

“This study investigates whether watching an instructional video improves medical students’ ability to perform venepuncture safely.” Pan et al (2014).

Reference:

Pan, M., Harcharik, S., Lubner, A., Bernardo, S., Levitt, J. and Moskalenko, M. (2014) Instructional video for teaching venepuncture. *The Clinical Teacher*. 11(6), p.436-41.

Abstract:

**BACKGROUND:** Safe venepuncture technique is a critical skill for health care professionals, to avoid accidental occupational injury. This study investigates whether watching an instructional video improves medical students’ ability to perform venepuncture safely.

**METHODS:** This was a randomised, controlled, assessor-blinded trial that evaluated the utility of an instructional video, with the primary outcome of the ability to perform venepuncture safely. Forty-two second-year medical students were recruited and randomised to receive either video instruction (group A, n = 20) or no intervention (group B, n = 22). Prior to the study, all students attended an instructor-led workshop on venepuncture. During the study, students were paired and instructed to perform venepuncture on a partner. Performance was assessed using a points-based checklist. Pre- and post-study surveys were conducted to assess confidence with technique.

**RESULTS:** The mean total checklist score was higher in group A than in group B, with values of 14.15 and 9.18, respectively ( $p < 0.0001$ , maximum 18 points). Mean scores were also higher in group A than in group B among students who performed first ( $p = 0.008$ ) and students who performed second ( $p = 0.005$ ) within the pair. From the post-procedure survey, only group A rated increased confidence in performing venepuncture after the study ( $p = 0.008$ ).

**DISCUSSION:** Students who watched an instructional video performed venepuncture more effectively and reported greater confidence with the technique. Medical students can benefit from having access to an instructional video on venepuncture as an adjunct to the standard curriculum. Safe venepuncture technique is a critical skill for health care professionals.

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