

Table (1): Demographic data and diagnosis of the studied patients

| Total no. = 170 | No. (%) | Range | Mean ± SD | Median (IQR) |
|-----------------------------------|-----------------------|--------------|------------------|---------------------|
| *GA (weeks) | | 28 – 36 | 34.20 ± 1.87 | |
| Weight (kg) | | 0.8 – 3.6 | - 2.17 ± 0.46 | |
| Age on admission (days) | | 1 – 22 | | 1 (1 – 4) |
| Total Hospital stay (days) | | 3 – 20 | | 10 (7-13) |
| Sex | Male | 93 (54.7%) | | |
| | Female | 77 (45.3%) | | |
| Mode of Delivery | Vaginal | 74 (43.5%) | | |
| | *C. S | 96 (56.5%) | | |
| Diagnosis | *R. D | 102 (60.0%) | | |
| | Sepsis | 90 (52.9%) | | |
| | *N. J | 69 (40.6%) | | |
| | Preterm growers | 50 (29.4%) | | |
| | *HDN | 3 (1.8%) | | |
| | *N. Seizures | 1 (0.6%) | | |
| Feeding | Breast feeding | 114 (69.5%) | | |
| | Artificial feeding | 50 (30.5%) | | |
| Inotrope | *1 st line | 11 (26.2%) | | |
| | *2 nd line | 31 (73.8%) | | |
| Antibiotics | *1 st line | 135 (79.4%) | | |
| | *2 nd line | 20 (11.8%) | | |
| | *3 rd line | 5 (2.9%) | | |
| Ventilation | No | 70 (41.2%) | | |
| | Yes | 100 (58.2%) | | |
| Complications | No | 77 (45.3%) | | |
| | Yes | 93 (54.7%) | | |
| Outcome | Survived | 162 (95.3%) | | |
| | Died | 8 (4.7%) | | |

*Number & percent for sex, mode of delivery, type of feeding, type of inotrope, type of antibiotics, ventilation, diagnosis, complications, total hospital stay and outcome.

*Median (IQR) for non-parametric data.

*Mean (SD) for parametric data.

*Abbreviations: *GA: Gestational age. *CS: Cesarean section *RD: Respiratory Distress. *N. J: Neonatal jaundice. *HDN: Hemorrhagic disease of newborn. *N. seizures: Neonatal seizures. 1st line of inotrope: Dopamine. *2nd line of inotrope: Dopamine + Dobutamine. *1st line of antibiotics: Ampicillin+ Gentamicin. *2nd line of antibiotics: Meropenem + Vancomycin. *3rd line of antibiotics: Amikacin, Cefotaxime, clindamycin, cefoperazone, fluconazole, Amoxicillin/clavulanic acid, Azithromycin, Ciproflaxacin, Teicoplanin.

Table (2): Comparison of HeRO score in patients with initial sepsis than non-septic patients

| Item | | Non-septic patients n= 101 | Initial septic patients n= 69 | Test value \neq | P-value |
|---------------|-----------------------|-------------------------------|----------------------------------|-------------------|---------|
| HeRO score D1 | Median (IQR) Range | 1 (0 – 1) 0 – 4 | 2 (2 – 3) 1 – 5 | -10.755 | <0.001 |
| HeRO score D4 | Median (IQR) Range | 0 (0 – 1) 0 – 5 | 2 (1 – 2) 0 – 5 | -6.687 | <0.001 |

HeRO: Heart Rate Observation, P-value > 0.05: Non -significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant \neq : Mann-Whitney test

Table (3): Cut off point, AUC, sensitivity, and specificity for HeRO score for D1 and D4

| Variables | Cut off point | AUC | Sensitivity | Specificity | +PV | -PV |
|---------------|---------------|-------|-------------|-------------|------|------|
| HeRO Score D1 | >1 | 0.969 | 92.75 | 98.02 | 97.0 | 95.2 |
| HeRO Score D4 | >1 | 0.789 | 65.22 | 85.15 | 75.0 | 78.2 |

HeRO: Heart Rate Observation, AUC: area under curve, PV: predictive value

Table (4): Comparison of HeRO score for development of sepsis

| Item | | Groups | | Test value \neq | P-value |
|---------------|--------------|-----------------------------------|----------------------------|-------------------|---------|
| | | Did not develop sepsis n = 149 | Developed sepsis n = 21 | | |
| HeRO scoreD4 | Median (IQR) | 1 (0 – 2) | 2 (1 – 2) | -3.577 \neq | <0.001 |
| | Range | 0 – 5 | 1 – 5 | | |
| HeRO scoreD7 | Median (IQR) | 0 (0 – 1) | 2 (1 – 3.5) | -4.079 \neq | <0.001 |
| | Range | 0 – 5 | 0 – 4 | | |
| HeRO scoreD13 | Median (IQR) | 0 (0 – 1) | 1.5 (0 – 3) | -2.618 \neq | 0.009 |
| | Range | 0 – 5 | 0 – 5 | | |

HeRO: Heart Rate Observation, P-value > 0.05: Non-significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant \neq : Mann-Whitney test,

Table (5): cut off point, AUC, sensitivity, and specificity for HeRO score for D4, D7 and D13 for the development of sepsis

| Variables | Cut off point | AUC | Sensitivity | Specificity | +PV | -PV |
|----------------|---------------|-------|-------------|-------------|------|-------|
| HeRO Score D4 | >0 | 0.731 | 100.00 | 41.61 | 19.4 | 100.0 |
| HeRO Score D7 | >0 | 0.768 | 90.00 | 55.56 | 27.3 | 96.8 |
| HeRO Score D13 | >0 | 0.704 | 72.22 | 61.11 | 48.1 | 81.5 |