ABSTRACT

Changes in Nurses' Knowledge Following Basic Trauma Cardiac Life Support Training in Berau Regency

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Background : Nurses play a vital role in managing trauma and cardiac emergencies, where timely interventions are essential. Adequate Basic Trauma Cardiac Life Support (BTCLS) knowledge helps nurses respond appropriately. Structured training can improve nurses' knowledge and preparedness. However, evidence of knowledge changes following BTCLS training in Berau Regency remains limited. Therefore, comparing pre- and post-training knowledge is important to evaluate immediate learning outcomes.

Objective : This study aimed to assess changes in nurses' knowledge before and after Basic Trauma Cardiac Life Support (BTCLS) training in Berau Regency.

Research Methods/ Implementation Methods : This quantitative pre-experimental study used a one-group pretest–posttest design involving 22 nurses attending BTCLS training in Berau Regency on June 25–July 1, 2026. The blended-learning program included theory, discussions, skills-station practice, and evaluation. Pretest and posttest scores were compared using a paired-samples t-test ($p<0.05$).

Results : The mean knowledge score increased from 82.68 before training to 91.05 after training, corresponding to a mean increase of 8.37 points. The difference between pre- and post-training scores was statistically significant ($t=2.797$; $df=21$; $p=0.011$), with a 95% confidence interval for the mean difference of 2.15–14.58 points.

Conclusion/Lesson Learned : Nurses demonstrated significantly higher knowledge scores after BTCLS training than before. These findings indicate an immediate improvement in knowledge among participating nurses in Berau Regency. Further evaluation is needed to assess whether these improvements are sustained and applied in clinical practice.

Keyword : Basic Trauma Cardiac Life Support, training, nurses, knowledge, emergency care