Multi-modal Curriculum to Teach Rare, Life-threatening Obstetrical Emergencies

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Introduction: EM residency experiences in high-risk Obstetrical situations are limited. The majority of our residents have never participated in a live, high-risk delivery. A focused curriculum using multi-modal learning strategies was developed to address these deficiencies.

Educational Objectives: To identify high-risk OB situations pertinent to the practice of EM and to develop a sustainable curriculum to teach cognitive and technical skills related to these rare situations.

Curriculum Design: Post-partum hemorrhage, shoulder dystocia, newborn resuscitations and compound presentations were identified as high-risk situations. Relevant milestones were mapped to the curriculum. Instructional materials (lectures, video-podcasts and scripted simulated cases) and assessment tools (skills checklists and an MCQ test) were created. Residents attended traditional lectures and viewed videos in the month prior to the 5-hour workshop. The value of this experience was evaluated.

Impact: Residents participated in the longitudinal experience. Residents demonstrated competency in identification and management of high-risk conditions and the technical skills required to manage these conditions. Average MCQ scores rose 18% with less than expected improvement due to the pharmacology section alone. Residents uniformly valued this process and felt it should be an annual opportunity.

Conclusion: High-risk OB deliveries are a rare; competency in this area is critical requiring a multi-faceted learning strategy. A deficiency in knowledge of post partum hemorrhage pharmacotherapy was significant and not well addressed in this longitudinal experience. Future emphasis on the importance of resource utilization during critical events should be added. These educational materials and simulation cases are easily reproducible and modifiable for future use. We suggest this model of collaborative multi-faceted, education strategy to teach other rare cross-disciplinary high-risk events.