

# Decoding perinatal deaths: A three-year retrospective review at Hospital Sultan Idris Shah, Serdang

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## ABSTRACT

**Objective:** To highlight leading causes of perinatal mortality using Wigglesworth pathophysiological classification and to also understand the maternal, placental and fetal factors contributing to it. **Materials and Methods:** This retrospective study analyses perinatal deaths over the past three years (2022-2024) using descriptive statistics. The inclusion criteria were stillbirths and early neonatal deaths after 22 weeks of completed gestation and or birthweight >500 grams. **Results:** During the study period, total births were 21,939. The PMR was calculated for each year in the study period, with values of 10.6 in 2022, 11.9 in 2023, and 12.8 in 2024. The leading cause of perinatal death was immaturity (60%), followed by lethal congenital anomalies (15%), normal macerated stillbirths (13%), other specific conditions (7.5%), and perinatal asphyxia (4.1%). Among the premature group, 9.1% had cervical length screening and among whom 26.3% were treated with Arabin pessary or cervical cerclage. Among lethal congenital anomalies, 31.9% had termination of pregnancy, and 68.1% continued with their pregnancy. Among those who did not perform termination, 11.3% had no anomaly scan done, 19.4% were due to late presentation, and 17.7% were not keen. Maternal comorbidities, including diabetes (19%), hypertension (13.5%), and obesity (12.9%), within the macerated stillbirths. In growth-restricted fetuses, 25.2% had more than 2 risk factors, and 37.9% of mothers were on aspirin. **Conclusion:** Improving outcomes requires addressing preventable factors such as prematurity, fetal growth restriction, and maternal comorbidities. Enhanced prenatal assessments, including the use of ultrasound, continue to offer opportunities for earlier detection and intervention.