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Qatar Health 2021 Conference

Effective continuing interprofessional healthcare education to improve sepsis care in a tertiary children and women's hospital in the State of Qatar *"Culture of think sepsis"*

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ABSTRACT

Background: Sepsis is a medical emergency and a global economic and health burden. It is one of the leading causes of death worldwide with 1 death every 2.8 seconds and represents 20% of all deaths worldwide^{1,2}.

Sidra Medicine, the only pediatric tertiary care centre in the State of Qatar, in collaboration with Qatar's Ministry of Public Health, Hamad Medical Corporation (HMC), and Hamad Healthcare Improvement Institute (HHQI) share the national goal of reducing mortality due to sepsis and septic shock through an increase in healthcare provider compliance to the sepsis six bundle of care from 0% to 95% by the end of 2022.

Methods: A multifaceted, interdisciplinary, comprehensive education and training program was designed and provided to healthcare practitioners across Sidra and comprised:

- Pre-implementation education
- Multidisciplinary education sessions and workshops
- Train-the-trainer nurse educator workshop
- Bedside interdisciplinary simulation-based education
- Sepsis case discussions during morning reports, academic activities, grand rounds, and morbidity and mortality meetings
- Annual Qatar National Sepsis Symposium
- September Sepsis-Awareness Month
- Pediatric and women sepsis e-learning module
- National Patient Safety Collaborative (NPSC) training sessions and storyboards in collaboration with the Institute for Healthcare Improvement (IHI) and HHQI

In addition, sepsis pathway posters, think-sepsis booklets and pocket cards, antibiotic preparation and administration cards, and family education materials in Arabic and English were produced and utilized.

Results: Improved sepsis awareness and education was observed. 95% of providers successfully completed the e-learning module (Figure 1). Compliance to the sepsis six bundle of care subsequently reached 81%. Sepsis mortality rate was 1.8% in the first two quarters of 2020 which is well below international mortality rates.

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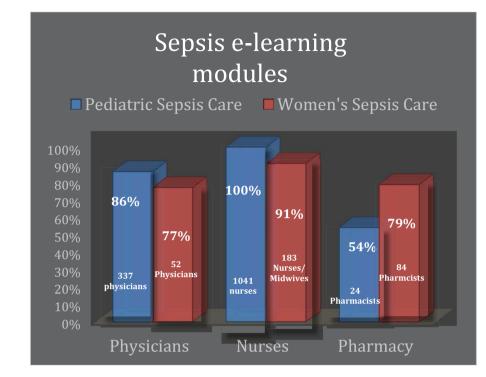


Figure 1. Staff compliance in completing the sepsis e-learning modules

Conclusion: Since 2018, Sidra Medicine embraced sepsis education and care through a national evidence-based sepsis guideline for early recognition and treatment ³ which is positively reflected in low sepsis mortality rates for 2020.

Keywords: think sepsis, children & women, sepsis six, clinical pathways, antibiotic algorithm

Ethical approval/IRB statement: This study was approved as a quality improvement project by the Sidra Medicine Chief Medical Officer and the Quality Improvement Director. **Disclosures and acknowledgements:** The authors have no conflict of interest to declare.

REFERENCES

- [1] Zick M. The Lancet: Sepsis Associated with 1 in 5 Deaths Worldwide, Double Prior Estimates Children and Poor Regions Hit the Hardest [Internet]. World Sepsis Day; 2020 [cited 2020 Nov 2]. Available from: https://www.worldsepsisday.org/news/2020/1/16/the-lancet-sepsis-associated-with-1-in-5-deaths-worldwidedouble-prior-estimates-children-and-poor-regions-hit-hardest-global-burden-disease-study-kristina-rudd
- [2] Rudd KE, Johnson SC, Agesa KM, Shackelford KA, Tsoi D, Kievlan DR, et al. Global, regional, and national sepsis incidence and mortality, 1990-2017; analysis for the Global Burden of Disease Study. *Lancet*, 395(10219):200-211.
- [3] Ministry of Public Health Qatar. National Clinical Guidelines. The Diagnosis & Management of Sepsis [Internet] [cited 2020 Nov 2]. Available from: https://www.moph.gov.qa/_layouts/download.aspx?SourceUrl=/Admin/Lists/Clinical-GuidelinesAttachments/Attachments/66/The%20Diagnosis%20and%20Management%200f%20Sepsis.pdf