Development and evaluation of A Clinical Competence Assessment tool for Msc-Medical/Surgical Nursing Students in Kenya.

Chege, Margaret Njambi
Mount Kenya University

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DEVELOPMENT AND EVALUATION OF
A CLINICAL COMPETENCE ASSESSMENT TOOL FOR
MSC- MEDICAL/SURGICAL NURSING STUDENTS IN KENYA

MARGARET NJAMBI CHEGE

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The MSc medical-surgical nurse graduates are deployed in highly specialized areas. They are expected to respond competently to complex medical-surgical health care needs of the adult patients. They are also expected to expand nursing faculty and redesign nursing education in Kenya. In order to ensure that the MSc medical-surgical nurses are equipped to handle the current demands for their specialty, a valid and reliable tool to assess clinical competence before they are deployed in the area of specialization is vital. Without clear standards for measuring the nurse’s quality of being adequately prepared for the job, clients’ safety could be at risk. Since the establishment of the first MSc medical-surgical nursing programme in Kenya, there has not been a tool, scientifically proven to be adequate for the assessment of clinical competence of the students. The main objective of this study was to develop a tool that would guide effective assessment of clinical competence of MSc medical-surgical nurse students before they graduate from the course. Before embarking on the study, approval was sought from Kenyatta National Hospital-University of Nairobi Ethics and Research Committee and the National Council for Science and Technology. A descriptive qualitative cross-sectional study where mixed methods were used in collecting and analyzing data was conducted. MSc medical-surgical nurse specialists were purposefully sampled from universities in Kenya to participate in the study. The study was conducted in three phases where deductive approach was used to construct tool content followed by inductive approach to determine validity and reliability of the tool. Each phase had a specific research tool which was pretested before implementation. Phase I concerned evaluation of the original version of the assessment tool and gathering data for development of a new tool. Phase II concerned organization of the data for development of the new tool. Phase III involved evaluation of the new tool in terms of content, internal structure, internal consistency, essentiality, inter-rater reliability and practicality evidence. The original version of the tool had a low percentage agreement of 59%. The new tool achieved a percentage agreement of 92%. Component analysis revealed 5 components whose Cronbach’s alpha co-efficient ranged between 0.88 and 0.94. Majority (83.3%) of the participants agreed that all the 24 items in the tool are essential in demonstrating clinical competence of MSc medical-surgical nurse students at exit from the training. Clarity of the items and their descriptors was good. The inter-rater reliability across the assessors was satisfactory at 74.7% indicating that all the assessors engaged in assessing clinical competence of the student would be in the same path in their ability to identify and rate the performance with consistency. The 100% acceptance of the 4- performance level format and ease of tool use demonstrated that the tool is a practical one to use in measuring the clinical competence. The study concluded that the original version of the tool for assessing clinical competence of MSc medical-surgical nurse students at the end of the course has a low content validity. The same concluded that the levels of validity, reliability and practicality evidence of the new tool are a substantial milestone in achieving an objective means of evaluating clinical competence of MSc medical-surgical nurse students before they graduate. The results of this study can support identification of gaps in the curriculum and also serve as an easy guide to giving feedback to the students. The researcher recommends that the universities conducting MSc
ABSTRACT

The MSc medical-surgical nurse graduates are deployed in highly specialized areas. They are expected to respond competently to complex medical-surgical health care needs of the adult patients. They are also expected to expand nursing faculty and redesign nursing education in Kenya. In order to ensure that the MSc medical-surgical nurses are equipped to handle the current demands for their specialty, a valid and reliable tool to assess clinical competence before they are deployed in the area of specialization is vital. Without clear standards for measuring the nurse’s quality of being adequately prepared for the job, clients’ safety could be at risk. Since the establishment of the first MSc medical-surgical nursing programme in Kenya, there has not been a tool, scientifically proven to be adequate for the assessment of clinical competence of the students. The main objective of this study was to develop a tool that would guide effective assessment of clinical competence of MSc medical-surgical nurse students before they graduate from the course. Before embarking on the study, approval was sought from Kenyatta National Hospital-University of Nairobi Ethics and Research Committee and the National Council for Science and Technology. A descriptive qualitative cross-sectional study where mixed methods were used in collecting and analyzing data was conducted. MSc medical-surgical nurse specialists were purposefully sampled from universities in Kenya to participate in the study. The study was conducted in three phases where deductive approach was used to construct tool content followed by inductive approach to determine validity and reliability of the tool. Each phase had a specific research tool which was pretested before implementation. Phase I concerned evaluation of the original version of the assessment tool and gathering data for development of a new tool. Phase II concerned organization of the data for development of the new tool. Phase III involved evaluation of the new tool in terms of content, internal structure, internal consistency, essentiality, inter-rater reliability and practicality evidence. The original version of the tool had a low percentage agreement of 59%. The new tool achieved a percentage agreement of 92%. Component analysis revealed 5 components whose Cronbach’s alpha co-efficient ranged between 0.88 and 0.94. Majority (83.3%) of the participants agreed that all the 24 items in the tool are essential in demonstrating clinical competence of MSc medical-surgical nurse students at exit from the training. Clarity of the items and their descriptors was good. The inter-rater reliability across the assessors was satisfactory at 74.7% indicating that all the assessors engaged in assessing clinical competence of the student would be in the same path in their ability to identify and rate the performance with consistency. The 100% acceptance of the 4- performance level format and ease of tool use demonstrated that the tool is a practical one to use in measuring the clinical competence. The study concluded that the original version of the tool for assessing clinical competence of MSc medical-surgical nurse students at the end of the course has a low content validity. The same concluded that the levels of validity, reliability and practicality evidence of the new tool are a substantial milestone in achieving an objective means of evaluating clinical competence of MSc medical-surgical nurse students before they graduate. The results of this study can support identification of gaps in the curriculum and also serve as an easy guide to giving feedback to the students. The researcher recommends that the universities conducting MSc medical-surgical nursing programme use the new tool for the assessment of the students’ clinical competence before they graduate.