

East Tennessee State University

Digital Commons @ East Tennessee State University

Appalachian Student Research Forum

2020 ASRF Presentations

Utilizing Medical Simulation as Exposure to Ignite Interest in the Medical Field for High School Students from Rural Appalachia

Morgan Howard

Quillen College of Medicine

Gina Botsko

Quillen College of Medicine

Taylor Harris

Quillen College of Medicine

Follow this and additional works at: <https://dc.etsu.edu/asrf>

Howard, Morgan; Botsko, Gina; and Harris, Taylor, "Utilizing Medical Simulation as Exposure to Ignite Interest in the Medical Field for High School Students from Rural Appalachia" (2020). *Appalachian Student Research Forum*. 2.

<https://dc.etsu.edu/asrf/2020/presentations/2>

This Poster Competitive is brought to you for free and open access by the Events at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Appalachian Student Research Forum by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.



Utilizing medical simulation as exposure to ignite interest in the medical field for High School Students in rural Appalachia.

Gina Botsko, Taylor Harris, and Morgan Howard

East Tennessee State University, Quillen College of Medicine, Center for Experiential Learning



Purpose

- Rural communities suffer from a shortage of healthcare professionals.¹
- One method for recruiting healthcare providers to rural areas is to target students born in the particular region.^{2,3}
- Expose high school students to the myriad of opportunities within the healthcare field while explaining the educational process necessary to reach those goals.

Background

- Create a simulation-based summer camp for local high school students.
- Give students the opportunity to experience the role of a primary healthcare provider.
- Expose students to the multitude of healthcare opportunities to determine in the healthcare field is right for them.



Methods

- Twenty-one students attended a five day camp.
- The camp was facilitated by medical students and undergraduate simulation lab interns.
- Morning sessions focused on instruction and basic skills practice.
- Afternoon sessions involved practicing those skills in simulated healthcare situations.

Daily Focus

- Day 1 – Patient History and Physical Exam
- Day 2 – Respiratory and Cardiovascular System
- Day 3 – Ultrasound, Trauma, CPR, and Healthcare Panel
- Day 4 – Suturing, Phlebotomy, and OB/GYN
- Day 5: Multi-system Integration, Standardized Patient Rounds, and Physician Panel

Data collection

- A survey using the Likert scale was collected before and after the camp to gather information on desire and perceived obstacles to a future in the healthcare field.

Results

Questions	Entrance Survey	Exit Survey
I have had enough exposure to the medical field to know that I am interested or not interested in the field.	19%	52%
If I decide that I want to be a physician, I believe that I am capable of achieving that goal.	52%	67%
If I decide I want to be a physician, I think I know enough about the educational process to pursue that career.	14%	43%
The Simulated Medicine in Action Camp improved my desire to pursue a career in healthcare:		76%
The Simulated Medicine in Action Camp improved my desire to become a physician:		62%
The Simulated Medicine in Action Camp improved my desire to pursue further education:		76%

Conclusion

- The Simulated Medicine in Action Camp provided clarity about the healthcare field and increased interest in becoming a physician.
- Simulated scenarios with standardized patients and synthetic patients is an effective tool to allow students to learn and practice medical skills.
- Programs such as this should be utilized in a greater capacity to boost rural high schoolers interest in the healthcare field, potentially playing a role in alleviating the rural healthcare deficiencies.

References

- ¹Rosenblatt, R. A., & Hart, L. G. (2000). Physicians and rural America. *The Western journal of medicine*, 173(5), 348–351. doi:10.1136/ewjm.173.5.348
- ²Easterbrook, M., Godwin, M., Wilson, R., Hodgetts, G., Brown, G., Pong, R., and Najgebauer, E. (2019). *Rural background and clinical rural rotations during medical training: effect on practice location*. [online] CMAJ. Available at: <http://www.cmaj.ca/content/160/8/1159.short> [Accessed 18 Sep. 2019].
- ³Feldman, Kymm, et al. "The difference between medical students interested in rural family medicine versus urban family or specialty medicine." *Canadian Journal of Rural Medicine*, vol. 13, no. 2, 2008, p. 73+. *Gale Academic Onefile*, Accessed 18 Sept. 2019.