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**“A Study To Assess The Correlation Between Level Of Critical Thinking Ability And Competency In Performing Neurological Assessment Among Nursing Students Of Selected Nursing Colleges Of Udupi District, Karnataka”**

PIYALI SAHA

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"ABSTRACT A research study entitled "A study to assess the correlation between the level of critical thinking ability and competency in performing neurological assessment among nursing students of selected Nursing colleges of Udupi district" was conducted by Ms. Piyali Saha in partial fulfillment of the degree of master of science in nursing at Manipal College of Nursing, Manipal Academy of Higher Education, Manipal. The objectives of the study were to identify the level of critical thinking ability among nursing students, assess the level of knowledge regarding neurological assessment among nursing students, assess the level of competency in performing neurological assessment among nursing students and determine the relationship between the level of critical thinking ability and competency in performing neurological assessment among nursing students. A study was conducted among 76 nursing students from the 4th year BSc Nursing of Manipal College of Nursing, Manipal using an enumerative sampling technique. The conceptual framework for the study was adopted from the modified Tanners clinical judgement model (2006). Data were collected using demographic proforma, critical thinking ability interpretive questionnaire, structured knowledge questionnaire on neurological assessment, observational skill checklist based on neurological assessment, structured attitude scale on performance of neurological assessment.

#### Abstract

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The content validity of the tools was established by giving the tools to five experts and modifications were made based on the suggestions. The tools were pretested and reliability was established. The reliability of the critical thinking ability interpretive questionnaire was done using split-half method and the reliability score was 0.71. The reliability of the structured knowledge questionnaire on neurological assessment was done using split-half method and the reliability score was 0.72. The reliability of the structured observational skill checklist based on neurological assessment was done using inter-rater reliability method and the reliability score was 0.89. The reliability of the structured attitude scale on performance of neurological assessment was done using Cronbach's alpha method and the reliability score was 0.72. Pilot study was done and was found to be feasible.

Administrative permission was obtained from the Dean, MCON, Manipal, Institutional Research Committee, MCON, Manipal, Institutional Ethics Committee, KH, Manipal (914/2019) and registered the study under CTRI (CTRI2020/06/025507).

The students who met the eligibility criteria were informed about the study with the participant information sheet and the informed consent was obtained. The anonymity and confidentiality of the data were assured.

The analysis was done by using SPSS version 20.0. The study findings revealed that in the academic result of previous year, majority 44 (57.9%) students received first

class, 48 (63.2%) students obtained highest mark in medical surgical nursing and none of the students participated in any of the critical thinking workshop/seminar.

#### Abstract

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The analysis revealed that 42 (55.3%) students had average critical thinking ability and 34 (44.7%) students had poor critical thinking ability. The mean of critical thinking score of nursing students is 6.83 and the standard deviation is 2.452.

Maximum score obtained by the students was 12 and minimum score was 2, which showed unacceptably low mean score.

The present study shows that the knowledge score ranges between 0-30.

Majority 59 (77.6%) students had average knowledge, 16 (21.1%) students had poor knowledge and 1(1.3%) student had good knowledge. Approximately 33 (43.4%) students had poor skill in performing neurological assessment and, 43(56.6%) students were in the category of need practice. None of the students were skillful in performing the neurological assessment. Majority 71 (93.4%) students had favourable attitude and only 5 (6.6%) of them had unfavourable attitude towards performing neurological assessment. As in this present study competency referred as integration of good knowledge, favourable attitude and skillful towards neurological assessment hence, it was found that all 76 (100%) students were less competent in performing neurological assessment. This indicates that there is a need for training program to enhance their knowledge, skill and attitude.

In this present study, there is a weak positive correlation ( $r = .127$ ,  $p = .273$ ) between the level of critical thinking ability and competency in performing neurological assessment, which is statistically not significant. Hence, the null hypothesis is accepted stating that there is no correlation between critical thinking ability and competency in performing neurological assessment.

#### Abstract

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In this present study, it is found that, there is no significant association between level of critical thinking ability and demographic variables such as academic performance level ( $X^2 = 3.55$ ,  $p = .314$ ), subject obtained highest mark ( $X^2 = .497$ ,  $p = .780$ ). Thus, null hypothesis is accepted and alternate hypothesis is rejected.

Therefore, it is inferred that critical thinking ability and demographic variables are independent on each other. Thus, students with good demographic variable doesn't have good critical thinking ability and this gives us a reason to explore whether the patterns capture critical thinking abilities and if so to what extent.

The study limitations were, the study was conducted in a single setting and the clinical exposure for the students was not similar.

The present study was conducted to determine the relationship between the level of critical thinking ability and competency in performing neurological assessment among nursing students. Thus, the study concluded that students have poor to average critical thinking ability. It is also found that competency in performing neurological assessment was relatively at the low level due to average knowledge and poor skill in performing neurological assessment. The study results also concluded that there is a weak positive correlation between the level of critical thinking ability and competency in performing neurological assessment, which is statistically not significant. There is no significant association between level of critical thinking ability demographic variables such as academic performance level and Subjects with highest marks.

Abstract

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Since knowledge, attitude and skill are vital components of professional competency effective development of all these three areas is crucial for health care professionals and also it is essential to focus on enhancing critical thinking of the health care professionals in order to promote quality care."