

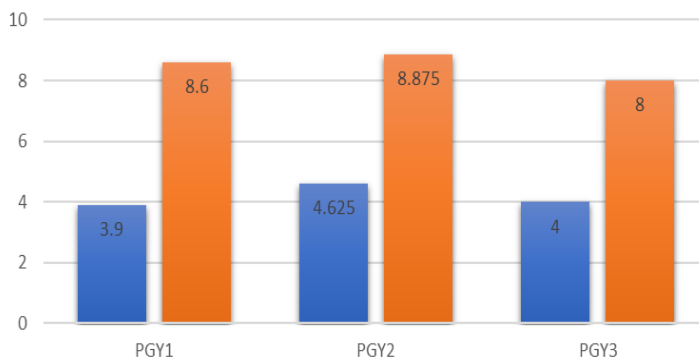
# The utility of a structured, interactive cardiac anatomy teaching session for resident education

Jacquelyn Kukulski, DO, Jacqueline Rausa, DO, Julia Weld, DO, Amina Jaji, MD, Nobuyuki Ikeda, MD, Brian Lee, MD, Lisha Thomas, MD, Robert H. Anderson, MD, Rohit S. Loomba, MD

## Background

Pediatric residents are often taught cardiac anatomy by use of two-dimensional images of heart specimens, or via clinical imaging such as echocardiography or computed tomography. This study set forth to determine if the use of a structured, interactive, teaching session using heart specimens would be effective in teaching the concepts of cardiac anatomy.

Average number of questions correct based on year pre-test compared to post-test



## Methods

- Interest in a session evaluated by a survey
- 4 major cardiac lesions identified: ASD, VSD, tetralogy of Fallot and transposition
- Specimens demonstrating key features of the lesion were selected
- 10 question assessment administered
- Teaching session taught by cardiology fellows
- Repeat 10 question assessment administered
- Post-session survey circulated to participants

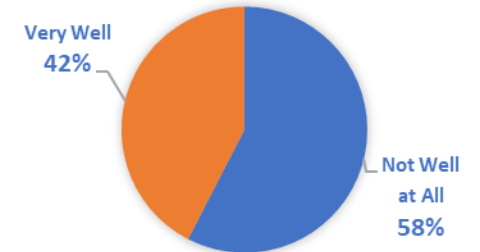
## Results

- Interest survey demonstrated 100% interest
- 24 residents were present for the session
- Median pre-test score of 45%
- Median post-test score of 90%; p less than 0.01
- Post session survey indicated it was a good use of time and interest in future sessions

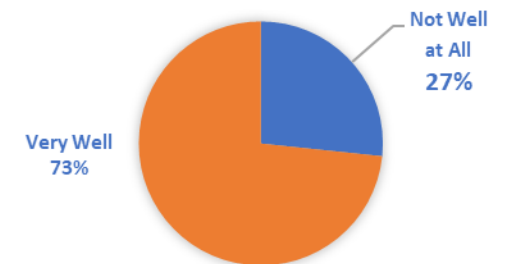
## Conclusion

A two-hour cardiac anatomy teaching session using cardiac specimens can successfully highlight key anatomic concepts for pediatric residents.

SUBJECTIVE KNOWLEDGE OF COMPLEX HEART LESIONS BEFORE THE SESSION



SUBJECTIVE KNOWLEDGE OF COMPLEX HEART LESIONS AFTER THE SESSION



## Limitations

- Single center study
- Small sample size
- Availability of heart specimens