfer of theoretical knowledge into practice. The results findings showed that nursing students had insufficient clinical knowledge and skills, and usually failed to transfer their theoretical knowledge into clinical practices.

The conceptual framework for this study was based on Kolb's Experiential Learning, Service Learning which are part of experiential theories education and backed up by Mokgele's facilitation model. Nursing practice is based on profession, experiential learning theory and service learning emphasize on learning by doing and reflection. [17] viewed learning as 'the process whereby knowledge is created through the transformation of experience'. Learning is a continuous process that entails creation of knowledge through transformation of experience through: change of a person's behavior, feelings and thinking. In addition, learning is defined as a 'relatively permanent change of knowledge, attitude and behaviour that occur as a result of formal education or training or as a result of informal experiences' [4] On the same note, it considers a learner as an adult with vast experience which is a basis for generating new knowledge.

According to [17] theory is cyclic in nature. Students have to go through it multiple times to improve their skills repetitively. Furthermore, one of the principles of adult learning is that learners adapt better based on their application of

experience to new ideas and skills [16]. Therefore, the thinking is significant in understanding the attributes that students must be competent and lifelong learners. Experiential is whereby “learning and development is achieved through personal determined experience and involvement rather than on received” which is expressed as hands-on. [4] described experiential learning as “client-focused, supported approach to individual, group and organizational development which engage the young or adult learner in using the elements of action, reflection and transfer”. This form of learning was determined by the individual that came from internal rather than being controlled from external. Learning through experience is defined as planned experience that facilitates learning since students acquire knowledge, skills and attitudes in a relevant setting where students directly encounter the phenomenon [12].

### 3. CONCEPTUAL FRAMEWORK

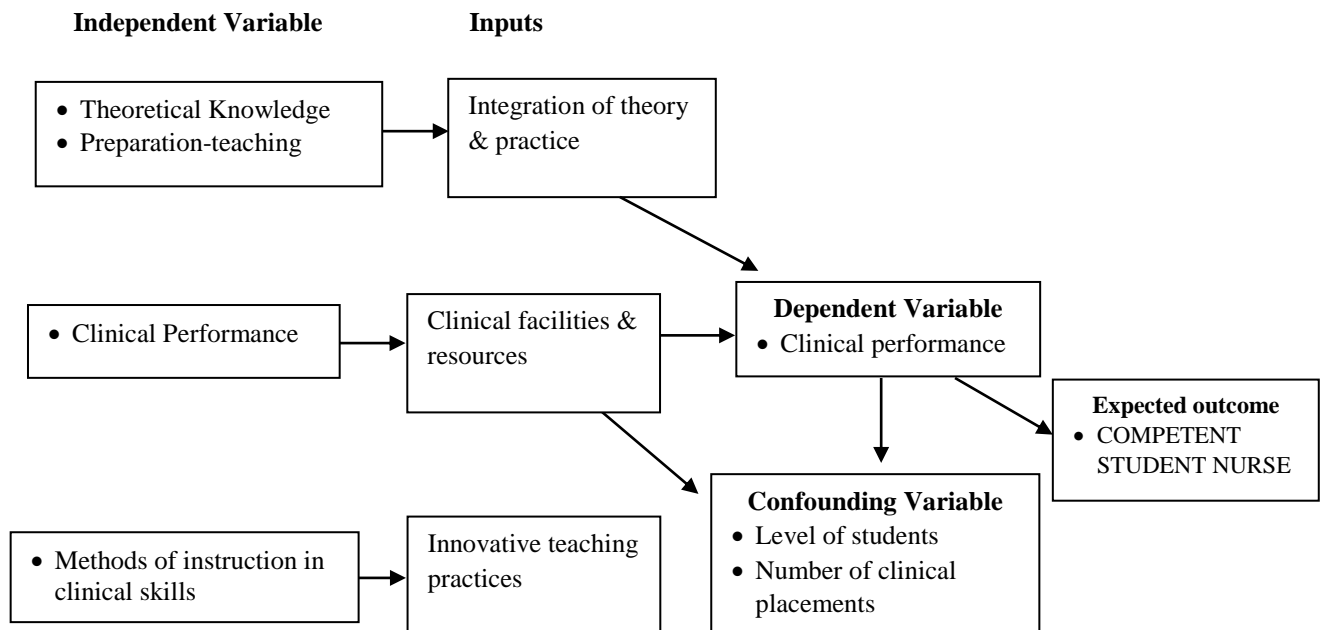


FIGURE 2.1: CONCEPTUAL FRAMEWORK (AUTHOR, 2020)

### 4. SUMMARY AND CRITIQUE OF EXISTING LITERATURE

Experiential Learning Theory (ELT) and Service Learning (SL) provided a wide range of benefits to the institutions, faculties, students and the community. ELT and SL allowed students to link their course work to their work context and roles after completion of training that enhanced learning, as students were aware of the environment in which they were to work in [27]. In service learning, students’ involvement with the community allowed them to apply what was learned in the classroom to practice in order to solve real life problems [8]. Furthermore, service learning not only increased understanding of the community but also helped faculty to change direction and became confident in their teaching. As a result, the faculty was able to teach what was relevant in the work place that reduced the theory-practice gap and promoted learning [27]. Similarly, through reflection students were able to relate theory and practice. Reflection was integral in learning from experience and service-learning provided opportunity for critical reflection which led to lifelong learning required in nursing practice, for nurses to respond to new situations. To facilitate clinical learning through service learning, reflection ought to be incorporated in all courses as well as clinical practice [3]. In service learning, there were consideration of the needs of the students in higher education, to facilitate their learning as appropriate methods and resources were used [27]. In comparison between Service learning and Community service, studies found out that, there was significant academic performance with service learning. Students acquired skills in writing, critical thinking, problem solving, communication, interpersonal skills, leadership and increased awareness of personal values. In addition, students developed positive attitudes towards the communities’ cultural beliefs and values [25]. Acquisition of these skills and understanding their own values and beliefs were essential in nursing practice to become competent for practice and provision of quality nursing care.

It also showed that ELT and SL enhanced personal, moral, social and cognitive development in students which was necessary for nursing as a caring profession. Students became independent learners, developed social skills, team spirit,

self-certainty, self-esteem and interest in civic participation [18]. For these reasons ELT and SL assisted students effectively learn clinical nursing skills, attain educational objectives and increased understanding of the course content, and positively impacted on their learning. Both ELT and SL are student centered and emphasize on active participation and learning by doing, which are required for students to be actively involved in nursing activities for learning to take place. Nursing is a profession that requires learning by doing the skills and not only observing or listening to the nurse educator [23]. A number of factors were associated with the students learning in nursing clinical education. The variables in the above framework indicated that, there were significant differences in all independent variables. This suggested that nursing student's clinical performance was influenced by several factors in both classroom and clinical practice. The framework showed that the clinical performance, theoretical knowledge preparation and methods of instruction in clinical skills significantly and negatively affected integration of theory to practice, and resulted into anxiety, confusion and finally incompetence among diploma nursing students during clinical placements.

## 5. RESEARCH METHODOLOGY

The research design was a descriptive cross sectional survey. The target population of interest in this study consisted of diploma nursing student in Kenya Medical Training Colleges in Western Kenya. The target population was was KMTC nursing students pursuing diploma in Kenya registered community health nursing in three (3) colleges in Western Kenya namely; Kisumu KMTC – 90, Webuye KMTC – 89 and Kitale KMTC – 86 students respectively. From the target population of 10,000 a sample size of 5% was taken, giving a respondent base of 265 respondents. A sample frame for this study included the people with disabilities, youth, women and the aged. To carry out this study, a structured questionnaire was developed and pre-tested. It contains both open and close ended questions. Questionnaires were administered through drop and pick. A total of 20 respondents were used for piloting. This study was expected to produce both quantitative and qualitative data. Once the questionnaires are received they were coded and edited for completeness and consistency. Quantitative data were analyzed by employing descriptive statistics and inferential analysis using statistical package for social science (SPSS version 24).

## 6. RESULTS AND DISCUSSION

### Response Rate

The study targeted a sample size of 265 respondents out of which 265 filled in and returned the questionnaires, making a total response rate of 100%. According to [20] a response rate of 50 percent is adequate, a response rate of 60 percent is good, and a response rate of 70 percent is very good. Therefore, the 100 percent response rate reported for this study formed an acceptable basis for drawing conclusions. While we should not expect full response in studies where responding is voluntary scholars utilizing questionnaires, should aim for a high response rate. Out of the 285 questionnaires a few were incomplete in some of the survey questions. List wise deletion method was used in SPSS to eliminate subjects that were missing data considered essential.

### Demographic characteristics of the respondents

The study asked the respondents to indicate their background characteristics in terms of the age bracket, gender, year of study, ward of last clinical placement, duration of placement and student average ward stay. Findings give a summary of the demographic characteristics of the respondents. With regard to their gender profiles, many were females 55.5 % (n=146). Results on the year of study revealed that majority, 47.5 % (n=126) were second years, 38.2% were third years while only a few 14.3% (n=38,) were first years. Results on age showed that many 60% (n=159) were aged between 21-25 years. Many of the respondents 28.7% (n=76) were placed in the Maternity/Obstetric wards. The placement weeks statistics showed that many of the respondents 53.2% (n=141) had been in current placement for 4 weeks of less with a mean of 5.5 weeks ( $\pm 2.3$ ). However, students average stay in the ward showed that 35.8% (n=95) had been in the wards for 1 – 2 weeks.

### Perception on clinical performance

The first objective of this study was to determine the clinical performance of diploma nursing students in Kenya Medical Training Colleges in Western Kenya. Among 265 respondents 26.1% (n=69) had unfavorable performance in clinical training compared to 56 % (n= 148) who found to be favorable performance. According to [9] the clinical performance can either positively or negatively affect clinical training. The current study found that 41.5% (n=110) of the respondents disagreed that diploma student nurses are encouraged to ask questions. The results from the quantitative aspect showed

that there were poor relationships between students and clinical staff. Students in their first year had a more positive relationship with staff than those in their second and third years. The results from the qualitative part revealed that majority of students highlighted the negative behaviors of clinical staff including confronting students in the presence of patients. The environment was unfriendly, not welcoming, and non-inclusive in the health care team, and students often covered shortages of clinical staff. Poor relationship between students and clinical nurses could have been due to previous experience that those nurses had when they were students [5].

### **Theoretical knowledge preparation of diploma nursing students**

The second objective of this study was to assess the theoretical knowledge preparation of diploma nursing students in Kenya Medical Training Colleges in Western Kenya. The results showed that those who gave negative perception (strongly disagree & disagree) were 35.6% (n=94) of the 265 respondents, those who gave favourable perception (strongly agree & agree) were 49.5% (n= 131), while those unable to determine their perception (Not sure) were 14.9%. However, the score of 50% and above was classified as favourable and below 50% unfavourable. These findings conform with findings from a study done by [15] who found that diploma nursing students still face a challenge of integrating what is learnt in the classroom into the clinical settings and therefore make them demotivated and develop negative attitude and perception towards clinical practices. These in turn lead them to have inadequate clinical competencies and eventually unsatisfactory clinical performance. What is taught in the classroom and what is practiced has been a source of concern over the years to teachers, practitioners and learners in nursing education. The current study found that, many of the diploma nursing students perceived they had good theoretical preparation for practice 55.7 % (n=148). The study findings were supported by [26] in Jordan where students' perceived differences between what was learnt in class and simulation laboratory as well as what existed in the clinical placement.

### **Perception on adequacy of methods of clinical teaching instruction in clinical skills**

The current study found that majority of the nursing diploma students perceived the teaching methods as adequate 57.9% (n=153). Similarly, [25] pointed out that nursing students strongly supported the view that clinical laboratory demonstration sessions prepared them for practice in the clinical setting. In addition, clinical teaching methods that have stronger focus on evidence – based and student – centred learning enhance both clinical and academic performance of students. Problem – based learning and case- based learning and student – centered learning potentially enhance both academic and clinical performance of nursing students. However, traditional teaching approaches that focus mainly on information giving activities in the classroom, firmly controlled by the student educator, do not promote realistic clinical performance. Studies are attributing poor clinical performance of nurses to poor clinical teaching methods. Global trend of clinical competencies among nursing students has been in doubt as their clinical performances are at unsatisfactory state [6].

## **6. CONCLUSION**

In a study done by [7] that examined the preparation of nursing students for the reality of the clinical setting the result reinforced the need for clinical laboratory, theoretical knowledge preparation and safe clinical learning placements. In addition, [25] pointed out that students strongly supported the view that the clinical laboratory classes prepared them for practice in the clinical setting. In addition, a study by [30] acknowledged the three themes: theoretical knowledge preparation, clinical performance and innovative teaching methods as factors influencing theory- practice gap. This was in regard with the presence of adequate and qualified clinical educators, clinical instructors' support and coaching to them and the availability medical supplies and technological. Most of the associated perception issues related with clinical performance identified in this study are preventable. However, consistent and coordinated efforts are required to ensure an improvement in quality of clinical performance. Positive perception of clinical performance and adequate methods of clinical teaching approaches contribute to favorable clinical performance of diploma nursing students in Kenya Medical Training Colleges in Western Kenya. It is therefore, recommended to develop nursing competencies and to provide realistic working behaviours for nurse educators and institutional management. There is need for further research where nurse educator and clinical nurses provide their perceptions on factors influencing students' clinical performance. There is need for diploma nursing curriculum at KMTC and Nursing Council of Kenya to be reviewed in relation to clinical assessment, monitoring and evaluation.

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