

MRCHS017

COMPARISON OF HYBRID AND SIMULATION MODE OF TRAINING IN BASIC NEWBORN RESUSCITATION AMONG RESPIRATORY THERAPY STUDENTS

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Introduction

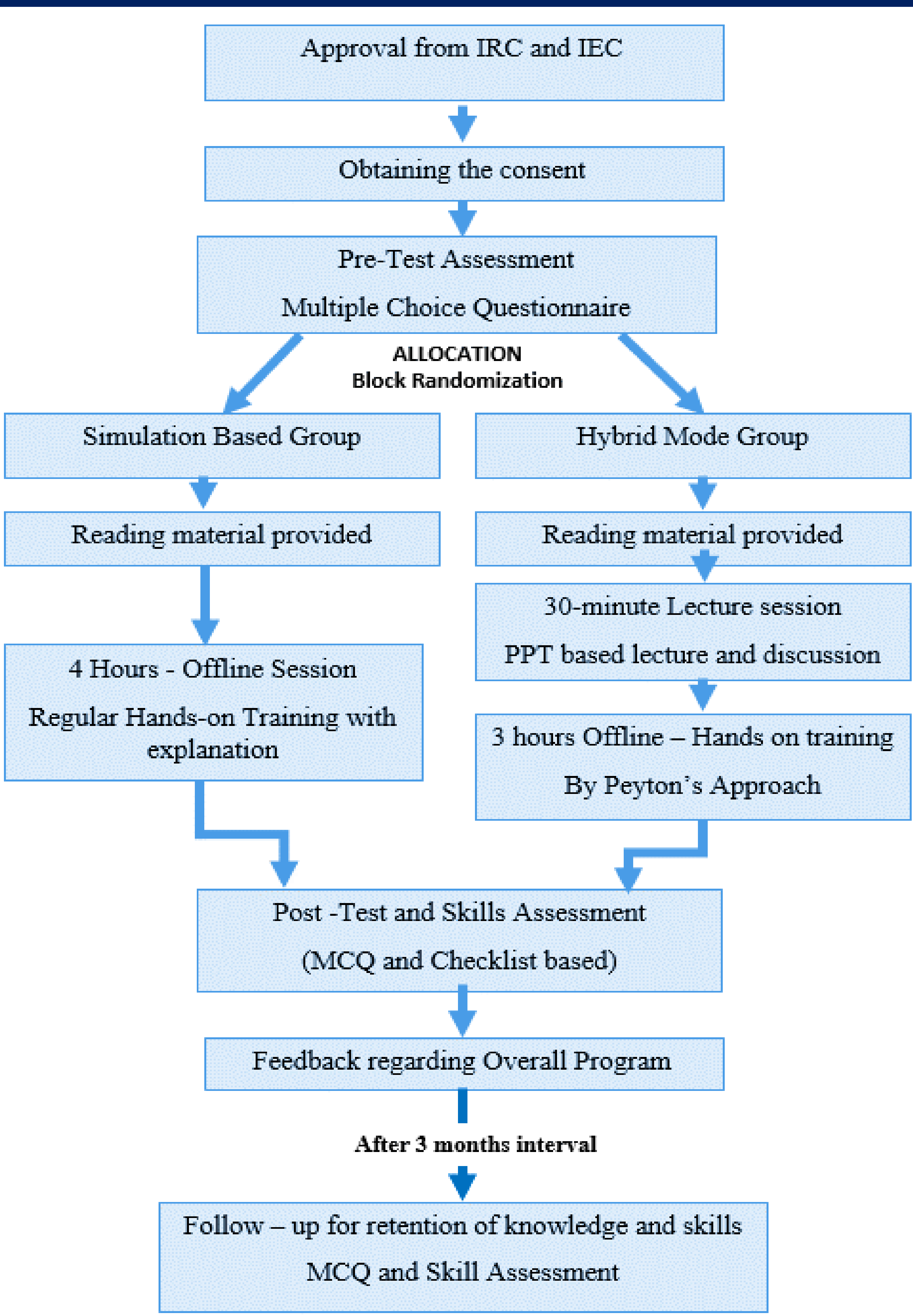
Neonatal Resuscitation is a vital skill for any professional involved in the care of neonates in NICU. In the delivery room for the resuscitation of newborn, a healthcare provider must develop cognitive, behavioral, and psychomotor abilities. A respiratory therapist is an integral part of the neonatal resuscitation team who require adequate knowledge and skills.

Objectives

To compare Hybrid mode of learning strategy and Simulation based learning strategy in enhancing acquisition and retention of knowledge and basic neonatal resuscitation skills.

Method

Material Used – Expert validated questionnaire and checklist
Inclusion Criteria – Respiratory therapy students untrained in neonatal resuscitation.
Statistical Tests – Shapiro Wilk Test, Paired Sample T – test, Independent Sample T – test, and Mann Whitney U - test was used.



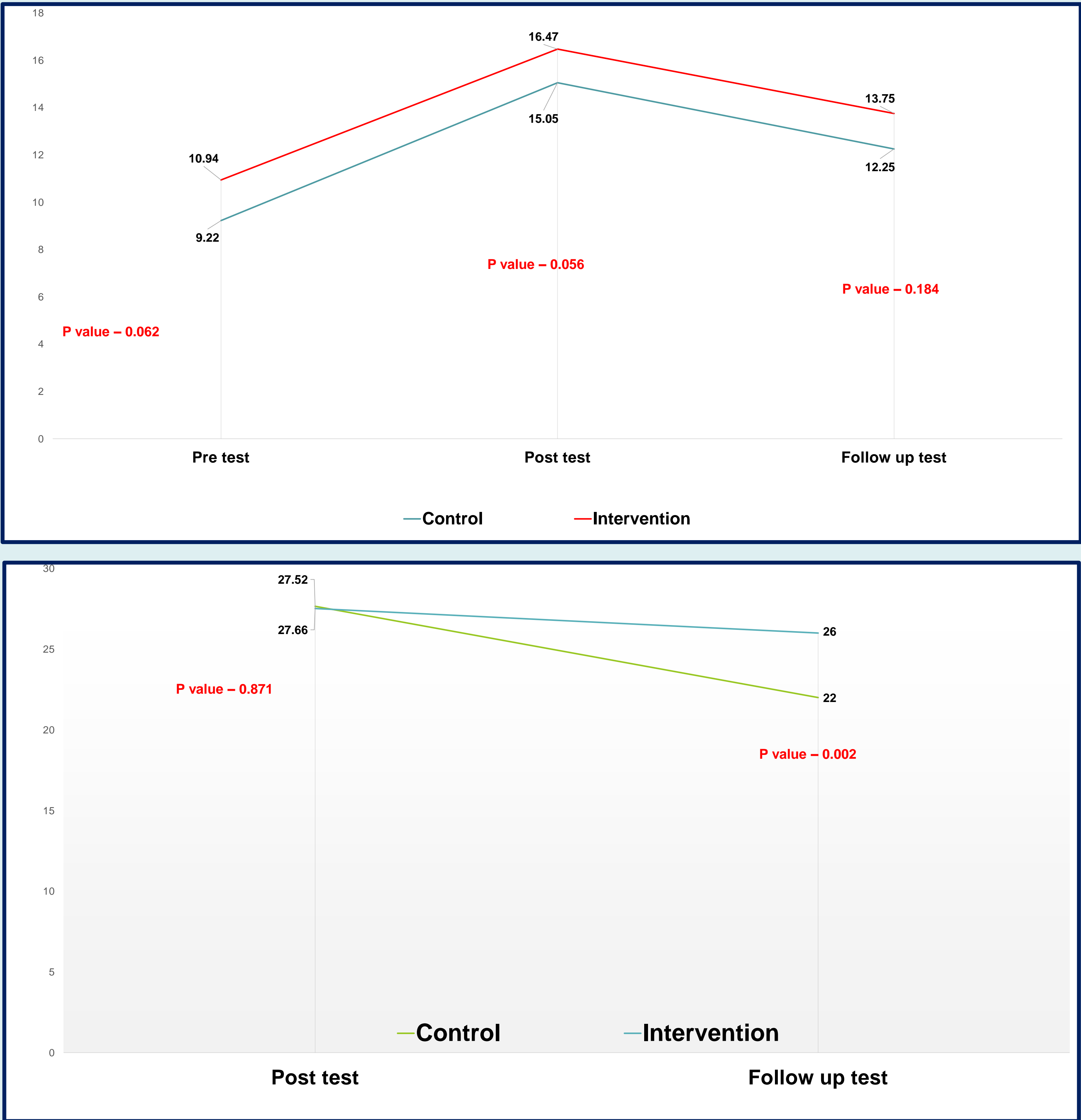
Results

- A total of 38 participants were recruited and 35 participants reported on the day of intervention. The control group had 18 participants whereas intervention group had 17 participants. For the follow up assessment, 32 (84.2%) of the total participants reported.
- 3 (17%) were male and 15 (83%) were female and 5 (29%) were male and 12(71%) were female in Simulation and Hybrid Group respectively.
- The Mean age was 18.83 ± 0.51 and 19 ± 0.86 in the Simulation and Hybrid groups respectively.
- A significant difference was seen in retention of skill scores in the Hybrid group when compared with Simulation Group with the p value of 0.002,

Results

	Pre-Test	Post-Test	Follow up Test		Post-Test	Follow up Test
Simulation Group	9.22 (±2.46)	15.05 (±2.12)	12.25 (±2.88)	Simulation Group	27.66 (±1.94)	21.43 (±3.58)
P value	<0.001		0.104	P value	<0.001	
Hybrid Group	10.94 (±2.81)	16.47 (±2.09)	13.75 (±3.36)	Hybrid Group	27.52 (±2.93)	24.81 (±3.58)
P value	<0.001		0.002	P value	0.048	

Figure 1 & 2: Demonstration of Knowledge and Skill scores at different time points



Conclusion

Our study demonstrates that hybrid-based training via Peyton's 4-stage technique can considerably enhance neonatal resuscitation performance and retention of the skills.
The main limitation of our study was small sample size and intervention was done in only one professional group.

References

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3. Alalhareth N, Howarth M. The effectiveness of simulation training on nursing students' neonatal resuscitation skills: A systematic review. International Journal of Nursing and Health Care Research. 2020;3(2):1187.