

## Comparing Education Methodology in the Emergency Department.

Nicole J. Benseal BSN, RN  
*Lehigh Valley Health Network, Nicole\_J.Benseal@lvhn.org*

Karen N. Brunner BSN, RN  
*Lehigh Valley Health Network, Karen\_N.Brunner@lvhn.org*

Michelle J. Henne BSN  
*Lehigh Valley Health Network, Michelle\_J.Henne@lvhn.org*

Ashley D. Roman BSN, RN  
*Lehigh Valley Health Network*

Amanda M. Tarantino BSN, RN  
*Lehigh Valley Health Network, Amanda\_M.Tarantino@lvhn.org*

Follow this and additional works at: <https://scholarlyworks.lvhn.org/patient-care-services-nursing>



Part of the [Nursing Commons](#)

## Let us know how access to this document benefits you

---

### Published In/Presented At

Benseal, N. Brunner, K. Henne, M. Roman, A. Tarantino, A. (2017, July 28). *Comparing Different Methods of Sick Cell Disease Education for the Pediatric Population in the Emergency Department*. Poster presented at: LVHN Vizient/AACN Nurse Residency Program Graduation, Lehigh Valley Health Network, Allentown, PA.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).



# Comparing Education Methodology in the Emergency Department

Nicole Bensel BSN, RN; Karen Brunner BSN, RN; Michelle Henne BSN, RN; Ashley Romano BSN, RN; Amanda Tarantino BSN, RN

Lehigh Valley Health Network, Allentown, Pennsylvania

## Background/Purpose

- Emergency Department nurses expressed a desire for an increase knowledge of sickle cell disease
- What is the best way to provide education on sickle cell disease? Is a slide presentation the best method?

## PICO

### PICO Question:

When emergency room nurses are educated on Sickle Cell Disease in the pediatric population, does the use of PowerPoint versus video increase the overall retention of information?

- P:** Emergency Department nurses
- I:** Education on pediatric sickle cell disease using a slide presentation
- C:** Education on pediatric sickle cell disease using a video
- O:** Increase nurse retention of information

## Evidence

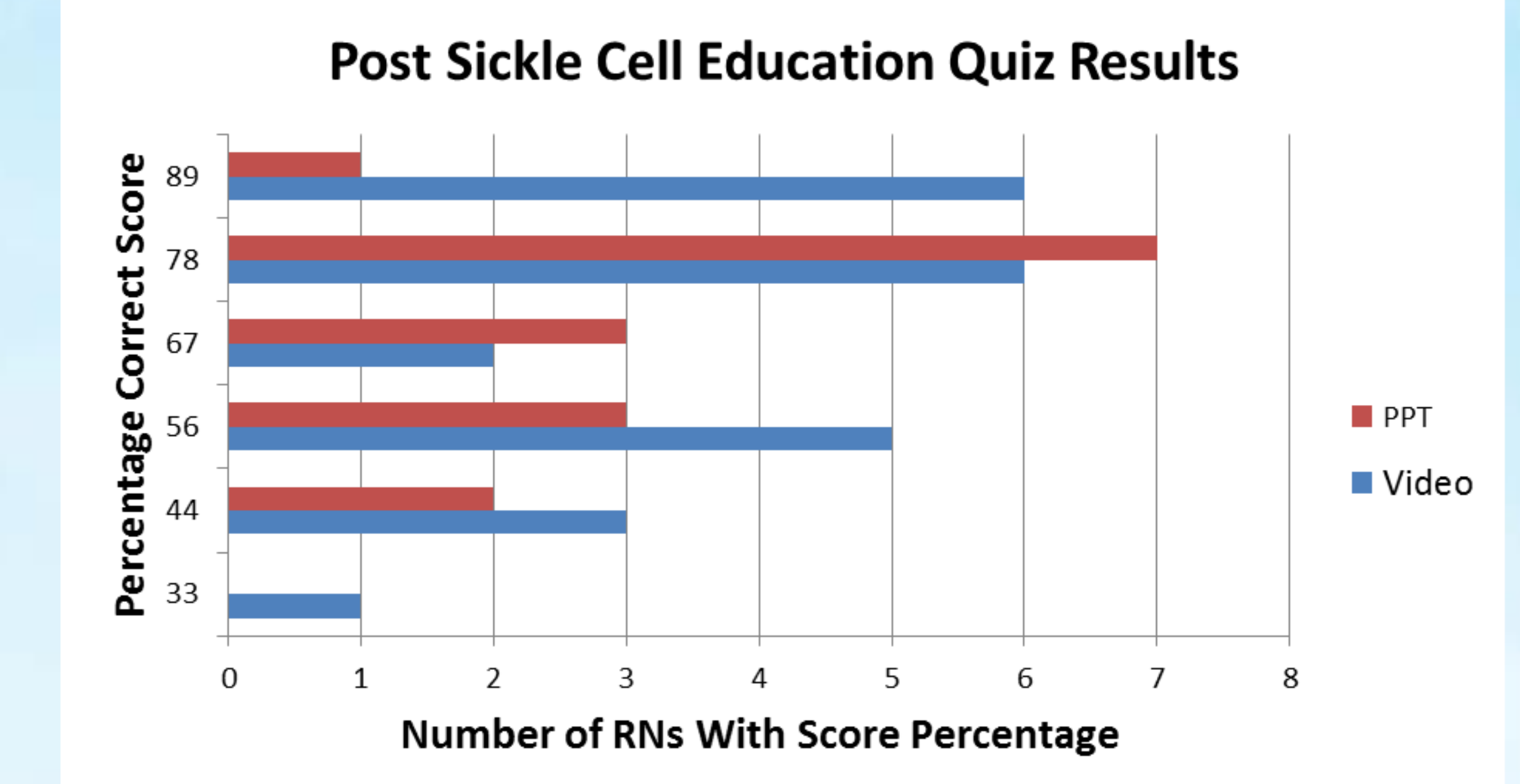
- “PowerPoint presentations rank among the most dreaded presentation platforms” (Spiva et. al 2012)
- Using videos helps to engage viewers and promote critical thinking and decision making (Spiva et. al 2012)
- 4 essential e-learning designs needed to engage the learner (Spiva et. al 2012)
  - Structure, Visual Interest, Emotion, Storytelling
- To increase learner motivation (Spiva et. Al 2012)
  - Grab their attention, Show them why they need to learn, Build their confidence, Bring satisfaction

## Implementation Plans/Method

- Two educational approaches were created on sickle cell disease in children using standard PowerPoint and video. Each education contained the same information. The slide presentation and the video were uploaded into TLC.
- The PowerPoint and video were randomly assigned to the emergency room nurses using The Learning Curve.
- One month following the education a quiz was handed out in person and through email. Nurses were asked which educational method was utilized. The quiz was the same for both methods.

## Results

- Average Post-education Quiz Scores  
PowerPoint: 68.82%      Video: 68.31%
- While the average scores are very close and seem to show little difference in nurse retention, the nurses that were given the video education had higher instances of scoring above 70%
  - 12 Video RNs, 8 PowerPoint RNs
- Limitations:
  - Time between education and quiz was <1 month and not equal for all
  - Not all computers used could play the videos properly
- Future Considerations (Lessons Learned):
  - Easier access to video education opportunities
  - A motivation aspect for the learning topics



### REFERENCES

- Anders, J., Lin, S.M., Steward, S.W., Strouse, J.J., & Whiteman, L.N. Improving quality of care for the sickle cell patients in the pediatric emergency department. *Pediatric Emergency Care*. January 2016;32(1).
- Barrett, D., Hunter, J., Jarrell, N., Johnson, K., Mendoza, I., Robertson, B., & Spiva, L. The effectiveness of nurses' ability to interpret basic electrocardiogram strips accurately using different learning modalities. *Journal of Continuing Education*. 43(2): 81-89. doi: 10.3928/00220124-20111011-02
- Baxter, A.L., Buchanan, G.R., Frei-Jones, M.J., & Rodgers, Z. Vaso-occlusive episodes in older children with sickle cell disease: emergency department management and pain assessment. *Journal of Pediatric Medicine*. 2008;152:281-5.
- Brier, J., Carolyn, M., Haverly, M., Januario, M.E., Padula, C., Tal A., & Triosh, H. Knowing 'something is not right' is beyond intuition: development of a clinical algorithm to enhance surveillance and assist nurses to organize and communicate clinical findings. *Journal of Clinical Nursing*, 24, 832-843. doi: 10.1111/jocn.12870
- Cerrentano, E., Raddin, C., & Tanabe, P. Sickle cell disease management in the emergency department: what every emergency nurse should know. *Journal of Emergency Nursing*. 2011;37:341-5
- Chao, J.H. & Subramaniam, S. Managing acute complications of sickle cell disease in pediatric patients. *Pediatric Emergency Medicine Journal*. November 2016; 13(11)
- Cohn, T. & Thomas, V.J. Communication skills and cultural awareness courses for healthcare professionals who care for patients with sickle cell disease. *Issues and innovations in nursing education*. 2006.
- Delaney, K., Givens, M., Joshi, G., & Rutherford, C. Impact of an emergency department pain management protocol on the pattern of visits by patients with sickle cell disease. *Journal of Emergency Medicine*. 2007;32(3):239-243
- Hanik, S., Hartman, L., & Sackett, K.M. An educational module to improve healthcare staffs' attitudes toward sickle cell disease patients. *Journal for Nurses in Professional Development*. Sep/Oct2014; 30(5): 231-236. (6p)
- Gildengorin, D., & Morris, C.R. Quality improvement initiative to improve emergency department care for pediatric patients with sickle cell disease. *Journal of Clinical Outcomes Management*.
- Olujohungbe, A.D., Parker, N.E., Rees, D.C., Stephens, A.D., Telfer, P. & Wright, J. Guidelines for the management of the acute painful crisis in Sickle Cell disease. *British Journal of Hematology*. 2003, 120(5):744-752.

© 2014 Lehigh Valley Health Network