

## Lehigh Valley Health Network LVHN Scholarly Works

---

Department of Emergency Medicine

---

# Incorporating Sex and Gender into Culturally Competent Simulation in Medical Education (Poster).

Gillian A. Beauchamp MD

Lehigh Valley Health Network, [gillian.beauchamp@lvhn.org](mailto:gillian.beauchamp@lvhn.org)

Alyson J. McGregor MD, MA

Esther K. Choo MD, MPH

Basmah Safdar MD

Alexander M. Rosenau DO

Lehigh Valley Health Network, [Alex.Rosenau@lvhn.org](mailto:Alex.Rosenau@lvhn.org)

*See next page for additional authors*

Follow this and additional works at: <https://scholarlyworks.lvhn.org/emergency-medicine>

Part of the [Emergency Medicine Commons](#)

---

### Published In/Presented At

Beauchamp, G. A., McGregor, A. J., Choo, E. K., Safdar, B. Rosenau, A. M., Greenberg, M. R. (2017, September 14-16). *Incorporating Sex and Gender into Culturally Competent Simulation in Medical Education*. Poster Presented at: The 8th Congress of the International Society of Gender Medicine, Miyagi, Japan.

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).

---

**Authors**

Gillian A. Beauchamp MD; Alyson J. McGregor MD, MA; Esther K. Choo MD, MPH; Basmah Safdar MD; Alexander M. Rosenau DO; and Marna R. Greenberg DO, MPH, FACEP

# Incorporating Sex and Gender into Culturally Competent Simulation in Medical Education

Gillian A. Beauchamp, MD<sup>1</sup>, Alyson J. McGregor, MD, MA<sup>2</sup>, Esther K. Choo, MD, MPH<sup>3</sup>,  
Basmah Safdar, MD, MSc<sup>4</sup>, Alex M. Rosenau, DO<sup>1</sup>, Marna R. Greenberg, DO, MPH<sup>1</sup>

<sup>1</sup>Lehigh Valley Health Network/USF Morsani College of Medicine, Allentown, PA, <sup>2</sup>Warren Alpert Medical School of Brown University, Providence, RI, <sup>3</sup>Oregon Health and Science University, Portland, OR, <sup>4</sup>Yale University School of Medicine, New Haven, CT

## BACKGROUND and OBJECTIVES

The medical establishment is increasingly recognizing the importance of incorporating sex and gender-based cultural competence training into medical education. Simulation provides a vehicle to introduce these competencies into the education of medical trainees.

## METHODS:

Using the previously validated Texas Tech University Health Sciences Center Sex and Gender Specific Health (SGSH) PubMed Advanced Search Tool, we reviewed the existing sex and gender-based medical simulation education literature. The Society for Academic Emergency Medicine Sex and Gender Interest Group then collaboratively developed recommendations for the incorporation of these concepts into simulation training.

## RESULTS:

The SGSH PubMed Search resulted in 224 publications which were reviewed by the study authors. Four articles met inclusion criteria for addressing sex and gender aspects of medical simulation and were used to develop SGSH recommendations for medical simulation training. Knowledge-based competency in sex and gender-based medicine involves understanding the relevant key terminology. Attitude-based competencies should include an understanding of tendencies towards bias in patient assessment and care which can be addressed in the self-reflection component of a simulation debrief. Skill-based competencies include communication skills, assessing the social context in which a patient is pursuing medical care, and recognition of gender-based cultural models of health and disease. Strategies for successful implementation of these simulations include sex and gender-focused faculty development, designation of administrative and financial resources, use of both male and female simulation equipment and standardized patients, and scenarios that address sex and gender-based medical care.



**Figure 1. Laerdal SIM Family.** Image used with permission from Laerdal Medical. Originally published: <http://www.laerdal.com/us/LLEAP>.



**Figure 2. CAE Healthcare's Athena™** 'anatomically correct simulator with female proportions and realistic vocalizations'. Image used with permission from CAE Healthcare. Originally published: <http://www.meti.com/eng/patient-simulators/athena>.

**Table 1. Search Terms for the Texas Tech University Health Sciences Center Sex and Gender Specific Health (SGSH) PubMed Advanced Search Tool for Literature Review on Medical Simulation Education.**

SEARCH TERMS
((("sex"[MeSH Terms] OR "sex"[All Fields]) AND based[All Fields]) OR ("sex factors"[MeSH Terms] OR ("sex"[All Fields] AND "factors"[All Fields]) OR "sex factors"[All Fields]) OR ("sex distribution"[MeSH Terms] OR ("sex"[All Fields] AND "distribution"[All Fields]) OR "sex distribution"[All Fields]) OR ("sex characteristics"[MeSH Terms] OR ("sex"[All Fields] AND "characteristics"[All Fields]) OR "sex characteristics"[All Fields]) OR ("sex characteristics"[MeSH Terms] OR ("sex"[All Fields] AND "characteristics"[All Fields]) OR "sex characteristics"[All Fields]) OR ("sex characteristics"[MeSH Terms] OR ("sex"[All Fields] AND "dimorphism"[All Fields]) OR "sex dimorphism"[All Fields]) OR (gender difference[All Fields] OR gender differences[All Fields]) OR ("sex"[MeSH Terms] OR "sex"[All Fields] OR "gender"[All Fields] OR "gender identity"[MeSH Terms] OR ("gender"[All Fields] AND "identity"[All Fields]) OR "gender identity"[All Fields]) AND based[All Fields])) AND (gender[ti] OR sex[ti] OR women[ti] OR female[ti]) AND ("humans"[MeSH Terms] AND English[lang]) AND "simulation"[All Fields])

## CONCLUSIONS:

The early adoption of culturally competent sex and gender-based scenario design by medical educators has the potential to significantly impact both medical training and the provision of empathetic and humanistic care while reducing sex and gender-based healthcare disparities.

© 2017 Lehigh Valley Health Network

610-402-CARE LVHN.org