

# Point of care ultrasonography in hemophilia: impact of prior experience and success on competency assessment/evaluation

K. Strike<sup>1,2</sup>, S. Squire<sup>3</sup>, W. Lawson<sup>4,5</sup>, M. Uy<sup>4</sup>, Chan AK<sup>1,5</sup>.

<sup>1</sup>Hamilton-Niagara Regional Hemophilia Program, McMaster Children's Hospital, Hamilton Health Sciences, Hamilton, Ontario, Canada; <sup>2</sup>Department of Rehabilitation Science, McMaster University, Hamilton, Ontario, Canada; <sup>3</sup>Hemophilia Program – Adult Division, St. Paul's Hospital, Vancouver, British Columbia, Canada; <sup>4</sup>McMaster University Mohawk College, Medical Radiation Sciences Program, Hamilton, Ontario, Canada; <sup>5</sup>Department of Pediatrics, McMaster University, Hamilton, Ontario, Canada.

## Introduction and Objectives

- Point of care ultrasonography (POC-US) is an ultrasound (US) provided in the clinic by the primary health practitioner in adjunct to the physical examination to answer a specific clinical question.
- POC-US has been explored as a method for managing hemophilia and the importance of training, competency assessment/evaluation has been published (Strike, 2015).
- The objective of this study is to assess the knowledge base of physiotherapists (PT) prior to participation in the McMaster University/Mohawk College POC-US course and to determine if there is a relationship between experience with POC-US and success in course evaluations.

## Methods

- Eight PT in Canada completed the POC-US course.
- Competencies were tested in a simulated environment and modeled after the Sonography Canada Clinical Skills Assessment Tool and focused on the application of POC-US to hemophilia conditions.
- Knowledge levels were assessed using multiple-choice evaluations before and after intervention and a practical examination.
- Assessments reference a selection of appropriate competencies from the Sonography National Competency Profile developed by Sonography Canada with 70% required for a passing grade.
- Participants were categorized into groups based on POC-US experience.
- Descriptive statistics of the mean/standard deviation of the pretest, post-test, practical exam were calculated.

## References

- Strike KL, Iorio A, Jackson S, et al. Point of care ultrasonography in haemophilia care: recommendations for training and competency evaluation. *Haemophilia*. 2015;21(6):828-831. doi:10.1111/hae.12767.

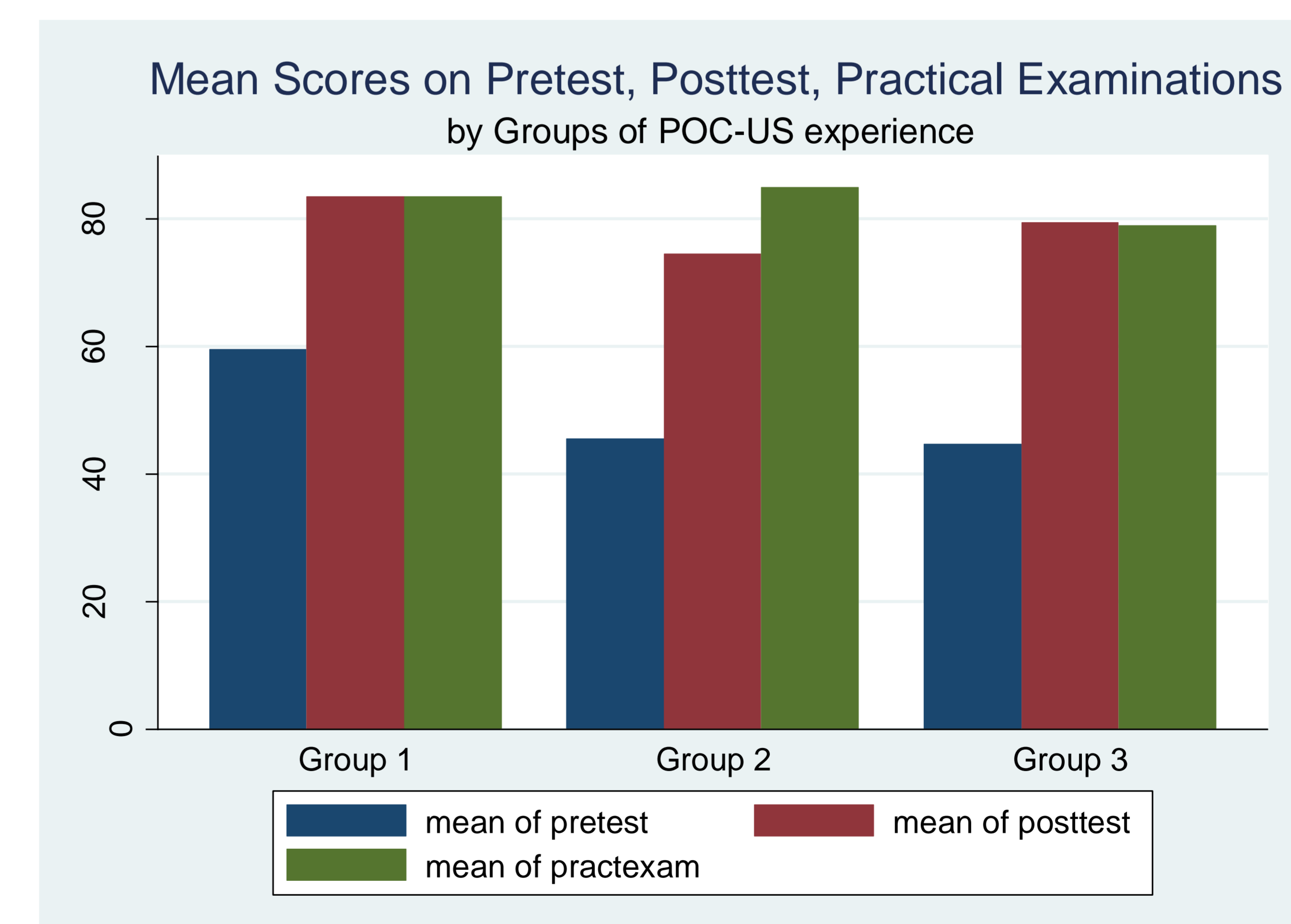
## Disclosures

- The authors would like to acknowledge and disclose Pfizer Canada as a source of funding support for this project.

## Results

- Refer to the table below for a summary of the results.
- Statistical analyses is limited by the small sample size (n=8).
- The sample had varying ranges of POC-US experience:
  - Group 1: n=2 PT actively using POC-US in clinic
  - Group 2: 2 PT with some experience with POC-US but it is rarely used in clinic
  - Group 3: n=4 PT with no prior experience in POC-US.

	<b>Pretest</b> Mean, Standard deviation	<b>Post-test</b> Mean, Standard deviation	<b>Practical Exam</b> Mean, Standard deviation
<b>Group 1</b>	59.5, 3.536	83.5, 0.707	83.5, 4.95
<b>Group 2</b>	45.5, 7.778	74.5, 6.363	85, 2.828
<b>Group 3</b>	44.75, 2.986	79.5, 18.646	79, 12.543



## Conclusions

- This study suggests that without training, not all PT have the required knowledge of POC-US.
- Completion of the McMaster University/Mohawk College POC-US course appears to improve knowledge and clinical practice of POC-US regardless of previous POC-US experience.



Poster Presented at:

DOI: 10.3232/psa.ea.WFH2016.2016

Physiotherapy and Rehabilitation  
Karen Strike

158--PP-T



9T0ZHM