

Reviving Rounds: Using an electronic tablet for note-taking during medical teaching rounds

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Background

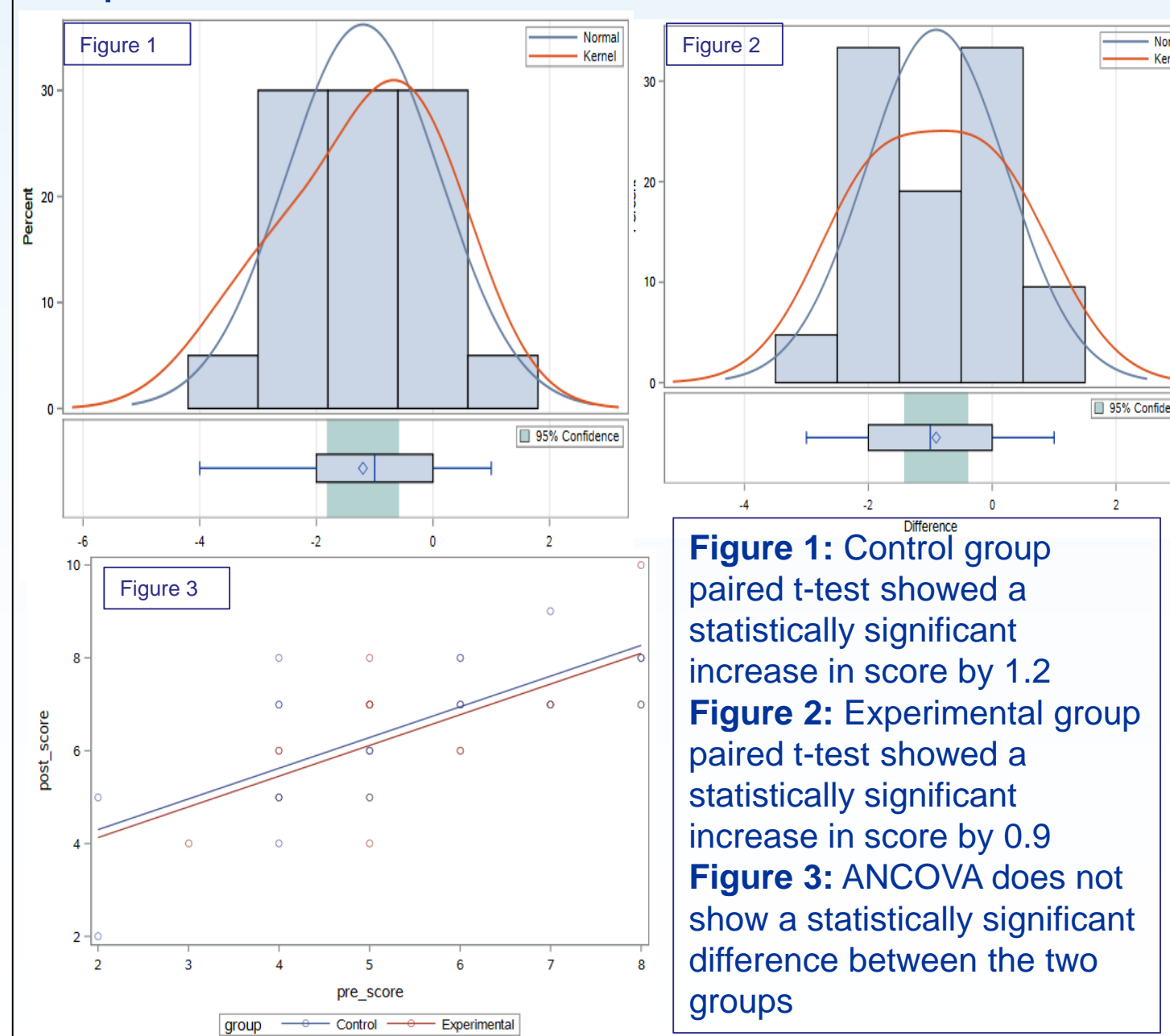
- Medical rounds occur daily in teaching hospitals. This ensures quality patient care and delivery of educational content.
- Medical rounding does not provide formal testing or handouts to assist resident learners with knowledge acquisition or retention.
- We conducted a quasi-experimental study to evaluate the use of an electronic tablet to distribute information presented on medical rounds and its impact on resident recall.

Methods

- Over a 10 to 14-day period an experimental group, similar in structure to the control group, was provided a handout of notes taken during rounds with the use of an electronic tablet.
- Both the control and the experimental group were administered an identical 10 question pretest and posttest pertaining to the core-curriculum covered on rounds.
- Test questions were vetted by experts in the field of internal medicine to ensure accuracy and pertinence.
- Additionally, both study groups completed a survey.

Results

- Overall, there was an increase in the pretest vs posttest scores among both the control group (an average increase of 1.2 points) and the experimental group (an average increase of 0.9 points).
- The majority of resident learners in the experimental group found the use of handouts to be an effective method for learning (32% found it a “great deal” effective, 42% found it “a lot” effective, while 0% found it “not at all” effective).
- Additionally, resident learners did not find use of an electronic tablet to be disruptive to patient care.



Discussion

- This pilot study was novel in evaluating the use of an electronic tablet to distribute information from teaching rounds and its impact on learner recall.
- Although there was no statistically significant difference between the control and experimental group test scores, there was an increase in overall test scores. This may suggest that the sole act of administering a test may incentivize learning on medical rounds and lead to improvement in medical knowledge, despite the use of electronic tablet-generated handouts.
- In addition, survey results revealed that few residents studied for the post-test; this is likely attributed to test results having no bearing on rotation evaluations. Having this test “count” towards a rotation evaluation may have incentivized studying and thus the use of the hand-out notes.
- Limitations of our study included a small sample size, a limited number of distributed test questions, and variability in learning and teaching styles among attendings.
- With innovations in technology, the world of postgraduate medical education has room for advancements.
- Future studies are needed to further evaluate vehicles which may be helpful in improving teaching and resident learning on rounds.