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# An international chorionic villus sampling training program in ongoing-pregnancies with demonstrable outcomes: a survey study



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## Background

- Chorionic villus sampling (CVS) remains the sole method for first-trimester prenatal diagnosis.
- Most physicians are unable to provide this service because of a lack of training.

**Objective:** To identify the impact of a well-established international training program in invasive diagnosis on provider confidence and practice pattern among those trained through the hands-on program.

## Study Design

- 20-question online survey was sent to all MDs who had completed training at the host institution.
- Included questions about the trainees educational and procedural experiences, estimates of the number, type of procedures performed, and self-evaluation of competence.
- Descriptive statistics were performed and the Student t-test was used as indicated. Multiple logistic regression was used to adjust for covariates.

## Results

- 72 surveys sent, 47 (65.3%) were returned. 63.8% of respondents were female. All trainees were OBs/MFMs except one radiologist who had completed an average of 8.7 (SD: 21.8) CVS and 115.8 (SD: 222.8) amniocentesis before the training program.
- Rotators were 25 (51%) were faculty and 22 (47%) were residents/fellows.
- The mean length of rotation was 2.7 weeks. Attendees came from 13 countries with 11(23.4%) from the U.S.
- Comfort with CVS ( $p<0.001$ ) and amniocentesis ( $p<0.001$ ) improved significantly after the training
- 34.7% are currently teaching CVS following training.
- There was no association with pre- vs post-training comfort in CVS or amniocentesis following training, when adjusted for age, gender, or experience ( $p>0.05$ ).

**Conclusion:** As comprehensive training in invasive fetal procedures dwindles, a program able to improve confidence and skill in these procedures is critical. The critical components of training remain challenging.

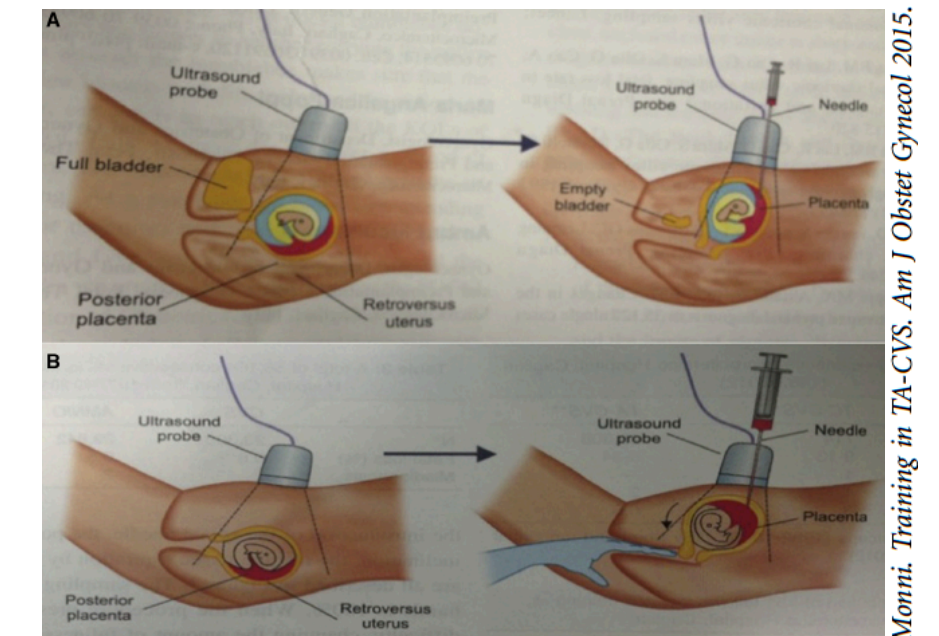
We have established a successful international training program in trans-abdominal chorionic villus sampling in ongoing pregnancies.



Questions?

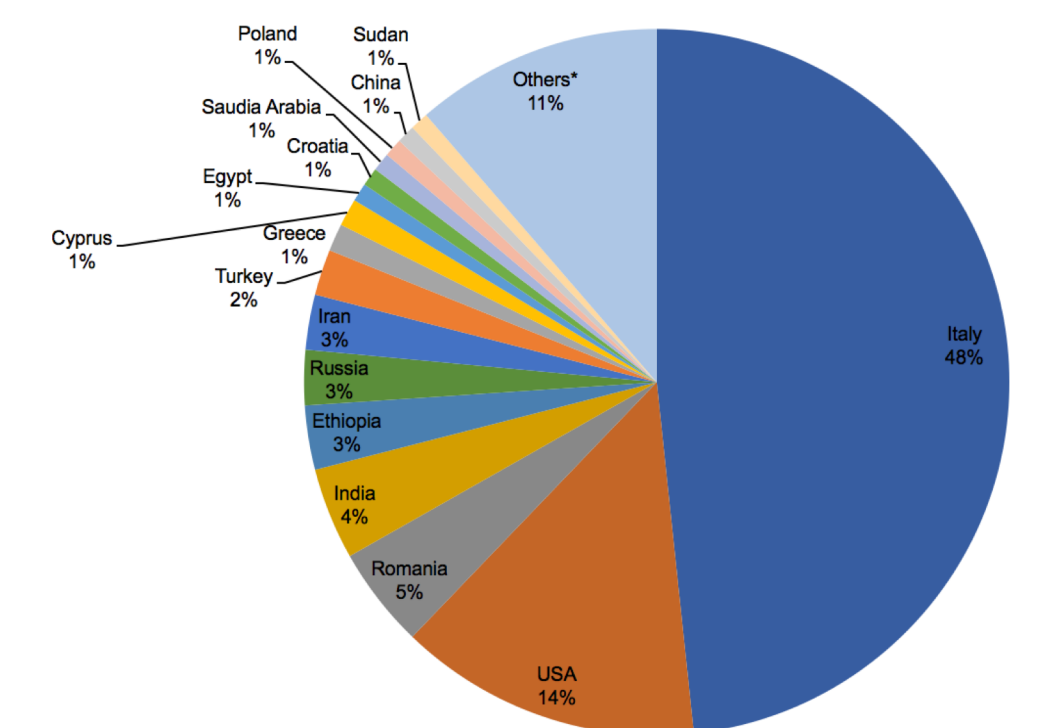
Take a picture of this QR code to access the poster or email Dr. Giovanni Monni at [prenatalgmonni@gmail.com](mailto:prenatalgmonni@gmail.com)

## TA-CVS Technique



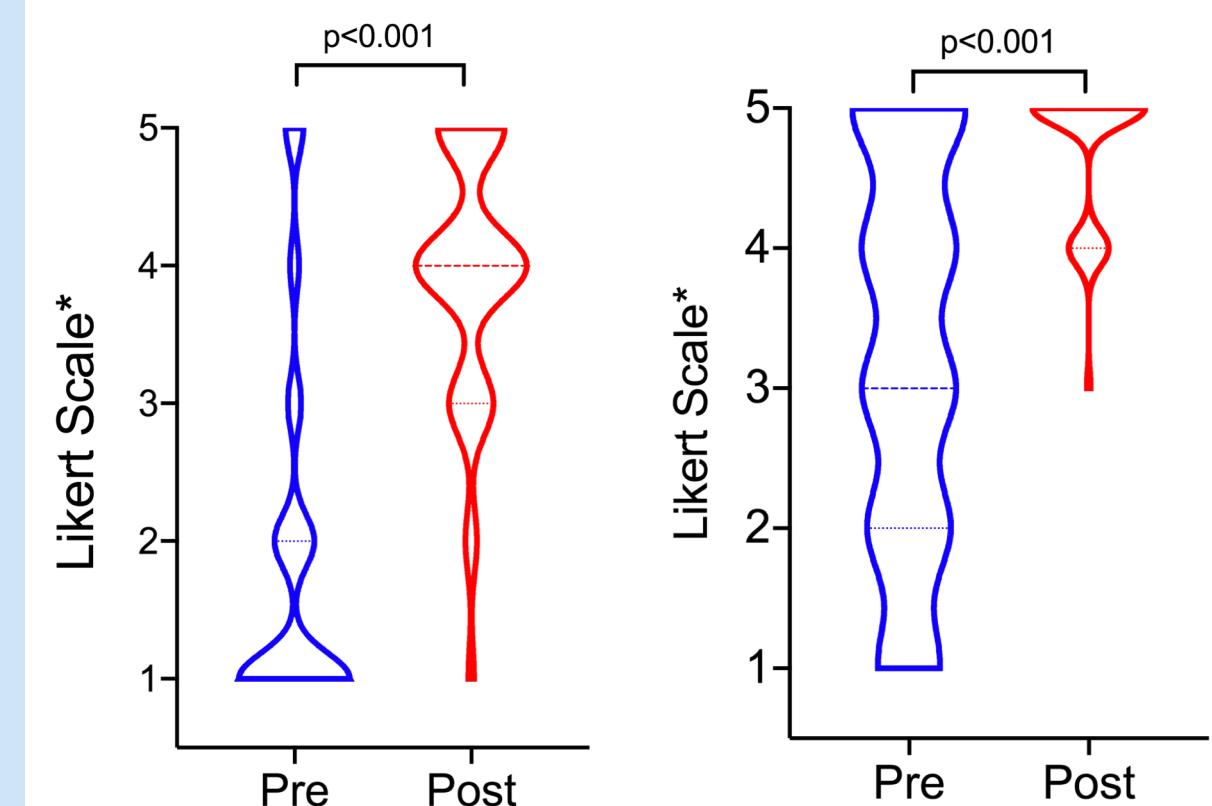
Monni. Training in TA-CVS. Am J Obstet Gynecol 2015.

Country of Origin of Trainees Rotating in International TA-CVS Program  
n=236



\*Others: n=1 from Argentina, Azerbaijan, Bosnia, Czech Republic, Canada, Georgia, Japan, France, Germany, Kosovo, Lebanon, Mongolia, Morocco, Nigeria, Netherlands, Pakistan, Portugal, Qatar, Slovenia, Spain, Sudan, Emirates, Venezuela

## Comfort with CVS Comfort with Amniocentesis



\*1=not comfortable, 5=very comfortable

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