**Editorial** 

## **Obstetrics and Gynecology Intensive Care**

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The intensive care unit (ICU) or critical care unit (CCU) is a specialized unit in a healthcare facility dedicated to the provision of care for patients who are ill from critical conditions from which there is potential for recovery. The goal of the ICU is to prevent morbidity and mortality among patients who are at high risk through the provision of critical care. Patients admitted to the ICU are offered more detailed observation, monitoring, and treatment as compared to the care available to patients admitted to the standard lying-in wards or departments.<sup>1,2</sup>

In Indonesia, there were 305 maternal deaths per 100,000 live births in 2015. In 2020, this figure dropped to 189 per 100,000 live births. Indonesia has a substantially higher Maternal Mortality Ratio (MMR) compared to other countries in Southeast Asia.<sup>3</sup> World Health Organization (WHO) declared in 2015 that the maternal mortality rate must continue to decrease or be lowered to 105 per 100,000 live births to meet the Sustainable Development Goals (SDGs).<sup>4</sup>

Obstetric and gynecologic intensive care demands a nuanced understanding of both the physiological complexities of pregnancy and the intricacies of gynecologic conditions. Obstetric medicine is different from the general medicine because of the various physiological changes occurring in pregnancy, and only an experienced obstetrician who has good knowledge of obstetric medicine can interpret and understand complex conditions in pregnancy. The percentage of obstetric and gynecologic population requiring admission to the ICU is different in different countries based on the socioeconomic status, criteria for ICU admission, availability of ICU beds, and availability of a high dependency unit. It ranges from 0.08 to 0.76 % of deliveries in developed countries and 0.13 to 4.6 % in developing countries. The mortality in these patients is high and ranges from 0 to 4.9 % of ICU admissions in developed and 2–43.63% in developing countries. Hypertensive disorders and obstetric hemorrhage are the two the commonest risk factors for ICU admission. The other risk factors are sepsis, cardiac disease, and severe anemia.<sup>5,6</sup>

Indication for Intensive Care Unit (ICU) admission may be elective, such as a planned admission for maternal congenital heart disease, or emergency, such as an admission for postpartum hemorrhage or acute respiratory failure. Women who become acutely unwell during pregnancy, labour and the postnatal period should have immediate access to critical care, of the same standard as other sick patients, irrespective of location. Admission to an ICU has recently been identified as: a marker of severe maternal morbidity by the American College of Obstetrics and Gynecology (ACOG). ICU admission remains rare for obstetric subjects in high-income countries, accounting for less than 1% of ICU admissions.<sup>7,8</sup>

A multidisciplinary team approach including obstetrician and intensivist is appropriate in obstetric and gynecologic critical care settings. Setting up of obstetric and gynecologic intermediate care units can lessen the burden. In addition to good antenatal care, timely referral, health education, training of health professionals, and investment in critical care infrastructure (e.g. oxygen supply chains, mechanical ventilation, blood banking) may improve clinical outcome and better obstetric practice, especially in developing country. In conclusion, "Obstetrics and Gynecology Intensive Care" represents a concerted effort to illuminate the complexities of intensive care in women's health.<sup>9,10</sup>

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