

## **Abstract**

**Background:** Alterations in patients' conditions are missed by nurses despite charting. The most important factor associated to this is lack of knowledge and understanding of deteriorations. The modified early warning score (MEWS) aids nurses in early recognition and response to clinical deteriorations. However, utilization of MEWS remains a major challenge at Mulago hospital where about 63.2% of the in-hospital cardiac arrests are unrecognized. This has resulted into a significant burden of critical illness with a prevalence of 11.7% and a 5.5% mortality. Therefore, this study aimed to assess the effect of an educational intervention on Nurses' knowledge and practice on use of MEWS to recognize critical illness at Mulago hospital.

**Methods and materials:** A descriptive quantitative, quasi experimental one-group pretest-posttest study design was used. The study purposively enrolled 77 nurses working at Mulago national referral hospital. A face-to-face teaching strategy was used to instil knowledge of MEWS to the Nurses. For practices, a simulation was used to instil skills to the nurses. Data was collected using a validated self-administered questionnaire for knowledge and self-rated practices, and an observational check list for the observed practices. The preintervention data was collected two weeks before the intervention and the post intervention data were collected after one month. A Wilcoxon sign rank test was used to assess the effect of educational intervention on nurses' knowledge and practice towards MEWS. For all the analysis, the level of significance was set at 0.05 at 95% confidence interval.

**Results:** The majority of the participants, 52(67.53%) were females. Most of the participants 58(75.32%) were aged above 30 years. The majority 52(67.53%) of the nurses demonstrated a Novice level of knowledge towards MEWS. For self-rated practices, about 24(31.17%) of the nurses demonstrated a proficient level. On the overall researcher observed practice of the nurses towards MEWS, the majority 09(90%) demonstrated a novice level of competency. The educational intervention had an effect on the nurses' knowledge ( $Z=7.631$ ,  $p<0.0001$ ), self-rated practices ( $Z=7.290$ ,  $p<0.0001$ ), and competency ( $Z=2.812$ ,  $p=0.0020$ ) towards the MEWS.

**Conclusion:** The baseline knowledge and practice of the nurses towards the MEWS at Mulago national referral hospital falls short of recommended guidelines. Education Intervention significantly improved nurses' knowledge and practices towards MEWS in recognition of critical illness.