"CORRELATION OF CLINICAL RISK INDEX FOR BABIES (CRIB II) SCORE WITH MORTALITY IN PREMATURE BABIES – ONE YEAR HOSPITAL BASED OBSERVATIONAL STUDY"

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LIST OF ABBREVIATIONS

APACHE	-	Acute Physiology and Chronic Health Evaluation
AUC	-	Area under receiver operating characteristics curve
CRIB	-	Clinical Risk Index for Babies
CRIB – II	-	Clinical Risk Index for Babies, Version II
EDD	-	Estimated date of delivery
FiO2	-	Fractional inspired oxygen
LAMA	-	Left against medical advice
LMP	-	Last menstrual period
NICU	-	Neonatal intensive care unit
NMR	-	Neonatal Mortality Rate
PMR	-	Perinatal Mortality Rate
PSI	-	Physiologic Stability Index
ROC	-	Receiver operating characteristics
SNAP	-	Score for Neonatal Acute Physiology
SNAP – II	-	Score for Neonatal Acute Physiology, Version II
SNAP-PE	-	Score for Neonatal Acute Physiology, Perinatal Extension
SNAPPE – II	-	Score for Neonatal Acute Physiology, Perinatal Extension, Version II
VLBW	-	Very low birth weight
WHO	-	World Health Organization

ABSTRACT

Background and objectives

Every year, 15 million babies are born prematurely. Many attempts are underway to minimize preterm births, including identifying risk factors and improving maternal care. In 2019, 2.4 million neonates died globally, representing half of all deaths in children under five. Estimating mortality risk is useful for quality control, management and resource allocation. A scoring system like Clinical Risk Index for Babies (CRIB) II score can be used early after hospitalisation, easy to use for the defined population for which it is appropriate and predicts mortality. The efficiency of the mortality predicting scores vary between populations requiring external validation is essential. The present study was undertaken to correlate the CRIB II score with mortality and length of hospital stay in premature babies.

Materials and methods

This observational study was conducted from January 2020 to April 2021 in the Department of Paediatrics, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi. A total of 128 babies between ≥28 - 34 weeks of gestation were studied. Maternal and neonatal data was collected in a structured proforma. The CRIB II scores were assigned based on their birth weight, gestational age, gender, base deficit and admission temperature. CRIB II score was categorized into four levels. Score was correlated with day seven outcome and duration of hospital stay. The data was analyzed using SPSS V25. Chi-square test, independent t-test and Karl Pearson correlation were used.

Results

During the study period 128 subjects were analyzed. Fifty percent of the mothers were between 20-30 years and had education above the level of secondary. Around 70.5% were primi and majority delivered by cesarean section. No statistical difference noted in terms of gender, gestational age, birth weight and birth place between babies who survived and those did not survive. Non-survivors had high mean CRIB II score of 5.80 ± 3.425 compared to 2.78 ± 2.823 in survivors (p=0.009). There were 50% of non-survivors who had level II score while 80.5% survivors had level I score. As the level increased, there was increase in mortality risk (p=0.01). Individual variables like gestational age, admission temperature and base excess were able to predict outcome on day seven. P value of gestational age, admission temperature and base excess was 0.02, 0.001 and 0.002 respectively. With CRIB II cut-off score value of five, the sensitivity, specificity, positive predictive value, negative predictive value and accuracy were 80%, 75.42%, 21.62%, 97.8% and 75.78% respectively. Area under the receiver operating characteristic curve for CRIB II score was 0.747 (p=0.010). The CRIB II score model is accurate enough to predict the outcome of the neonates. Babies with level I CRIB II score had 14.56 ± 8.88 mean duration (days) of hospital stay that is less than the mean 21.61 ± 14.34 for level II, which was statistically significant (p=0.002). Positive correlation between CRIB II score and duration of hospital stay was observed (p=0.001).

Conclusion

This simple mortality scoring system, which does not need extensive investigations can be used to allocate resources in neonatal intensive care unit, to reduce neonatal mortality rate and achieve better neonatal outcome.

Keywords

CRIB II, mortality, prematurity, scoring system

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INTRODUCTION

Preterm is defined by the World Health Organization as a baby born alive before the 37th week of pregnancy. Premature birth affects 15 million newborns each year. In 2019, 2.4 million newborns died around the world, accounting for 47% of all fatalities in children under the age of five[1]. Many initiatives are being undertaken to reduce preterm births, including identifying risk factors and increasing the quality of care provided to mothers throughout pregnancy. Despite advances in perinatal and neonatal care, preterm problems still account for more than a third of neonatal deaths, making them the top cause of mortality. To develop strategies to reduce infant mortality, it is vital to understand the causes and factors contributing to infant mortality[2].

Scoring and risk prediction systems help to diagnose and stratify neonates at risk[3]. The neonatal intensive care unit (NICU) must assess the severity of the newborn illness to predict prognosis. Estimating mortality risk provides valuable information for quality assurance, management studies, and resource allocation.

To estimate mortality risk many risk predictions scores were developed and following are some of the scores that are widely used. The Score for Newborn Acute Physiology (SNAP), SNAP-Perinatal extension (SNAP-PE), Clinical Risk Index for Babies (CRIB), and other indicators of newborn illness severity are used to predict death. Clinical Risk Index for Very Low Birth Weight (VLBW) newborns was developed before surfactant usage became common. To evaluate a single or group of NICUs, the first-generation CRIB score proved helpful. It was valid for VLBW in the first 12 hours, and their respiratory condition[4].

The CRIB II score is a validated assessment of initial mortality risk and disease severity within one hour of admission. It is a simplified scoring system that does not contain subjective parameters like fractional inspired oxygen (FiO2) and congenital anomalies. It is less time-consuming, less affected by perinatal factors and has five variables[5].

Fleisher et al proposed the following ideal features for a scoring system which can be easily used and applied early after hospitalization. Score should describe the group for which it is applicable and to be able to predict mortality, morbidity or costs for interventions[6].

The CRIB II score is easy to compute and may be used to detect high-risk neonates, audit neonatal units, and provide a standardized death rate for neonatal unit performance comparison. Higher scores imply a bad prognosis and can be utilized in all birth weight neonates. The score is mostly determined by the baby's state at birth rather than the intervention used.

Because the efficacy of predictive scores differs when applied to diverse populations, external validation is required. Rastogi et al. found that CRIB II performed better than the CRIB score at the precise center for predicting death in preterm newborns in India[7].

There are few Indian studies on CRIB II score, therefore plan to undertake this study to correlate CRIB II score in the first hour after admission with mortality in preterm neonates and length of hospital stay.

OBJECTIVES

PRIMARY

1. To find out relation between CRIB II score in first one hour of admission with 7-day neonatal mortality.

SECONDARY

1. To correlate between CRIB II score and length of hospital stay.

REVIEW OF LITERATURE

Infant mortality rates are often regarded as a proxy for the population's overall health. There is roughly 60 percent of all infant fatalities globally attributed to neonatal deaths [8](Figure 1). The chances of newborn death in first four weeks is 70 times more compared to postnatal period. Although it was not given the attention it needed until a few years ago, neonatal health was still overlooked. Neonatal mortality rates (NMRs) in most nations, including India, have been steadily decreasing over the past few decades.[9]

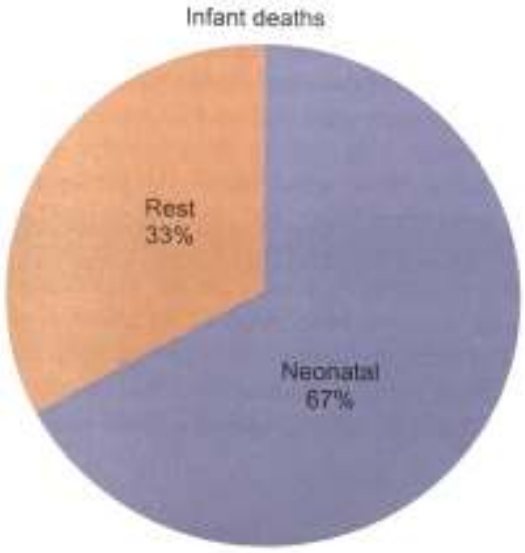

Figure 1. Neonatal death as a percentage of infant deaths

Neonatal mortality rate (NMR)

Current Scenario

The current (2019) NMR in India is 22 per 1,000 live births, much higher than the global average of 17 per 1,000 live births[9]. It is estimated that two-thirds of all

baby fatalities in the country and more than half of all under-five deaths take place in the neonatal period[2].

Assuming the rate of reduction from 57 to 22 in NMR from 1990 to 2019, projected NMR of India for years 2030 and 2035, is 12 and 9 per 1,000 live births respectively. This has been possible because of the scaling up of simple and effective interventions in recent years to reduce neonatal deaths[9].

Perinatal mortality rate (PMR)

The PMR in India (2014) is 24 per 1,000 births. It varies from 15 per 1,000 urban births to 27 per 1,000 rural births. Like NMR, the PMR varies across the nation. Around 77 percent of newborn mortality occur in underdeveloped nations. More than half of all newborn fatalities occur in the first three days of life. In India, three-quarters of newborn fatalities occur in the first week (Figure 2), and one-third occur on the day zero (Figure 3)[10]. Prematurity-related deaths and virtually all asphyxia-related deaths occur within the first week of life, whereas infection-related mortality occur late[11].

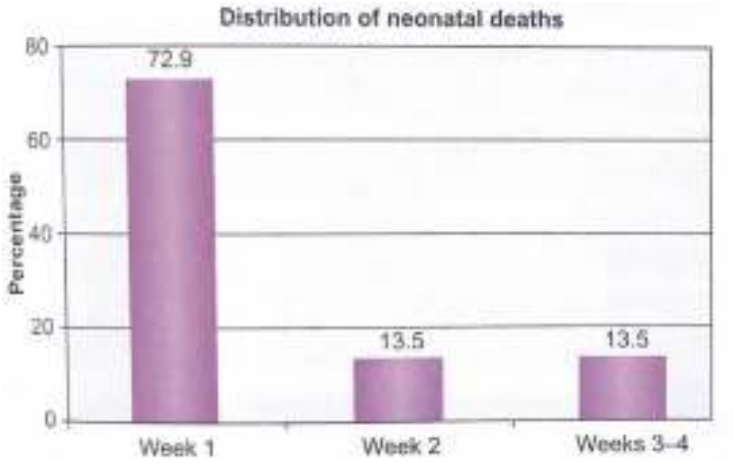

Figure 2. Distribution of neonatal deaths (weeks-wise)

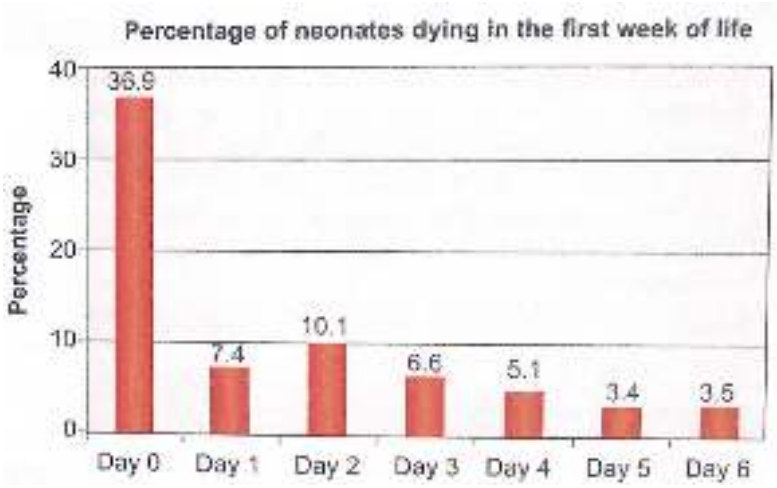

Figure 3. Distribution of neonatal deaths in the first week of life

Causes for Neonatal mortality and morbidity

Neonatal fatalities worldwide are caused by preterm birth, infections, and intrapartum disorders. India has a greater rate of infection-related mortality than other countries. The most prevalent causes of death among preterm babies in tertiary care institution are low birth weight (19.0%), preterm (13.1%), birth asphyxia (8.7%), newborn jaundice (6.4%), and sepsis (5.7%) (Figure 4)[11].

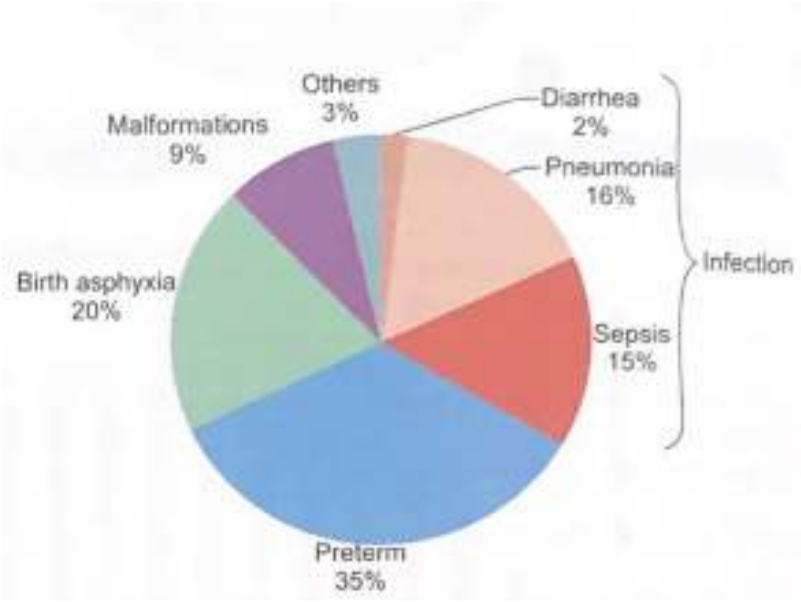

Figure 4. Distribution of primary cause of death of preterm infants

Improved Survival

While Neonatal Intensive Care Unit (NICU) treatment has improved over the decades, and survival rates have increased, additional breakthroughs are needed to enhance neonatal critical care. Researchers have worked to reduce neonatal death and morbidity. Efforts have been made to determine the severity of various ailments. Sickness severity ratings can assist physicians predict infant mortality and track illness severity during a patient's stay[12].

In order to compare hospital results fairly, disease severity must be measured. In isolation common risk factors such as birth weight, gestational age, and sex do not properly reflect disease severity.

Around the world, numerous newborn mortality risk prediction scores have been proposed and verified. Intensive care is increasingly employing scoring systems to assess sickness severity. These scoring methods are independent of diagnosis and measure the severity of disease in terms of deviation from normal physiology across various physical and regular laboratory findings across time.

Some of the mortality predicting scoring systems used include Score for Neonatal Acute Physiology (SNAP), Clinical Risk Index for Babies (CRIB), SNAP II, Score for Neonatal Acute Physiology Perinatal Extension II (SNAPPE-II), and CRIB II.

SNAP score was developed to assess clinical severity in newborn intensive care units for all birth weights and validated as a predictor of death and morbidity. It is similar to the Acute Physiology and Chronic Health Evaluation (APACHE) and the Physiologic Stability Index (PSI). SNAP is made up of 26 components, and the score

varies from 0 to 42, depending on the patient's state. The SNAP score is a reliable measure of sickness severity. However, data collected within 24 hours of admission tends to disguise the severity of the initial sickness, and therefore cannot predict the mortality of infants who die within 24 hours of admission. The SNAP score is lengthy and may not predict late sequelae[13].

CRIB score was developed in UK (1993) to quantify hospital mortality risk for VLBW infants or under 31 weeks gestation. Tarnow-Mordi et al. used six parameters: gestational age, birth weight, maximum and minimum fraction of inspired oxygen (FiO2), congenital anomaly and maximal base deficit within the first 12 hours of admission. CRIB has a higher discriminating ability than birth weight alone for predicting mortality. It is simple, quick, sensitive, and utilizes neonatal physiological data. This score may be used to compare NICUs. The involvement of newborn physiological factors overcomes the disadvantage of birth weight and/or gestational age-specific neonatal death predictions. Drawbacks of CRIB score include, used during the first 12 hours, in very low birth weight neonates and depends on respiratory status[4].

It was challenging to apply CRIB/SNAP to infants delivered outside the hospital because of the volume and complexity of items. Richardson designed and validated a second-generation SNAP score (SNAP II), which is simpler, more reliable, and re-calibrated.

The SNAP II was developed and validated using data from multiple sites with large number of neonates for evaluating mortality risk. The data collection window

was reduced from 24 to 12 hours, eliminating treatment bias. SNAP II is an admission score, not a daily score. There are six variables in SNAP II [14]. Adding the variables like birth weight under 749g, Apgar less than 7 at 5 minutes, and small for gestation age to SNAP II makes SNAPPE II score. SNAPPE-II found to be accurate in predicting mortality.

In 2003, the CRIB's suitability for current data (1988 and 1990) was questioned which resulted in development of CRIB II score. They added variables for up to an hour following admission. The resultant model's coefficients were rounded to generate CRIB II variables.

CRIB-II is a five-item (sex, gestation, birth weight, admission temperature, and worst base excess in first 1h after admission) simplified version of CRIB that was published in 2003 with all data accessible early after admission. The scale runs from 0 to 27 points. The new score was created to enhance predictions for small, extremely preterm newborns, as well as to eliminate characteristics that may be impacted by the infant's care[5].

CRIB II has an advantage over CRIB in that it has a re-calibrated scoring methodology that eliminates the risk of early treatment bias. It is a measure of immediate mortality risk and disease severity in the first hour after admission. It has no subjective factors and has parameters (Table 1) that may be easily gathered from medical records and used to inform parents on the probability of death[15].

Score characteristics	CRIB	CRIB-II
Year of publication	1993	2003
Data collection time limit from admission	12 h	1 h
Range of possible scores	0–23	0–27
Death rate prediction (logit equation)	–	+
Variables/Items		
Gender	–	+
Gestational age	+	+
Birth weight	+	+
Body temperature	–	+
Base excess	+	+
Congenital malformations	+	–
Minimum appropriate FiO_2	+	–
Maximum appropriate FiO_2	+	–

Table 1. Differences between CRIB and CRIB II

The different variables that are measured in the various illness severity scores are as follows (Table 2):

	CRIB ($n=244$)	CRIB-II ($n=1166$)	SNAP-II ($n=1546$)	SNAPPE-II ($n=1546$)
Number of parameters	6	5	6	9
Qualifying criteria				
Birth weight (g)	<1500	All	All	All
Gestation (weeks)	≤32	≤32	All	All
Valid until hour	12	1	12	12
Parameters				
Birth weight	✓	✓		✓
Gestation	✓	✓		✓
Maximum base excess	✓	✓		
Congenital malformation	✓			
FiO_2	✓			
Gender		✓		
Temp at admission		✓		
Mean BP			✓	✓
Lowest temp			✓	✓
pH			✓	✓
PO_2/FiO_2 ratio			✓	✓
Multiple seizures			✓	✓
Urine			✓	✓
APGAR				✓

Table 2. Variables in CRIB, CRIB II, SNAP-II, SNAPPE- II

Various researchers have worked on CRIB II score to predict mortality and morbidity in different parts of the world, and the following are some of those studies:

In Italy, **Claudio De Felice et al** compared the accuracy of CRIB and CRIB II scores in predicting in-hospital mortality for 147 very low birth weight babies. Scores were computed and neonatal mortality was examined. CRIB had an area under the receiver operating characteristics curve (AUC) of 0.924, CRIB II had an AUC of 0.886 showed identical accuracy values and both had no benefit in predicting death over traditional markers like gestation and weight[16].

A five-year prospective cohort study comparing CRIB II score vs gestational age and birth weight in predicting preterm infant death by **Mladen Jasic et al.** where 119 out of 153 newborns survived. The AUC of CRIB II to predict mortality was 0.9008, indicating that death prediction was 90% accurate for all babies. The AUC for birth weight, gestational age were less compared to CRIB II. CRIB II score had sensitivity of 77% and specificity of 88% in predicting mortality[17].

In 2003, **Zardo M S et al** from Brazil compared different mortality risk scores like SNAP, SNAPPE, SNAPII and CRIB. The study included 494 neonates and divided them into two groups depending on their birth weight. Birth weight and other illness severity ratings were plotted. SNAPPE II had the large AUC in both groups. The scores for different illness severity scores were compared which did not differ significantly[18].

Mortality risk in 720 VLBW infants by using CRIB, CRIB II and SNAPPE II was assessed by **Gagliardi et al**. They plotted receiver operating characteristics

(ROC) curves for CRIB, CRIB II and SNAPPE-II. The area under the curve for CRIB and CRIB-II was more and concluded that both are superior to SNAPPE-II in VLBW babies.[15]

Preterm infant mortality predictors CRIB-II and SNAPPE-II were compared by **Shelley Reid et al** in a study which included 1777 newborns. CRIB-II performed better (AUC 0.913) than SNAPPE-II (AUC 0.907). The positive and negative predictive values of CRIB-II and SNAPPE-II are comparable. Within the first 12 hours of life, they found that both disease severity scores performed identically**.**[19]

CRIB II and SNAPPE II scores were compared by **Karaarsian et al.** in their study which enrolled 189 babies. When tested with ROC curve analysis, it was shown that CRIB-II and SNAPPE-II were both discriminating in terms of mortality. CRIB II and SNAPPE-II both have a comparable AUC in this regard. They found that neither the CRIB-II nor the SNAPPE-II scores differed statistically in their ability to predict death, hence CRIB II which has fewer characteristics than SNAPPE II, is preferable and more useful[20].

In a study by **Zahraa Mohammed Ezz-Eldin et al.,** 113 preterm neonates admitted in NICU during the first 24 hours of delivery were enrolled. A strong association between CRIB II score and mortality (p=0.001) was found in the study data. CRIB II score > 11 was the best cut-off point for predicting mortality. The positive and negative predictive values of the CRIB II score were greater. This study had a small sample size and a modest number of newborns under 32 weeks gestation.[21]

Mohammad Heidarzadeh et al. conducted a study with 215 preterm newborns to determine the mortality prediction by using CRIB II. Babies were

followed up till three months of age after the CRIB II score was calculated. Among the enrolled, 64 died in the hospital, and 150 were still alive at three months of age. Mean CRIB II score in the deceased babies compared to the group of survivors revealed that the higher score means a poor chance for survival($p<0.05$). The prediction power of CRIB II with 8.5 as a cut-off score could predict 83 percent of death in the study group when using the receiver operating characteristic (ROC) curve. They discovered that CRIB II has significant predictive value in forecasting newborn mortality risk and that it may be utilized as a reliable and straightforward tool to prioritize therapies in the neonatal intensive care unit.[22]

CRIB II score was found to be an independent predictor of death in a prospective study by **Marete IK et al**. They discovered a significant difference in the mean CRIB II score between those who were living and those who were deceased (P=0.001). The sensitivity, specificity, and accuracy of the CRIB II score were shown to be superior to standard measures like birth weight. The sensitivity, specificity, and predictive values were 80.6 percent, 75.3 percent, and 77.3 percent, respectively, when using CRIB II score of four as a cut-off. Greater the CRIB II score, more likelihood of death.[23]

Rastogi, et al conducted a study to assess the relation between CRIB II score and neonatal mortality in a prospective cohort study. A total of 86 neonates were enrolled but 69 neonates data was analyzed. The mean CRIB II score was 8.29 ± 4.35. Study results showed a significant correlation between CRIB II score and mortality. No significant difference was noted between observed and expected outcome when tested with Hosmer-Lemeshow test(P=0.62).[7]

A study was conducted on 272 VLBW babies by **Azadeh Jafrasteh et al.** to predict mortality risk by using CRIB II score. During hospitalization 58.8% neonates died. Mean scores of CRIB II were high in non-survivors (9.7 ± 3.1) compared to survivor neonates (6.1 ± 2.7) (p=0.001). CRIB II score had 83% specificity and sensitivity. They inferred that CRIB II had higher value of prediction of mortality. It also showed that CRIB II score contained variables which are routinely measured in all neonates. Neonatal mortality prediction using the CRIB II score is reliable, and their classification helps to prioritize medical interventions, which is especially important in areas where medical services are not readily accessible.[24]

Stomnaroska et al. used the CRIB II score on 80 preterm newborns. In their study, AUC exceeded for birth weight and gestational age compared to CRIB II score. They inferred that CRIB II is helpful in predicting newborn outcomes and may be used to monitor and improve results in one NICU while simultaneously monitoring and improving outcomes in other NICUs.[25]

In a study by **Phatak et al**., to find the effectiveness of CRIB II in predicting neonatal mortality before discharge from the hospital, 140 newborns were enrolled. Using a CRIB II cut-off score of nine, the sensitivity, specificity, and predictive values were 95.5 percent, 95.7 percent, and 95.6 percent respectively. They inferred that those with a higher CRIB II score were more likely to die (p=0.001)[26].

MATERIAL AND METHODS

The study was conducted in the department of paediatrics, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, affiliated to Jawaharlal Nehru Medical College, Belagavi from January 2020 to December 2020. Due to the COVID-19 pandemic, the enrollment period extended till April 2021 to reach the sample size.

Study design

Observational study.

Study duration and period

Sixteen months, January 2020 to April 2021.

Place

KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi, a teaching hospital affiliated to Jawaharlal Nehru Medical College, Belagavi.

Source of data

Preterm neonates admitted to the NICU of KLE'S Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi.

Sample size

$n = (Z_\beta + Z_{\alpha/2})^2 (sd_1^2 + sd_2^2)/(\mu_1 - \mu_2)^2$

$Z_\beta = 1.24$ for 90% power

$Z_{\alpha/2} = 1.96$ for 95 %confidence & 5 % alpha

$n = (1.96+1.24)^2 \ (4^2+4.8^2)/(16.1-13.6)^2$

$n = (10.24)\ (16+23.04)/(2.5)^2$

n= 10.24*39.04/6.25 x 2

Total no. of sample size = 128

Ethical clearance

Prior to the commencement, study was approved by Jawaharlal Nehru Medical College, Institutional Ethics Committee for Human Subjects Research, Belagavi.

Selection Criteria

Inclusion Criteria

1) All preterm newborns (inborn & outborn) with ≥28-34 weeks of gestational age, admitted to NICU of KLE'S Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi.
2) Willing to participate in the study.

Exclusion Criteria

1) All neonates with gestational age < 28 weeks

Informed Consent

Infants meeting eligibility criteria were enrolled into the study after written informed consent (Annexure I) from parents. Infant data was recorded in a structured proforma.

Methodology

Demographic details (name, sex, date and time of birth), detailed birth history including resuscitation, mode of delivery, gestational age (weeks), birth weight (gm) and temperature (Celsius) were recorded in the structured proforma (Annexure III). CRIB II score was recorded within the first hour of admission. Sex, birth weight, gestation, temperature and base excess, five variables are used in CRIB II scoring (Annexure III). 1. Sex of the baby, 2. Gestational age (weeks) In circumstances where the first day of the last menstrual period (LMP) was not known, the gestational age was computed using the New Ballard score, 3. At the time of admission, an electronic scale with a sensitivity of 10 grams recorded each baby's birth weight (gm), 4. A digital thermometer was used to record the axillary temperature, 5.First-hour arterial blood gas analysis was used to determine the base deficit (If not needed, it was considered as normal). All the variables were assigned scores. The aggregate of the individual scores was used to get the final score. Birth weight, gestation, and sex can range from 0 to 15 in the male sex and 0 to 14 in the female sex, respectively. Base excess score varies from 0 to 7, depending on the temperature at the time of admission score varies from 0 – 5. Total score ranges from 0 to 27. Level I is the lowest score (0-5), followed by Level II (6-10) and Level III (11-15) and Level IV (>15) for the highest scores. High CRIB II score has poor prognosis, level III and IV have worst prognosis. Study outcomes like day seven mortality (primary) and duration of hospital stay (secondary) were captured.

Statistical analysis

Data were entered in MS-Excel and analyzed by using SPSS V25. Descriptive statistics were represented with percentages, mean with standard deviation. Shapiro wilk test was applied to find normality. Chi-square test and independent t-test were calculated. Karl Pearson correlation was applied. ROC curve was drawn. Area under the curve was calculated. Sensitivity and specificity were calculated. $P<0.05$ was considered as statistically significant.

RESULTS

Table 3. Subjects enrolled in the study

Total subjects enrolled	129
Total analyzed	128
Left against medical advice (LAMA)	001

In our study we enrolled 129 subjects, but 128 subjects were included for final analysis as one baby left against medical advice.

Table 4. Maternal demographic factors

Demographic factors	Number (N=129)	Percentage
Age		
<20 years	9	7%
20 – 30 years	68	52.6%
>30 years	52	40.4%
Parity		
Primi	91	70.5%
Para 1	26	20.2%
≥Para 2	12	9.3%
Education		
Illiterate	21	16.3%
Primary	42	32.6%
Secondary and above	66	51.1%
Mode of delivery		
Vaginal	26	20.2%
Caesarean Section	103	79.8%

In our study 52.6% of the mother's age was between 20-30 years and 70.5% were primi. Level of education was secondary and above in 51.1% mothers. Majority (79.8%) were delivered by cesarean section.

Table 5. Neonatal demographic factors

Demographic factors		Outcome (N=128)		p-value
		Survivors	**Non-survivors**	
Gender	Male	71 (60.17%)	8 (80%)	0.3058
	Female	47 (39.83%)	2 (20%)	
Gestational Age (weeks)	28-30	29 (24.58%)	4 (40%)	0.07796
	31-32	35 (29.66%)	5 (50%)	
	33-34	54 (45.76%)	1 (10%)	
Birth Weight (grams)	< 1000	12 (10.17%)	2 (20%)	0.7656
	1001-1500	51 (43.22%)	5 (50%)	
	1501-2500	51 (43.22%)	3 (30%)	
	> 2500	4 (3.39%)	--	
Birth place	Inborn	107 (90.68%)	9 (90%)	1
	Outborn	11 (9.32%)	1 (10%)	

We found survivors and non-survivor group were similar in terms of gender, gestational age, birth weight and birth place.

Table 6. CRIB II score and day seven outcome

Day seven outcome (N=128)	CRIB II score			P-value
	Minimum score	Maximum score	Mean ± SD	
Non-survivors (n=10)	0	11	5.80 ± 3.425	**0.009**
Survivors (n=118)	0	10	2.78 ± 2.823	

In our study, non-survivors had mean score of 5.80 ± 3.425 compared to mean score of 2.78 ± 2.823 in the survivors which is statistically significant (p=0.009).

Table 7. CRIB II score levels and day seven outcome

CRIB-II Score levels	Day seven outcome		Total (N=128)	P-value
	Non-Survivors (n=10)	Survivors (n=118)		
Level I (0-5)	4	95	99	Ref
	40.0%	80.5%	77.3%	
Level II (6-10)	5	23	28	**0.01**
	50.0%	19.5%	21.9%	
Level III (11-15)	1	0	1	-
	10.0%	0	0.8%	
Total	10	118	128	
	100%	100%	100%	

We found that 50% of non-survivors had level II score while 80.5% survivors had level I score. As score level increased, there was increased risk of mortality (p=0.01).

Table 8. CRIB II score individual parameters vs day seven outcome

		Outcome	Minimum	Maximum	Mean ± SD	P-value
Birth weight (grams)		Non-survivors	810	2040	1364.0 ± 379.6	0.24
		Survivors	570	2860	1541.0 ± 441.7	
Gestational age (weeks)		Non-survivors	28	33	30.6 ± 1.4	**0.02**
		Survivors	28	34	31.9 ± 1.9	
Admission temperature (Celsius)		Non-survivors	34.6	36.3	35.14 ± 0.47	**<0.001**
		Survivors	34.6	36.5	35.98 ± 0.35	
Base excess (mEq/L)		Non-survivors	-18.3	0.0	-7.500 ± 6.0581	**0.002**
		Survivors	-15.5	15.0	-2.247 ± 4.0344	
Gender	Male	Non-survivors	8			0.32
		Survivors	71			
	Female	Non-survivors	2			
		Survivors	47			

In our study, individual variables like gestational age, admission temperature and base excess were able to predict outcome on day seven. P value of gestational age, admission temperature and base excess was 0.02, 0.001 and 0.002 respectively, which are statistically significant.

Table 9. CRIB II cut-off score sensitivity and specificity

CRIB-II score	Outcome on day seven		Total (N=128)
	Non-survivors (n=10)	Survivors (n=118)	
≥5	8	29	37
	80.0%	24.6%	28.9%
<5	2	89	91
	20.0%	75.4%	71.1%
Total	10	118	128
	100.0%	100.0%	100.0%

Table 10. Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy

		95% CI
Sensitivity	80.00%	44.39% to 97.48%
Specificity	75.42%	66.65% to 82.88%
Positive Predictive Value (*)	21.62%	15.05% to 30.04%
Negative Predictive Value (*)	97.80%	92.77% to 99.36%
Accuracy (*)	75.78%	67.42% to 82.91%

*Significant

With CRIB II score cut-off value of five, the sensitivity, specificity, positive predictive value, negative predictive value and accuracy were 80%, 75.42%, 21.62%, 97.8% and 75.78% respectively.

Table 11. Area under ROC curve for CRIB II score

Area	SE	P-value	Asymptotic 95% Confidence Interval
0.747	0.089	**0.010**	0.573-0.922

Area under the receiver operating characteristic curve for CRIB II score was 0.747 (p=0.010), indicating CRIB II score model is accurate enough to predict the mortality by day seven.

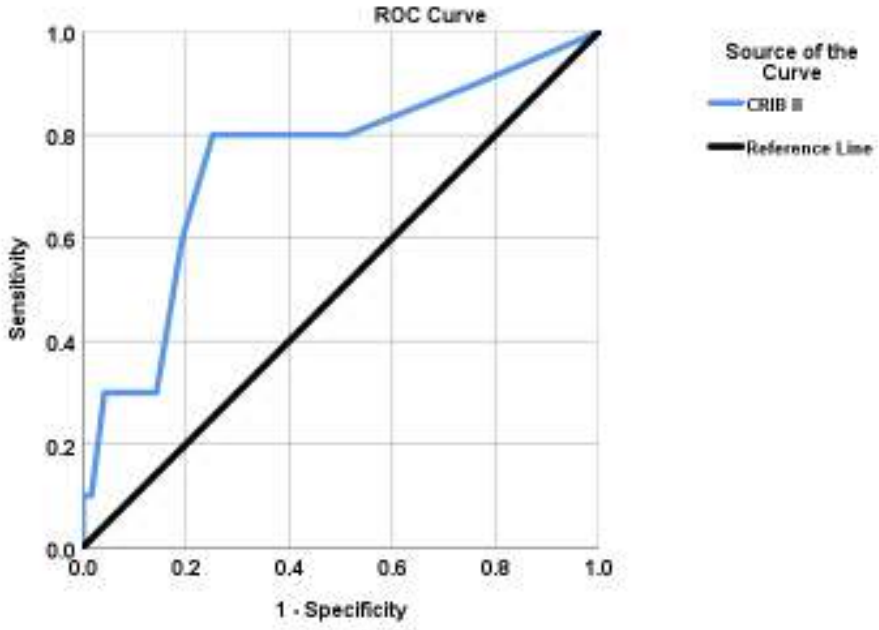

Figure 5. ROC Curve for CRIB II Score

Table 12. CRIB II score and duration of hospital stay

	Duration of Hospital stay (days)	
CRIB-II	n	Mean ± SD
Level I: 0-5	99	14.56 ± 8.88
Level II: 6-10	28	21.61 ± 14.34
Level III: 11-15	1	1.0
P=0.002		

In this study, babies with score level I had 14.56 ± 8.88 mean duration of hospital stay compared to mean of 21.61 ± 14.34 for level II score which is statistically significant (p=0.002).

Table 13. Correlation between CRIB II score and duration of hospital stay

r-value	P-value
.301**	**0.001**

**Significant

Pearson correlation of CRIB II score and duration of hospital stay showed a significant relation (p=0.001).

DISCUSSION

Mortality in preterm newborns is higher than full-term babies because of issues like respiratory problems, sepsis, hypoxia and other factors. With standard indicators such as birth weight and gestational age, it is difficult to predict the outcome of preterm newborns with the individual variables alone. Mortality predicting scores help to prioritize the interventions and resource allocations in NICUs of developing countries. In our study we used CRIB II to assess its ability to predict the outcome on day seven and duration of hospital stay.

During the study period, 129 early preterm babies were enrolled and 128 subjects are included in the final analysis. Majority of the mothers had secondary education or above and were between 20 to 30 years of age. There was no statistical difference between survivors and non-survivors (babies) in terms of gender, gestational age, birth weight and birth place.

We found correlation between the mean CRIB II score and the outcome on day seven. Babies who did not survive had higher score compared to survivors. Similar observations were made by **Mohammad Heidarzadeh et al**[22] and **Azadeh Jafrasteh et al**[24] who noted significant relation between mean CRIB II score and mortality.

We assessed relation between levels of CRIB II score with day seven of outcome and found to have significant difference in mortality between level I score (0-5) and level II score (6-10). Similar observations were also made by **Marete I K et al**[23] and **Zahraa Mohamed Ezz Eldin et al**[21], who reported progressive increase in mortality with increasing levels of score.

Our study revealed that individual variables of the CRIB II score like gestational age, admission temperature and base excess were able to predict the outcome independently. **Zahraa Mohamed Ezz Eldin et al**[21] and **Mohammad Heidarzadeh et al.**[22] also found that the birth weight, temperature, gestational age and base excess were able to predict mortality individually. However in our study, birth weight did not predict the outcome (p=0.24).

By using CRIB II score of five as cut-off, we found positive predictive value, negative predictive value and accuracy to be significant. Similar observations were made by **Marete IK et al**[23] using CRIB II score of four as cut-off value. This implies that higher score is associated with increased mortality and a lower score indicates high chance of survival.

In our study we found AUC for CRIB II score was 0.747, which suggested 75.78% accuracy (p=0.010). Similar observations were made by **Rastogi et al**[7], **Zahraa Mohamed Ezz Eldin et al**[21]**, Phatak et al**[26], **Marete IK et al**[23]**, and Mladen Jasic et al**[17] with AUC of 0.970, 0.968, 0.987, 0.692 and 0.901 respectively. Scores cannot discriminate if the AUC value is 0.5 or less and hence higher the AUC value better the prediction.

Our study found positive correlation between CRIB II score and the duration of hospital stay. **Zahraa Mohamed Ezz Eldin et al**[21] reported that the duration of hospital stay is strongly correlated with CRIB II score, and it was superior to individual parameters like admission temperature, birth weight, gestational age, and base excess.

LIMITATION AND SCOPE OF THE STUDY

- As the study included limited population from single center, results cannot be generalized to whole population. A study with large sample size from different geographical areas will be appropriate.
- Our study included babies upto gestational age of 34 weeks, so similar studies with this study group is required to improve the quality of care and resources for early preterm babies.
- It will be interesting to see the impact of duration of labor on the CRIB II score, but the data was not captured.

CONCLUSION

A CRIB II score of greater than five was found to be predictor of mortality among early preterm babies and a reliable tool for prioritizing interventions in neonatal intensive care units. Score helps in assessment of risk at admission in low birth weight babies and predicts outcomes more accurately than either birth weight or gestational age alone. Score has positive correlation with the duration of hospital stay.

SUMMARY

Observational study was conducted from January 2020 to April 2021 in the Department of Paediatrics, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi. We analyzed 128 subjects to correlate CRIB II score with mortality by day seven and duration of hospital stay. The salient findings of the study are summarized below.

- In our study 52.6% of the mother's age was between 20-30 years and 70.5% were primi. Level of education was secondary and above in 51.1% mothers. Majority (79.8%) were delivered by cesarean section.
- We found no statistical difference between the survivors and non-survivor (babies) group in terms of gender, gestational age, birth weight and birth place.
- In our study, non-survivors had higher mean CRIB II score of 5.80 ± 3.425 compared to mean of 2.78 ± 2.823 in the survivors (p=0.009).
- We found that 50% of non-survivors had level II score while 80.5% survivors had level I score. As the level of score increased, there was increase in mortality risk (p=0.01).
- In our study, individual variables like gestational age, admission temperature and base excess were able to predictive outcome on day seven.
- CRIB II score of five as cut-off, the sensitivity, specificity, positive predictive value, negative predictive value and accuracy were 80%, 75.42%, 21.62%, 97.8% and 75.78% respectively.

- Area under the receiver operating characteristic curve for CRIB II score was 0.747 (p=0.010), indicating CRIB II score model is accurate enough to predict the outcome.
- In this study, babies with level I score had 14.56 ± 8.88 mean duration of hospital stay that is less than mean of 21.61 ± 14.34 for level II score which is statistically significant (p=0.002).
- Pearson correlation of CRIB II score with duration of hospital stay showed a significant relation (p=0.001).

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ANNEXURE I – CONSENT FORM

CONSENT FOR PARTICIPATION IN RESEARCH

"CORRELATION OF CLINICAL RISK INDEX FOR BABIES (CRIB II) SCORE WITH MORTALITY IN PREMATURE BABIES – ONE YEAR HOSPITAL BASED OBSERVATIONAL STUDY"

Principal Investigator: Dr.
Guide: Dr.

You are hereby requested to involve your baby in the above said research to be conducted at KLE'S Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi from January 2020 to December 2020 by me.

Introduction

Preterm newborn or premature is the one born before 37 gestational week. Understanding the causes and factors contributing to neonatal deaths is needed to identify interventions that will reduce mortality. CRIB II score is measure of initial mortality risk and illness severity within one hour of admission. Scoring system and risk prediction tools are to quantify the severity of clinical condition and helps to stratify the risk in patients.

Voluntary participation

Your baby's participation in this study is your voluntary decision. Whether to participate or not to participate will not affect your current or future relationship with the KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi.
You are free to discontinue the participation in the study at any time for any reasons and you will not be paid any reimbursement for participation in the research.

Risk and benefits

There are no major risks involved, other than discomfort and pain caused during collection of biological sample.

Privacy and Confidentiality

The only people who will know that you are a research participant are member of the research team. No information about you or provided by you, during research will be disclosed to others without your written consent. When the results of the research are published or discussed in the conferences, no information will be disclosed that would reveal your identity. Any information obtained in connections with this study and that can be identified with you remain confidential and will be disclosed only with your permission.

Queries

If you have any queries you may contact

Dr.

Post Graduate Student

Department of Paediatrics

Jawaharlal Nehru Medical College, Belagavi-590010

Phone No.

Dr.

MBBS, MD (Paediatrics), DM(Neonatology)

Professor, Department of Paediatrics

Jawaharlal Nehru Medical College, Belagavi-590010

Phone No.

If you have any questions about your rights or research participation you may contact

Dr. Roopa M Bellad

Chairperson of Ethical Committee

Jawaharlal Nehru Medical College, Belagavi-590010

Phone No.9448113403

You will be given a copy of this form for your information and to keep for your records.

STATEMENT OF CONSENT

I hereby voluntarily agree for my baby participation in this study. I understand that even if I choose to allow my baby to take part in this study, I have the liberty to withdraw at any time. My signature below indicates that I have read or have been told about this entire consent form including the risks and benefits and have had all my questions answered. I will be given a copy of this consent form.

Signature of the authorized representative/ parent: _____

Date: _____

Name: _____

Relation to the Subject: _____

Signature of the witness: _____

Date: _____

Name: _____

Signature of investigator: _____

Date: _____

Name: _____

ANNEXURES II: INSTITUTIONAL ETHICAL CLEARANCE

K.L.E. ACADEMY OF HIGHER EDUCATION AND RESEARCH
(Deemed - to-be-University)
Accredited 'A' Grade by NAAC (2nd Cycle) Placed in Category 'A' by MHRD (GoI)
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
Website: http\www.jnmc.edu
E-Mail : dome@jnmc.edu
Phone: [+91-(0)831 Office : 2472550
Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref: MDC/DOME/ 219 **Date: 24/12/2019**

To,

PG student in Pediatrics,
J.N.Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"CORRELATION OF CLINICAL RISK INDEX FOR BABIES (CRIB II) SCORE WITH MORTALITY IN PREMATURE BABIES – ONE YEAR HOSPITAL BASED OBSERVATIONAL STUDY"**, is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Anita Dalal)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

(Dr. Roopa M Bellad)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

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ANNEXURE III – PROFORMA

"CORRELATION OF CLINICAL RISK INDEX FOR BABIES (CRIB II) SCORE WITH MORTALITY IN PREMATURE BABIES - ONE YEAR HOSPITAL BASED OBSERVATIONAL STUDY"

SUBJECT NO.:_____

MATERNAL INFORMATION

1. Name:
2. Age:
3. Education:
4. Occupation:
5. Address:
6. Telephone no.:

OBSTETRIC HISTORY

1. LMP: EDD: Gestational age(weeks):
2. Parity:

DETAILS OF LABOUR

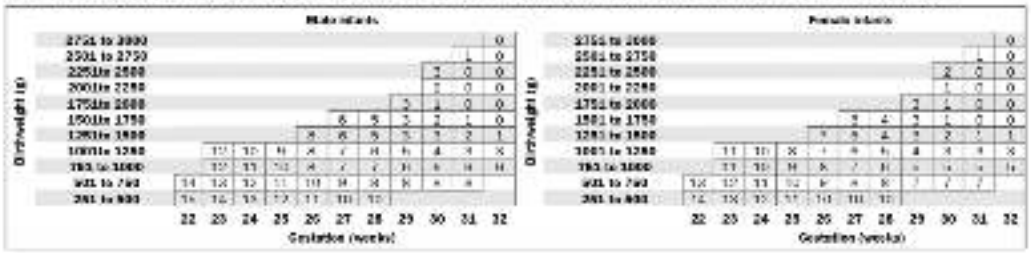
1. Date of delivery:
2. Time of delivery:
3. Duration of labour:
4. Duration of rupture of membranes:
5. Mode of delivery:

NEONATAL INFORMATION:

1. Inborn / Outborn:
2. IP No.:
3. APGAR score:
4. Resuscitation:
5. Sex: Male / Female
6. Birth weight (grams):
7. Admission weight (grams):
8. Gestational age (New Ballard score):
9. Body temperature at admission:
10. Estimated base excess:
11. Total CRIB II score of the baby (Annexure I):
12. Outcome on day 7: Discharged / still in the hospital / death.
13. Duration of hospital stay:

Birthweight (g) and gestation (weeks):

The maximum (worst) score for birthweight and gestation is 15, which is obtained for a 22 week male infant of less than 501 g birthweight



Temperature at admission (°C)	
< 29.6	5
29.7 to 31.3	4
31.4 to 32.8	3
32.9 to 34.4	2
34.5 to 36	1
36.1 to 37.8	0
37.9 to 39.1	1
39.2 to 40.7	3
>40.8	5

Base excess (mmol/L)	
< -26	7
-16 to -25	6
-12 to -15	5
-11 to -9	3
-7 to -3	2
-2 to 2	1
>3	0

Sex, birthweight (g) and gestation (weeks): _____

Temperature at admission (°C): _____

Base excess (mmol/L): _____

Total CRIB II Score: _____

The logistic regression equation relating CRIB II to mortality (CRIB II algorithm) is:

Log odds of mortality = -9.490 + 0.456 * CRIB II

Probability of mortality = exp(z)/(1+exp(z))

The range of possible CRIB II scores is 0 to 37

Clinical risk index for babies II (CRIB II) score

ANNEXURE IV

KEY TO MASTERCHART

(Code number)

- Details of Labor:

  (1) - NVD

  (2) - LSCS

- Education:

  (1) - School

  (2) - College PUC

  (3) - Graduate

  (4) - Post Graduate

  (5) - PHD

- Gender

  (1) - Male

  (2) - Female

- Neonatal information:

  (1) - Inborn

  (2) - Outborn

- Occupation

  (0) - Homemaker

  (1) - Software

  (2) - Private

  (3) - Govt – police, FARMER

  (4) - Central GOVT

- Outcome on day 7:

  (1) - Discharge

  (2) - Hospital

  (3) - Death

  (4) - AMA

- Resuscitation –

  (1) - Cried after birth

  (2) - Stimulation

  (3) - Bag & Mask

  (4) - Bag & tube

S.NO	IP. NO	Mothers Age(years)	Education	Occupation	GRAVIDA	PARA	LIVING	PREV STILL	ABORTION	LMP	EDD	Gestational Age (wks)	Date of Delivery	Time of Delivery	Duration of Labour	Duration of Rupture of membranes (Hours)	Mode of delivery	INBORN / OUTBORN	APGAR SCORE in 1min	APGAR SCORE in 5min	RESUSCITATION	GENDER	BIRTH WEIGHT (grams)	ADMISSION WEIGHT (grams)	GESTATIONAL AGE	BODY TEMP AT ADMISSION	Estimated base excess	Total CRIB II Score (Annexure I)	Sex, Birth weight(g) & Gestation(wk) Score (Annexure I)	Temperature at Admission Score	Base excess Score	Outcome on Day 7	Duration of Hospital stay (days)
1	998350	19	1	0	Primi	0	0	0	0	12-06-2019	18-03-2020	32	29-01-2020	7.10	NA	0	2	1	4	6	4	1	1800	1800	32	36	0	1	0	1	0	2	17
2	999826	26	1	0	5	0	0	0	4	Not Known	05-04-2020	31	05-02-2020	21.46	NA	0	1	1	8	9	1	2	1450	1450	31	36.2	0	2	2	0	0	2	10
3	1000357	25	3	1	3	0	0	0	2	15-07-2019	22-04-2020	29	08-02-2020	14.22	NA	18	2	1	6	7	1	2	1200	1200	30	36	0	6	5	1	0	1	7
4	1000850	23	1	0	2	1	1	0	0	08-07-2019	15-04-2020	31	11-02-2020	14.42	NA	0	2	1	6	7	1	1	1940	1895	31	36.4	0	0	0	0	0	2	12
5	1001291	37	2	0	7	6	6	0	0	16-07-2019	23-04-2020	29	13-02-2020	17.15	NA	0	2	1	5	6	2	1	1100	1100	28	36.2	0	5	5	0	0	4	4
6	1001671	24	2	2	Primi	0	0	0	0	09-07-2019	14-04-2020	31	15-02-2020	22.41	NA	14	1	1	6	7	1	1	1800	1800	31	36.3	0	0	0	0	0	3	2
7	1004335	30	2	0	Primi	0	0	0	0	29-07-2019	04-05-2020	30	29-02-2020	4.59	NA	0	1	1	6	7	1	1	1320	1320	30	36.1	-3.6	5	3	0	2	2	33
8	1004336	30	2	0	Primi	0	0	0	0	29-07-2019	04-05-2020	30	29-02-2020	5.09	NA	0	1	1	6	7	1	2	1410	1410	30	36.2	-4.6	5	3	0	2	2	33
9	1007764	32	4	0	3	2	2	0	0	Not Known	01-05-2020	33	18-03-2020	20.20	NA	24	2	2			1	1	1200	1300	33	36	-5.3	3	0	1	2	2	28
10	1008338	34	2	3	Primi	0	0	0	0	25-07-2019	11-05-2020	32	22-03-2020	9.57	NA	0	2	1	7	9	1	2	1270	1270	32	36.2	0	0	0	0	0	2	12
11	1008838	37	3	4	3	2	2	0	0	09-08-2019	15-05-2020	33	31-03-2020	9.47	NA	0	2	1	7	9	1	1	1390	1390	33	36.2	0	0	0	0	0	2	14
12	1009053	21	2	0	Primi	0	0	0	0	28-08-2019	31-05-2020	31	04-04-2020	3.28	NA	0	1	1	7	8	1	1	1230	1230	31	36.4	0	3	3	0	0	2	34
13	1009217	29	2	0	2	0	0	0	1	25-07-2019	30-06-2020	32	07-04-2020	19.30	NA	7	1	1	7	8	1	2	1700	1695	32	36.2	0	0	0	0	0	2	31
14	1009280	28	0	3	4	3	1	0	2	27-08-2019	02-06-2020	32	09-04-2020	2.35	NA	0	2	1	6	7	1	1	1200	1200	32	36	0	4	3	1	0	2	16
15	1009277	27	3	0	Primi	0	0	0	0	20-09-2019	26-06-2020	28	09-04-2020	1.27	NA	12	1	1	6	7	2	1	1190	1190	28	36.4	-6.9	8	6	0	2	2	47
16	1009519	29	3	0	Primi	0	0	0	0	06-09-2019	12-06-2020	31	14-04-2020	4.24	NA	26	1	1	6	8	1	1	1610	1620	31	36.2	-4.4	3	1	0	2	2	23
17	1009680	32	3	2	Primi	0	0	0	0	18-09-2019	24-06-2020	30	17-04-2020	8.26	NA	0	2	1	5	8	3	2	815	815	30	36.4	-4.9	7	5	0	2	2	51
18	1010077	30	3	0	2	1	1	0	0	13-09-2019	22-06-2020	31	25-04-2020	13.39	NA	0	2	1	5	6	1	1	1280	1280	31	36.4	-6	4	2	0	2	2	28
19	1010176	28	3	0	Primi	0	0	0	0	16-09-2019	28-06-2020	31	27-04-2020	15.06	NA	6	2	1	6	8	1	1	1400	1430	31	36.1	-7.6	4	2	0	2	2	12
20	1010473	18	0	0	Primi	0	0	0	0	12-08-2019	09-07-2020	30	02-05-2020	10.29	NA	0	1	1	3	6	2	1	1500	1500	30	36.3	0	3	3	0	0	2	9
21	1010540	21	1	0	Primi	0	0	0	0	07-09-2019	13-06-2020	32	03-05-2020	13.17	NA	0	2	1	6	7	1	1	1690	1690	32	36.3	0	0	0	0	0	2	20
22	1010541	21	1	0	Primi	0	0	0	0	07-09-2019	13-06-2020	32	03-05-2020	13.23	NA	0	2	1	6	7	1	2	1690	1690	32	36.4	0	0	0	0	0	2	20
23	1010780	35	3	3	4	0	0	0	3	05-10-2019	11-07-2020	30	06-05-2020	14.05	NA	20	1	1	4	7	1	1	1100	1100	30	36	0	5	4	1	0	2	30
24	1010781	35	3	3	4	0	0	0	3	05-10-2019	11-07-2020	30	06-05-2020	14.16	NA	20	1	1	3	6	1	1	1100	1100	30	35.8	0	5	4	1	0	2	30
25	1011068	28	2	0	Primi	0	0	0	0	29-09-2019	05-07-2020	31	10-05-2020	23.54	NA	0	2	1	4	6	1	1	1100	1100	31	36.2	0	3	3	0	0	2	33
26	1011282	35	2	0	Primi	0	0	0	0	23-09-2019	29-06-2020	33	13-05-2020	16.10	NA	12	2	1	4	7	1	1	1000	1000	34	35.7	0	1	0	1	0	2	9
27	1011283	35	2	0	Primi	0	0	0	0	23-09-2019	29-06-2020	33	13-05-2020	16.11	NA	12	2	1	4	6	1	1	1250	1250	34	35.8	0	1	0	1	0	2	41
28	1011537	34	3	2	2	1	1	0	0	21-10-2019	27-06-2020	34	16-05-2020	20.47	NA	0	2	1	4	7	3	1	1920	1920	34	36.3	-4.6	2	0	0	2	2	8
29	1011550	29	3	1	Primi	0	0	0	0	04-10-2019	21-07-2020	30	17-05-2020	7.12	NA	0	2	1	4	6	3	1	1120	1120	30	36.3	-13.9	8	4	0	4	2	26
30	1011787	27	0	0	Primi	0	0	0	0	14-10-2019	20-07-2020	31	19-05-2020	16.39	NA	0	2	1	6	8	1	1	1500	1500	31	36.2	0	2	2	0	0	2	16
31	1012989	36	4	2	3	1	1	0	1	08-11-2019	17-08-2020	29	31-05-2020	12.04	NA	0	2	1	4	6	3	1	808	808	29	36.5	0	6	6	0	0	2	38
32	1013177	24	0	0	Primi	0	0	0	0	28-10-2019	03-08-2020	30	01-06-2020	3.23	NA	0	2	1	6	7	1	2	1780	1780	30	35.8	0	2	1	1	0	2	8
33	1014310	20	0	0	Primi	0	0	0	0	20-10-2019	26-07-2020	33	07-06-2020	23.45	NA	10	1	1	6	7	1	2	1700	1700	33	36	0	1	0	1	0	2	10
34	1014109	36	2	0	4	2	1	0	1	26-12-2019	01-10-2020	32	08-06-2020	23.26	NA	0	2	1	6	8	1	1	870	870	32	36.4	0	6	6	0	0	2	26
35	1013900	32	4	2	2	0	0	0	1	17-10-2019	23-07-2020	33	08-06-2020	8.34	NA	0	2	1	7	9	1	2	1310	1310	33	36.5	0	0	0	0	0	2	14
36	1014493	26	1	0	2	1	1	0	0	28-10-2019	31-07-2020	32	12-06-2020	6.20	NA	0	2	2	5	9	1	1	2400	2400	32	35.8	0	1	0	1	0	2	8

S.NO	IP. NO	Mothers Age(years)	Education	Occupation	GRAVIDA	PARA	LIVING	PREV STILL	ABORTION	LMP	EDD	Gestational Age (wks)	Date of Delivery	Time of Delivery	Duration of Labour	Duration of Rupture of membranes (Hours)	Mode of delivery	INBORN / OUTBORN	APGAR SCORE in 1min	APGAR SCORE in 5min	RESUSCITATION	GENDER	BIRTH WEIGHT (grams)	ADMISSION WEIGHT (grams)	GESTATIONAL AGE	BODY TEMP AT ADMISSION	Estimated base excess	Total CRIB II Score (Annexure I)	Sex, Birth weight(g) & Gestation(wk) Score (Annexure I)	Temperature at Admission Score	Base excess Score	Outcome on Day 7	Duration of Hospital stay (days)
37	1014614	32	4	2	2	0	0	0	1	07-11-2019	13-08-2020	31	13-06-2020	12.22	NA	0	2	1	5	8	1	2	1080	1080	32	35.8	0	4	3	1	0	2	27
38	1015345	36	2	0	3	2	1	0	1	25-10-2019	31-07-2020	33	18-06-2020	10.01	NA	0	2	1	6	8	1	1	1870	1870	34	36	-4.6	3	0	1	2	2	12
39	1015351	35	2	0	Primi	0	0	0	0	25-10-2019	01-08-2020	33	18-06-2020	8.13	NA	0	2	1	6	9	1	2	2650	2650	33	36.3	0	0	0	0	0	1	7
40	1015352	35	2	0	Primi	0	0	0	0	25-10-2019	01-08-2020	33	18-06-2020	8.14	NA	0	2	1	5	9	1	2	1820	1820	33	36	0	1	0	1	0	1	7
41	1015454	25	3	0	Primi	0	0	0	0	09-11-2019	15-08-2020	31	19-06-2020	4.05	NA	0	1	1	8	10	1	1	1550	1550	31	36.2	0	2	2	0	0	2	15
42	1015455	25	3	0	Primi	0	0	0	0	09-11-2019	15-08-2020	31	19-06-2020	4.11	NA	0	1	1	4	6	1	1	1470	1470	31	36	0	3	2	1	0	2	15
43	1015500	31	4	0	Primi	0	0	0	0	02-11-2019	08-08-2020	32	19-06-2020	9.39	NA	0	2	1	5	9	1	1	1420	1420	32	36.2	0	1	1	0	0	2	20
44	1015934	34	3	2	2	0	0	0	1	02-11-2019	13-08-2020	32	22-06-2020	18.05	NA	20	2	1	5	7	1	2	2000	2000	32	36	0	1	0	1	0	1	5
45	1015935	34	3	2	2	0	0	0	1	02-11-2019	13-08-2020	32	22-06-2020	18.06	NA	20	2	1	6	8	1	2	1680	1680	32	36.1	0	0	0	0	0	1	5
46	1016341	30	3	0	Primi	0	0	0	0	28-10-2019	03-08-2020	34	25-06-2020	9.31	NA	0	2	1	5	7	1	2	1880	1880	34	36.1	0	0	0	0	0	1	7
47	1016344	30	3	0	Primi	0	0	0	0	28-10-2019	03-08-2020	34	25-06-2020	9.32	NA	0	2	1	6	7	1	2	1680	1680	34	36	0	1	0	1	0	1	7
48	1016693	27	3	2	2	0	0	0	1	05-12-2019	10-09-2020	29	27-06-2020	14.20	NA	0	2	1	5	7	1	2	750	750	29	35.6	0	8	7	1	0	2	28
49	1016692	27	3	2	2	0	0	0	1	05-12-2019	10-09-2020	29	27-06-2020	14.19	NA	0	2	1	4	6	3	2	570	570	29	34.8	0	8	7	1	0	2	14
50	1016690	27	3	2	2	0	0	0	1	05-12-2019	10-09-2020	29	27-06-2020	14.18	NA	0	2	1	6	8	1	2	990	990	29	35.8	0	6	5	1	0	2	28
51	1016686	32	3	0	4	0	0	0	3	02-11-2019	08-08-2020	34	27-06-2020	12.11	NA	0	2	1	8	10	1	2	2100	2100	34	36.2	0	0	0	0	0	1	7
52	1016684	32	3	0	4	0	0	0	3	02-11-2019	08-08-2020	34	27-06-2020	12.10	NA	0	2	1	8	9	1	2	2000	2000	32	36.3	0	0	0	0	0	1	7
53	1017364	37	3	3	2	0	0	0	1	29-10-2019	10-08-2020	34	02-07-2020	9.45	NA	0	2	1	7	9	1	1	2200	2200	34	36.2	0	0	0	0	0	2	8
54	1017365	37	3	3	2	0	0	0	1	29-10-2019	10-08-2020	34	02-07-2020	9.46	NA	0	2	1	7	9	1	1	1760	1760	34	36.1	0	0	0	0	0	2	8
55	1017484	40	3	3	Primi	0	0	0	0	14-11-2019	20-08-2020	33	03-07-2020	9.55	NA	27	2	1	7	9	1	2	1720	1720	33	36	0	1	0	1	0	2	13
56	1017977	29	3	0	Primi	0	0	0	0	11-11-2019	18-08-2020	34	07-07-2020	9.16	NA	0	2	1	7	9	1	2	2710	2710	34	36.2	0	0	0	0	0	1	6
57	1018323	33	3	0	4	1	1	0	2	05-12-2019	10-09-2020	31	10-07-2020	4.55	NA	4	2	1	3	6	4	2	1390	1390	31	35.2	-13.8	6	1	1	4	3	1
58	1018325	33	3	0	4	1	1	0	2	05-12-2019	10-09-2020	31	10-07-2020	4.56	NA	4	2	1	3	6	4	1	1380	1380	31	35	-5.8	5	2	1	2	3	5
59	1019965	26	2	0	2	1	1	0	0	03-01-2020	10-09-2020	34	30-07-2020	17.24	NA	30	1	1	6	8	1	1	2420	2420	34	36.2	-5.2	2	0	0	2	1	4
60	1020228	25	2	0	Primi	0	0	0	0	08-01-2020	14-10-2020	29	03-08-2020	18.00	NA	0	2	1	5	6	4	1	1050	1050	29	35.8	-8.8	9	5	1	3	2	42
61	1020379	34	4	2	Primi	0	0	0	0	Not Known	18-09-2020	33	05-08-2020	18.48	NA	0	2	1	6	7	1	1	2000	2000	34	36.1	0	0	0	0	0	2	13
62	1020380	34	4	2	Primi	0	0	0	0	Not Known	18-09-2020	33	05-08-2020	18.50	NA	0	2	1	6	8	1	2	1580	1580	34	35.8	0	1	0	1	0	2	13
63	1020444	20	0	0	Primi	0	0	0	0	06-01-2020	13-10-2020	30	06-08-2020	18.40	NA	6	2	2			1	1	1400	1400	30	35.8	-13.1	8	3	1	4	2	25
64	1020445	20	0	0	Primi	0	0	0	0	06-01-2020	13-10-2020	30	06-08-2020	18.42	NA	6	2	2			1	1	1200	1200	30	35.4	-4.9	7	4	1	2	2	25
65	1020486	26	0	0	Primi	0	0	0	0	21-12-2019	26-09-2020	32	07-08-2020	12.38	NA	24	2	1	6	8	1	1	1360	1360	32	36.2	-4.8	3	1	0	2	2	14
66	1021099	38	2	0	4	3	3	0	0	19-01-2020	25-10-2020	28	16-08-2020	21.36	NA	0	1	1	3	6	3	2	1160	1160	28	35.8	-6.8	8	5	1	2	2	34
67	1021316	40	4	2	Primi	0	0	0	0	08-01-2020	13-10-2020	32	19-08-2020	18.42	NA	24	2	1	6	8	1	1	2100	2100	32	36.2	-9.4	3	0	0	3	2	45
68	1021330	25	3	0	Primi	0	0	0	0	15-01-2020	21-10-2020	31	19-08-2020	22.52	NA	0	2	1	6	7	1	1	1280	1280	30	35.9	-4.7	5	2	1	2	2	26
69	1021641	28	0	0	Primi	0	0	0	0	09-01-2020	16-10-2020	32	24-08-2020	21.29	NA	0	2	1	5	8	3	2	1340	1340	32	36.1	0	1	1	0	0	2	22
70	1022254	24	3	0	Primi	0	0	0	0	12-02-2020	18-11-2020	29	02-09-2020	15.07	NA	22	2	1	4	6	1	1	1000	1000	29	34.8	-5.9	9	6	1	2	3	4
71	1022253	24	3	0	Primi	0	0	0	0	12-02-2020	18-11-2020	29	02-09-2020	15.06	NA	22	2	1	3	5	3	2	1100	1100	29	35	-9.4	8	4	1	3	2	19

S.NO	IP. NO	Mothers Age(years)	Education	Occupation	GRAVIDA	PARA	LIVING	PREV STILL	ABORTION	LMP	EDD	Gestational Age (wks)	Date of Delivery	Time of Delivery	Duration of Labour	Duration of Rupture of membranes (Hours)	Mode of delivery	INBORN / OUTBORN	APGAR SCORE in 1min	APGAR SCORE in 5min	RESUSCITATION	GENDER	BIRTH WEIGHT (grams)	ADMISSION WEIGHT (grams)	GESTATIONAL AGE	BODY TEMP AT ADMISSION	Estimated base excess	Total CRIB II Score (Annexure I)	Sex, Birth weight(g) & Gestation(wk) Score (Annexure I)	Temperature at Admission Score	Base excess Score	Outcome on Day 7	Duration of Hospital stay (days)
72	1022330	30	3	0	Primi	0	0	0	0	19-02-2020	25-11-2020	28	03-09-2020	12.43	NA	0	2	1	5	6	1	1	1160	1160	28	35	-3.4	9	6	1	2	3	7
73	1022423	19	1	0	Primi	0	0	0	0	02-01-2020	15-10-2020	34	04-09-2020	13.07	NA	26	2	1	6	7	1	1	2080	2080	34	36.2	0	0	0	0	0	1	4
74	1022562	37	3	0	5	3	2	0	1	Not Known	26-10-2020	32	06-09-2020	11.29	NA	0	2	1	6	7	1	1	1510	1510	32	36	0	1	0	1	0	2	21
75	1023191	28	2	0	3	1	1	0	1	08-01-2020	27-10-2020	33	14-09-2020	20.33	NA	0	2	1	5	6	1	2	1400	1380	33	35.9	0	1	0	1	0	2	9
76	1023492	32	2	0	2	1	1	0	0	02-02-2020	08-11-2020	32	18-09-2020	17.32	NA	0	2	1	8	9	1	1	1900	1900	32	36	0	1	0	1	0	2	8
77	1024226	26	1	0	Primi	0	0	0	0	03-03-2020	08-12-2020	29	28-09-2020	15.46	NA	58	2	1	6	8	1	1	1270	1270	30	35.9	-5.4	6	3	1	2	2	20
78	1024338	24	3	0	Primi	0	0	0	0	04-02-2020	10-11-2020	33	29-09-2020	19.59	NA	12	2	2			1	1	1500	1560	33	34.8	0	1	0	1	0	3	7
79	1025111	25	3	0	Primi	0	0	0	0	14-02-2020	20-11-2020	34	10-10-2020	11.50	NA	0	2	1	7	8	1	1	1600	1600	34	35.9	0	1	0	1	0	2	13
80	1025466	25	2	0	Primi	0	0	0	0	22-02-2020	28-11-2020	33	14-10-2020	18.45	NA	0	2	1	5	6	3	1	1200	1200	33	35.8	-8.7	4	0	1	3	2	18
81	1025467	25	2	0	Primi	0	0	0	0	22-02-2020	28-11-2020	33	14-10-2020	18.47	NA	0	2	1	5	7	1	1	1400	1400	34	36	-6.2	3	0	1	2	2	18
82	1026908	21	2	0	Primi	0	0	0	0	11-03-2020	16-12-2020	33	02-11-2020	18.49	NA	0	2	1	6	8	1	2	1900	1900	32	35.3	0	1	0	1	0	2	9
83	1027199	31	2	0	3	1	1	0	1	11-03-2020	16-12-2020	34	05-11-2020	13.24	NA	0	2	1	7	8	1	2	1800	1800	34	36	0	1	0	1	0	1	5
84	1027966	28	1	0	5	1	1	0	3	26-03-2020	31-12-2020	33	13-11-2020	12.52	NA	0	2	1	3	6	1	1	2780	2780	33	35.2	-12	4	0	1	3	2	30
85	1028034	32	3	0	3	0	0	0	2	21-03-2020	26-12-2020	34	14-11-2020	12.01	NA	0	2	1	6	7	1	1	1490	1490	34	36	0	1	0	1	0	2	13
86	1028333	32	0	3	2	1	1	0	0	21-03-2020	26-12-2020	34	18-11-2020	13.40	NA	23	2	1	6	8	1	1	1420	1420	34	35.9	0	1	0	1	0	2	20
87	1028334	32	0	3	2	1	1	0	0	21-03-2020	26-12-2020	34	18-11-2020	13.42	NA	23	2	1	6	8	1	1	1310	1310	34	35.8	0	1	0	1	0	2	20
88	1028335	32	0	3	2	1	1	0	0	21-03-2020	26-12-2020	34	18-11-2020	13.43	NA	23	2	1	6	8	1	2	1330	1330	34	35.7	0	1	0	1	0	2	20
89	1028539	32	3	0	4	3	3	0	0	20-03-2020	25-12-2020	33	20-11-2020	15.07	NA	0	2	1	6	7	1	2	1680	1680	34	35	0	1	0	1	0	1	7
90	1028870	25	2	0	2	0	0	0	1	18-04-2020	23-01-2021	31	23-11-2020	12.01	NA	12	2	1	5	6	1	1	1540	1540	31	35	-8.9	5	1	1	3	3	3
91	1029034	30	3	3	Primi	0	0	0	0	01-04-2020	06-01-2021	33	24-11-2020	11.34	NA	20	2	1	7	9	1	2	2200	2200	33	36.2	0	0	0	0	0	1	4
92	1029567	21	1	0	3	1	1	0	1	04-04-2020	21-01-2021	32	29-11-2020	13.43	NA	0	2	1	4	5	3	1	2040	2040	32	34.6	-18.3	6	0	1	5	3	6
93	1030100	25	3	2	2	1	1	0	0	20-04-2020	27-01-2021	33	03-12-2020	20.50	NA	0	1	1	4	6	1	2	1300	1300	33	35	-8.8	4	0	1	3	2	9
94	1031945	33	0	0	3	1	1	0	1	02-05-2020	06-02-2021	33	19-12-2020	14.21	NA	0	2	1	6	8	1	2	1800	1800	33	36.2	0	0	0	0	0	2	14
95	1031976	30	2	0	Primi	0	0	0	0	04-06-2020	11-03-2021	28	19-12-2020	22.10	NA	24	1	1	6	7	1	1	1350	1350	28	34.6	0	6	5	1	0	1	4
96	1032734	34	3	2	3	1	1	0	1	18-06-2020	23-03-2021	28	26-12-2020	17.02	NA	17	1	1	6	8	3	2	900	900	28	34.9	-6.6	9	6	1	2	2	41
97	1033614	25	2	0	Primi	0	0	0	0	15-05-2020	19-02-2021	33	04-01-2021	7.00	NA	0	2	1	4	7	3	1	1490	1490	34	35.9	-4	3	0	1	2	2	15
98	1034733	21	0	3	Primi	0	0	0	0	20-04-2020	24-01-2021	34	08-01-2021	10.25	NA	0	1	2			1	1	1950	1930	34	36	0	1	0	1	0	2	8
99	1034576	24	0	0	2	1	1	0	0	18-04-2020	23-01-2021	34	25-12-2020	13.33	NA	0	2	2			3	1	2300	2080	34	36.2	15	0	0	0	0	2	18
100	1035219	32	3	2	5	0	0	0	4	03-06-2020	10-03-2021	32	15-01-2021	21.47	NA	0	2	1	7	8	1	1	1570	1570	32	36.2	-6.2	2	0	0	2	2	18
101	1036389	35	0	3	Primi	0	0	0	0	20-06-2020	27-03-2021	28	23-01-2021	19.45	NA	0	2	2	7	8	1	1	1030	1030	28	35.8	-5.9	9	6	1	2	2	8
102	1037936	29	3	2	Primi	0	0	0	0	20-07-2020	26-04-2021	28	03-02-2021	12.36	NA	0	2	1	6	8	1	2	1050	1050	28	35.7	-15.5	10	5	1	4	2	28
103	1038566	31	4	0	Primi	0	0	0	0	20-06-2020	27-03-2021	33	08-02-2021	11.27	NA	0	2	1	8	9	1	1	1930	1930	34	36.2	-2.9	1	0	0	1	2	9
104	1039073	22	1	0	Primi	0	0	0	0	Not Known	03-04-2021	32	10-02-2021	22.30	NA	0	1	2			1	2	1500	1640	32	35.7	0	1	0	1	0	1	7
105	1039463	36	2	0	4	1	1	0	2	22-06-2020	29-05-2021	33	13-02-2021	12.19	NA	0	1	1	7	9	1	1	1460	1460	34	36.1	0	0	0	0	0	2	19
106	1040188	26	3	1	Primi	0	0	0	0	Not Known	21-04-2021	34	18-02-2021	7.33	NA	21	2	1	7	9	1	2	1350	1350	34	36.2	0	0	0	0	0	2	10

S.NO	IP. NO	Mothers Age(years)	Education	Occupation	GRAVIDA	PARA	LIVING	PREV STILL	ABORTION	LMP	EDD	Gestational Age (wks)	Date of Delivery	Time of Delivery	Duration of Labour	Duration of Rupture of membranes (Hours)	Mode of delivery	INBORN / OUTBORN	APGAR SCORE in 1min	APGAR SCORE in 5min	RESUSCITATION	GENDER	BIRTH WEIGHT (grams)	ADMISSION WEIGHT (grams)	GESTATIONAL AGE	BODY TEMP AT ADMISSION	Estimated base excess	Total CRIB II Score (Annexure I)	Sex, Birth weight(g) & Gestation(wk) Score (Annexure I)	Temperature at Admission Score	Base excess Score	Outcome on Day 7	Duration of Hospital stay (days)
107	1040610	23	0	0	2	0	0	0	1	07-07-2020	13-04-2021	33	19-02-2021	14.42	NA	28	2	2			1	1	1540	1490	34	35.9	0	1	0	1	0	1	7
108	1040611	23	0	0	2	0	0	0	1	07-07-2020	13-04-2021	33	19-02-2021	14.43	NA	28	2	2			1	1	1700	1640	34	36	0	1	0	1	0	1	7
109	1040878	29	1	0	3	2	2	0	0	28-06-2020	04-04-2021	34	21-02-2021	10.00	NA	0	2	1	7	10	1	2	2250	2190	34	36.2	0	0	0	0	0	1	4
110	1041576	20	0	0	Primi	0	0	0	0	30-06-2020	06-04-2021	34	24-02-2021	21.50	NA	0	1	2			1	1	1400	1400	34	35.8	-12	4	0	1	3	2	12
111	1042270	24	2	0	3	1	1	0	1	26-07-2020	02-05-2021	31	03-03-2021	9.15	NA	12	2	1	7	9	1	1	1810	1810	31	36.1	-5.1	2	0	0	2	2	16
112	1042787	24	3	0	Primi	0	0	0	0	13-07-2020	18-04-2021	33	05-03-2021	23.19	NA	6	2	1	8	10	1	1	2160	2160	33	36.3	-2.3	1	0	0	1	2	10
113	1044008	38	4	2	4	2	2	0	1	Not Known	14-05-2021	30	14-03-2021	14.27	NA	0	2	1	6	8	1	1	914	914	30	35.8	0	7	6	1	0	2	32
114	1044334	26	3	2	3	2	1	0	0	31-07-2020	07-05-2021	32	16-03-2021	6.36	NA	60	2	1	8	10	1	1	1760	1760	32	36.1	0	0	0	0	0	2	20
115	1045582	25	0	3	Primi	0	0	0	0	20-08-2020	27-05-2021	30	22-03-2021	10.58	NA	0	1	1	3	5	4	1	810	810	30	35.2	-13.3	11	6	1	4	3	1
116	1046218	33	3	0	2	1	1	0	0	01-08-2020	08-05-2021	33	25-03-2021	10.10	NA	2	2	1	5	8	1	2	2860	2860	34	36.3	-4.7	2	0	0	2	2	8
117	1046856	35	3	2	2	1	1	0	0	27-08-2020	03-06-2021	30	29-03-2021	17.20	NA	0	2	1	4	7	3	2	1020	1020	30	35.5	-5.6	6	3	1	2	3	4
118	1047212	25	3	1	Primi	0	0	0	0	17-08-2020	24-05-2021	32	31-03-2021	14.24	NA	0	2	1	6	8	1	1	1460	1460	32	36.1	-8.1	4	1	0	3	2	16
119	1048676	30	3	2	2	1	1	0	0	20-09-2020	27-06-2021	28	09-04-2021	17.51	NA	0	1	1	4	7	2	1	810	810	28	35.2	-6.5	10	7	1	2	2	14
120	1048845	20	1	0	Primi	0	0	0	0	28-09-2020	05-07-2021	28	11-04-2021	15.58	NA	0	2	1	4	6	1	2	1000	1000	28	35.8	0	7	6	1	0	2	18
121	1048901	27	3	0	Primi	0	0	0	0	05-07-2020	24-05-2021	34	12-04-2021	10.17	NA	0	2	1	8	9	1	1	1820	1820	34	36.3	0	0	0	0	0	2	11
122	1048902	27	3	0	Primi	0	0	0	0	05-07-2020	24-05-2021	34	12-04-2021	10.21	NA	0	2	1	7	9	1	2	1740	1740	34	36.1	0	0	0	0	0	2	10
123	1049605	36	1	0	3	1	1	0	1	21-08-2020	23-05-2021	34	17-04-2021	23.37	NA	0	2	1	7	8	1	1	1380	1380	34	36.2	0	0	0	0	0	2	11
124	1049620	20	0	0	Primi	0	0	0	0	15-08-2020	22-05-2021	33	18-04-2021	7.30	NA	0	1	1	7	9	1	2	1600	1600	33	36.1	0	0	0	0	0	2	10
125	1049862	33	4	2	2	0	0	0	1	14-09-2020	21-06-2021	31	19-04-2021	22.36	NA	24	2	1	4	6	3	1	1720	1720	31	36.1	-7.8	3	1	0	2	2	20
126	1049863	33	4	2	2	0	0	0	1	14-09-2020	21-06-2021	31	19-04-2021	22.38	NA	24	2	1	6	7	1	1	1710	1710	31	36.1	-7	3	1	0	2	2	20
127	1050939	31	3	1	Primi	0	0	0	0	03-09-2020	10-06-2021	33	28-04-2021	14.58	NA	0	2	1	6	8	1	2	1580	1580	34	36	0	1	0	1	0	2	20
128	1051121	30	3	0	Primi	0	0	0	0	06-10-2020	13-07-2021	29	30-04-2021	10.47	NA	7	2	1	4	6	1	2	983	983	29	35.6	-4.3	8	5	1	2	2	8
129	1051126	30	3	0	Primi	0	0	0	0	06-10-2020	13-07-2021	29	30-04-2021	10.49	NA	7	2	1	4	7	3	1	1264	1264	29	36.2	-6.7	5	3	0	2	2	15