Poor understanding of anesthesiologist's role during labor may affect maternal and fetal outcomes

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Today, one in four or five women in Ontario will give birth through a cesarean or "C-section." A new study, led by researchers from St. Michael's Hospital and The Wilson Centre for Research in Education and the Department of Anesthesia, University of Toronto, has found that many labour and delivery health professionals lack a clear understanding of the anesthesiologist's role as a physician with specialized skills in the management of seriously unwell pregnant patients. This role misperception may affect the quality of care delivered to mothers and their babies.

"Anesthesiologists are pivotal in so many areas of the hospital, yet their work and expertise are not well understood, especially in labour and delivery settings," said Dr. Saroo Sharma, Currie Fellow at The Wilson Centre and resident physician at the Department of Anaesthesia, University of Toronto and lead investigator of the study. "This study is the first-of-its-kind that explores specifically how anesthesiologists and their labour and delivery colleagues perceive the anesthesiologist's role, and the potential impact of these perceptions on interprofessional dynamics and team collaboration in labour and delivery."

The study, co-supervised by Dr. Patricia Houston, vice-president of education at St. Michael's Hospital, and Dr. Scott Reeves with the Li Ka Shing Knowledge Institute of Michael's Hospital and The Wilson Centre, was recently presented at the first International Conference on Faculty

Development in the Health Professions in Toronto at St. Michael's Hospital.

Health providers in the labour and delivery units at two urban teaching hospitals in Toronto were interviewed. Participants (ranging from midwives, nurses and obstetricians, as well as anesthesiologists, all with different levels of experience) were asked a series of in-depth questions to determine their understanding of the anesthesiologist's role during labour and delivery, the anesthesia process, and the type and amount of education and training they had received around anaesthesia management.

On analysis of the data, a number of important themes emerged:

- Lack of understanding of the complexity of the anesthesia process during labour and delivery. While midwives, nurses and obstetricians appreciated the role of their anesthesiologist colleagues, particularly in the provision of labour pain relief and anesthetics for C-sections, many reported that their understanding of the actual process of anesthesia and its potential complications, were limited. This was echoed by the anesthesiologists in the study who reported that epidurals and other anesthetic interventions were seen merely as 'technical' activities, rather than potentially complex medical care.

- Lack of training about anesthesia: Many nurses and midwives received little formal training about the anesthesia process in school or during their clinical placements. Similarly, most obstetricians had very little postgraduate exposure to formal anaesthesia training. The study also revealed that opportunities for structured communication between all labour and delivery health professionals (ex. to discuss cases or to debrief after an

adverse event) were infrequent and therefore, a missed opportunity for team learning and quality improvement.

- Anesthesiologist's membership in the labour and delivery 'team': Nurses, midwives, obstetricians and other members of the obstetrical team spend countless hours with the patient throughout the entire labouring process. In comparison, the study found that the anesthesiologist had less involvement in decision-making processes, even when they could have had useful and important input into a patient's care, particularly during obstetric emergencies. The study found that this misunderstanding and the often peripheral position of the anesthesiologist on the team, led to isolation of the anesthesiologists in their work, which had implications for effective communication, collaboration and the safe delivery of care.

- Imbalances and tensions between health professionals: The study found that some engrained stereotypes and historical tensions were present between different health professions. Instances of hesitation to question other professionals about decisions related to patient care were sometimes borne out of fear, or were due to inadequate training and knowledge. In other instances, participants described situations where the anesthesiologist assumed that colleagues had the proper experience and skills to provide anesthetic assistance in an emergency. When it was found that they did not, most of the anesthesiologists studied tended to revert to a strategy of 'self-sufficiency' rather than being vocal about their need for adequate assistance.

"This study tells us that as health professionals, we have an immense amount of work to do in order to build a culture of true interprofessional teamwork and to provide the necessary training and supports to ensure that we deliver the best possible patient care, "

Dr. Sharma added.

Provided by St. Michael's Hospital