Starting with the intensive coronary care units (ICUs) in the early 1970s and the respiratory care units in the mid 1970s, critical care medicine has come a long way in India, to emerge as a specialty in its own right. Presently, several centers provide critical care facilities not only in large metros but also in smaller cities and even small towns; these are run by the corporate sector, charitable institutions/societies and the government sector. However, only a few of these centers are accessible to pregnant women. Even then, pregnant and postpartum women form up to 7% of admissions in Indian intensive care units (ICUs), especially in public hospitals. Even though obstetric patients constitute a considerable proportion of patients admitted to intensive ICUs, sparse data are available from developing countries regarding the critical care perspective of pregnant women. Critical care in obstetrics still remains a neglected area, especially in developing countries like India.

Several disease-severity-scoring systems have evolved for predicting mortality in ICU patients. Acute physiology and chronic health evaluation (APACHE), simplified acute physiology score (SAPS) and mortality probability models (MPMs) are some of the scoring systems that are commonly used for objectively assessing the clinical status and severity of disease of critically ill patients. Given this scenario, the study authored by Tempe et al. is unique in that it attempts to provide a retrospective review of the utility of SAPS II for predicting maternal mortality in obstetric patients admitted to a multidisciplinary ICU at a tertiary care center in a teaching hospital in New Delhi, India. They have observed that maternal mortality in obstetric ICU admissions was 1.15/1,000 deliveries, and the mean SAPS II was significantly higher (40.04 ± 12.97 vs. 22.6 ± 7.31; P < 0.001) in those patients who died compared to survivors. The authors suggest that computation of SAPS II score as a routine in obstetric patients admitted to the ICU may help in identifying those at high risk of mortality so that an attempt may be made to reduce this risk.

These scoring systems were tested, refined and validated in the developed world, mainly in the American and European ICUs, in non-pregnant patients to predict adverse outcomes based on data available in the first 24 h of admission. ICUs from the Indian subcontinent seldom ever participated in these studies. Critical-illness-scoring systems require modification for obstetric patients to adjust for the normal physiologic responses to pregnancy. Evidence is also available suggesting that the critical care issues in obstetric patients in India are different from those observed in patients in western countries. For example, studies from India and Sri Lanka have shown that rheumatic valvar heart disease, malaria and viral hepatitis are important reasons for ICU admission during pregnancy and are also significant causes of maternal mortality. Therefore, several factors such as differences in the case mix, variations in the extent of prenatal care, delays in reaching the tertiary care hospital, differences in the severity of illness and limited availability of ICU beds should be kept in mind while interpreting studies of this nature.

The paper by Tempe et al. suggests that SAPS II scoring system appears to be one such model which has the potential to either be customized or used as a prototype to develop locally appropriate severity-scoring systems for predicting mortality in critically ill obstetric patients in India. Multicentric studies with a larger sample size are required from India to validate the observations documented in the study reported by Tempe et al. Given the large number of teaching hospitals attached to medical colleges in India that are equipped with ICUs, the issue of evolving and validating a new scoring system or a modified version of existing systems such as SAPS II appears to be a feasible prospect.

REFERENCES
CLOSED-SYSTEM SUCTIONING:

Another benefit of closed-end suctioning is the limitation of contamination. The infectious agents, such as bacteria or viruses, may be transferred from the suction catheter to the patient during suctioning if the catheter is not completely removed from the patient's airway before the suctioning process. This is known as “catheter exchange syndrome.”

The disadvantages of closed-suctioning systems include an increased risk of over- or under-suctioning, as the clinician cannot see the suctioned material. However, these potential advantages have not been shown to translate into clinically meaningful improvements, with several recent meta-analyses demonstrating no benefit of closed-suctioning systems.

However, the debate is clearly still open on this topic. In first-world ICUs, with adequate staffing and resources, the benefits may far outweigh the risks. However, in developing countries where resources are limited, the debate may be more complex.

In conclusion, closed-end suctioning should perhaps be broadened from the single patient to the wider ICU population. However, more research is needed to fully understand the benefits and risks of this practice.

REFERENCES


ALLADI MOHAN, SRINIVAS BOLLINENI*
The Division of Pulmonary and Critical Care Medicine, Department of Medicine, Sri Venkateswara Institute of Medical Sciences, Tirupati, Andhra Pradesh, India, *Department of Internal Medicine, St. Luke’s Hospital, Chesterfield, MO, USA.

E-mail: alladimohan@rediffmail.com