

The University of Texas at Austin School of Nursing

# **Using Simulation to Combat Racial Health Disparities**

## **Project Overview**

Develop a simulation of a Black female patient to increase awareness and increase sensitivity of students in the BSN program at UT Austin. Statistics as recent as last year show that Black mothers are three times more likely to die both during and after childbirth than their White counterparts. The US boasts the highest maternal mortality rate in the western world, leading other affluent countries like Canada and Australia. Steps to address this disparity which plagues our healthcare system can be taken by increasing the understanding of future health care providers through the use of simulation. In doing so, we hypothesize that students will be empowered and motivated to actively play a role in closing this gap.

## **Project Goals**

- 1. Provide a safe simulated experience for nursing students with a patient of color in an emergent situation by conducting in person or virtual simulation.
- 2. Collect data on learner reactions and responses through their nursing intervention choices with evaluations during simulation experience.
- 3. Identify learner competency gaps related to nursing care of black patients through evaluation of learners during simulation experience.
- 4. Increase learner confidence in providing general nursing care for black female patients measured by pre/post standardized metrics.
- 5. Facilitate learners' self-reflection on behaviors and attitudes towards nursing care of black female patients through standardized pre/post debriefing.

# **Simulation Learning Objectives**

- 1. Identify and address implicit bias within students that will improve patientprovider interactions, health communication, and health outcomes.
- 2. Self reflection on personal and professional bias towards marginalized communities
- Increase awareness and comfort level in treating women of color. 3.
- 4. Utilize clear, concise and comforting patient communication
- 5. High risk preeclampsia population considerations
- 6. Understand pathophysiology of pregnancy induced hypertension
- 7. Interpret signs of preeclampsia in physical findings and lab values
- 8. Relate indications for ordered medications to pathophysiology, assessment findings, and vital sign changes
- 9. Interpret pain assessment findings & advocate for pain management.
- 10. Patient education on condition, medication, and complications of pregnancy hypertension

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Black women are 3 times as likely to die from pregnancy-related complications.

Data shows that in comparison to their Caucasian counterparts..... Black women are more likely to experience hemorrhage and hypertensive disorders of pregnancy.

Black women's heightened risk of pregnancy-related death spans income and education levels.

**Black infants** have twice the risk of death in the first year.

- Literature and research review 2.
- Development of objectives and outcomes
- Simulation scenario timeline and character scripted
- Selection of debriefing tool PEARLS
- Student Simulation Effectiveness Survey© (SES) Tool completed 6.

# **Next Steps**

- Pre/Post assessment tool development Debriefing lesson plan development Faculty advisor review and approval of scenario School of Nursing Simulation committee review and approval Pilot scenario with volunteer nursing students Review pre assessment and post assessment data for

- revisions.

Abdou, C. M., & Fingerhut, A. W. (2014). Stereotype threat among Black and White women in health care settings. Cultural Diversity and Ethnic Minority Psychology, 20(3), 316-323. http://dx.doi.org/10.1037/a0036946

Bajaj, K., Meguerdichian, M., Thoma, B., Huang, S., Eppich, W., & Cheng, A. (2018). The PEARLS Healthcare Debriefing Tool. Academic Medicine, 93(2), 336-336. https://doi.org/10.1097/ACM.000000000002035

Gur, R. E., White, L. K., Waller, R., Barzilay, R., Moore, T. M., Kornfield, S., Njoroge, W. F.M., Duncan, A. F., Chaiyachati, B. H., Parish-Morris, J., Maayan, L., Himes, M. M., Laney, N., Simonette, K., Riis, V., & Elovitz, M. A. (2020). The Disproportionate Burden of the COVID-19 Pandemic Among Pregnant Black Women. Psychiatry Research, 293, 113475. https://doi.org/10.1016/j.psychres.2020.113475

Levine, L. D., Lewey, J., Koelper, N., Downes, K. L., Arany, Z., Elovitz, M. A., Sammel, M. D., & Ky, B. (2019). Persistent cardiac dysfunction on echocardiography in African American women with severe preeclampsia. Pregnancy Hypertension, 17, 127-132. https://doi.org/10.1016/j.preghy.2019.05.021

Leighton, K., Ravert, P., Mudra, V., & Macintosh, C. (2015). Updating the Simulation Effectiveness Tool: Item Modifications and Reevaluation of Psychometric Properties. Nursing Education Perspectives, 36(5), 317-323. https://doi.org/10.5480/15-1671

Mehra, R., Boyd, L. M., Magriples, U., Kershaw, T. S., Ickovics, J. R., & Keene, D. E. (2020). Black Pregnant Women "Get the Most Judgment": A Qualitative Study of the Experiences of Black Women at the Intersection of Race, Gender, and Pregnancy. Women's Health Issues. https://doi.org/10.1016/j.whi.2020.08.001

Wallace, M., Green, C., Richardson, L., Theall, K., & Crear-Perry, J. (2017). "Look at the Whole Me": A Mixed-Methods Examination of Black Infant Mortality in the US through Women's Lived Experiences and Community Context. International Journal of Environmental Research and Public Health, 14(7), 727. https://doi.org/10.3390/ijerph14070727

### **Completed Steps:**

Faculty advisement

### **Literature Review**

Center for Disease Control and Prevention. (2019). Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths. Https://Www.Cdc.Gov/Media/Releases/2019/P0905-Racial-Ethnic-Disparities-Pregnancy-Deaths.Html https://www.cdc.gov/media/releases/2019/p0905racial-ethnic-disparities-pregnancy-deaths.html

McLemore, M. R., Altman, M. R., Cooper, N., Williams, S., Rand, L., & Franck, L. (2018). Health care experiences of pregnant, birthing and postnatal women of color at risk for preterm birth. Social Science & Medicine, 201, 127-135. https://doi.org/10.1016/j.socscimed.2018.02.013

National Partnership for Women and Families. (2018). Black Women's Maternal Health. Black Women's Maternal Health: https://www.nationalpartnership.org/our-work/health/reports/black-womens-maternal-health.html

RACE LITERACY QUIZ. (2003). http://newsreel.org/guides/race/quiz.htm The US medical system is still haunted by slavery [Video]. (2018). https://www.youtube.com/watch?v=IfYRzxeMdGs Undergrad- Explores hx of racism in US medical system