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Research Article

**EARLY NEONATAL MORBIDITIES IN LATE PRETERM
NEONATES**¹Dr. Akasha Bint E Athar, ²Dr. Ayesha Nazeer, ³Attia Rasool¹Dera Ghazi Kha Medical College DG Khan., ²Avicenna Medical College Lahore, ³Dera Ghazi Kha Medical College DG Khan.**Article Received:** November 2020 **Accepted:** December 2020 **Published:** January 2021**Abstract:****Objective-** The objective of this study is to examine the morbidities in neonates due to late preterm neonates.**Material and methods-** This was a descriptive study which was conducted in DHQ Dera Ghazi Khan after getting the approval from ethical committee and in this data was collected from the records of all that neonates which were born due to late preterm with less than 37 weeks of gestation period but greater than 34 weeks. In this study the data of 147 neonates was collected and through clinical examination morbidities in all of these infants were observed till 7th day after delivery.**Results-** Mean neonatal age was of these selected neonates was 4 ± 3.74 . The gender of 44% neonates was female and 56% were male. Out of 147 neonates 13% had apnea, 16% had syndrome of respiratory distress, 15% had hypoglycemia, 4% had transient tachypnea, 20% had intrauterine growth restriction, 28% had sepsis, 25% had hyperbilirubinemia.**Conclusion-** In this study it was concluded that in neonate's apnea, syndrome of respiratory distress, hypoglycemia, transient tachypnea, intrauterine growth restriction, sepsis, and hyperbilirubinemia are linked with late preterm.**Keywords:** Infants, late preterm, Early neonatal morbidities,**Corresponding author:****Dr. Akasha Bint E Athar,**

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INTRODUCTION:

The one of the most common cause of mortality and morbidity in neonates is late preterm delivery. The reason behind preterm deliveries is the different obstetrical and medical conditions which results in form of morbidities in neonates. Neonates which were born due to late preterm with less than 37 weeks of gestation period but greater than 34 weeks are late preterm neonates. At the same time neonates which born at the gestation period of 34 weeks are considered as the normal neonates or term babies. As compared to term babies late preterm neonates are not considered as full-grown babies in physiological perspectives.

Late preterm neonates have high risk of dangerous outcomes and morbidities. These kind of neonates as compared to term babies have high risk of both long- and short-term consequences such as apnea, syndrome of respiratory distress, hypoglycemia, transient tachypnea, intrauterine growth restriction, sepsis, hyperbilirubinemia and feeding difficulties. In a study of Pakistan, it was documented that 13% of neonates had apnea, 16.5% had syndrome of respiratory distress, 38% had bilirubin, 5.2% had hypoglycemia, 4% had transient tachypnea, 24.8% had intrauterine growth restriction, 5% had sepsis, 25% had hyperbilirubinemia. The objective of this study is to examine the morbidities in neonates due to late preterm neonates. It is necessary to make people aware about the mortalities and morbidities associated with the late preterm deliveries so that future complications can be anticipated and managed properly.

MATERIAL AND METHODS:

This was a descriptive study which was conducted after getting the approval from ethical committee and in this data was collected from the records of all that neonates which were born due to late preterm with

less than 37 weeks of gestation period but greater than 34 weeks. In this study the data of 147 neonates was collected and through clinical examination morbidities in all of these infants were observed till 7th day after delivery. While those neonates were excluded who were belonged to term babies but have various syndromes and congenital anomalies. Before conducting the study, pretest counseling was given to all parents and a written consent paper was signed by all the parents. All the selected neonates were kept in neonate's unit till seven days after birth and morbidities such as apnea, syndrome of respiratory distress, hypoglycemia, transient tachypnea, intrauterine growth restriction, sepsis, and hyperbilirubinemia were evaluated. Under the supervision of experienced pediatrician all the observations were made. On a predesigned proforma gender, age, name, and address of all neonates including the above-mentioned information was recorded. SPSS ver. 21 was used for statistical analysis.

RESULTS:

The results of this study revealed that mean neonatal age was of these selected neonates was 4 ± 3.74 that is 69% i.e. 101 neonates were belong to age group of 1 to 4 days while 31% i.e. 46 neonates belong to age group of 4 to 7 days. The gender of 44% neonates was female and 56% were male. Out of 147 neonates 62% i.e. 91 neonates were born at 36 weeks of gestation period while 38% i.e. 56 were born at the gestation period of 35 weeks. Mean gestational weeks was 36 ± 2.341 . 18% i.e. 26 neonates had the weight of less than 1.5kg while 72% i.e. 106 neonates had weight between 1.5 to 2.5kg that means, mean weight was 1.7 ± 1.116 kg. Out of 147 neonates 13% had apnea, 16% had syndrome of respiratory distress, 15% had hypoglycemia, 4% had transient tachypnea, 20% had intrauterine growth restriction, 28% had sepsis, 25% had hyperbilirubinemia.

Table 1. Neonatal Morbidity

Morbidity	Frequency	Percentage
Hyperbilirubinemia	37	25%
Sepsis	41	28%
Intrauterine growth Restriction	29	20%
Transient tachypnea of Newborn	6	4%
Hypoglycemia	22	15%
Respiratory distress Syndrome	24	16%
Apnea	19	13%

Table 2. Neonatal morbidities w.r.t age

Morbidity	Status	1-4 days	4-7 days	Total	P value
Hyperbilirubinemia	Yes	26	11	37	0.8127
	No	75	35	110	
Total		101	46	147	
Sepsis	Yes	28	13	41	0.9462
	No	73	33	106	
Total		101	46	147	
Intrauterine growth restriction	Yes	20	9	29	0.9733
	No	81	37	118	
Total		101	46	147	
Transient tachypnea of newborn	Yes	4	2	6	0.9123
	No	97	44	141	
Total		101	46	147	
Hypoglycemia	Yes	15	7	22	0.9540
	No	86	39	125	
Total		101	46	147	
Respiratory distress syndrome	Yes	17	7	24	0.8060
	No	84	39	123	
Total		101	46	147	
Apnea	Yes	13	6	19	0.9770
	No	88	40	128	
Total		101	46	147	

Table 3. Neonatal morbidity w.r.t gender distribution

Morbidity	Status	Male	Female	Total	P value
Hyperbilirubinemia	Yes	21	16	37	0.8903
	No	61	49	110	
Total		82	65	147	
Sepsis	Yes	23	18	41	0.9618
	No	59	47	106	
Total		82	65	147	
Intrauterine growth restriction	Yes	16	13	29	0.9412
	No	66	52	118	
Total		82	65	147	
Transient tachypnea of newborn	Yes	3	3	6	0.7709
	No	79	62	141	
Total		82	65	147	
Hypoglycemia	Yes	12	10	22	0.8992
	No	70	55	125	
Total		82	65	147	
Respiratory distress syndrome	Yes	13	11	24	0.8617
	No	69	54	123	
Total		82	65	147	
Apnea	Yes	11	8	19	0.8425
	No	71	57	128	
Total		82	65	147	

Table 4. Neonatal morbidity w.r.t gestational weeks

Morbidity	Status	35 weeks	36 weeks	Total	P value
Hyperbilirubinemia	Yes	14	23	37	0.9703
	No	42	68	110	
Total		56	91	147	
Sepsis	Yes	16	25	41	0.8853
	No	40	66	106	
Total		56	91	147	
Intrauterine growth restriction	Yes	11	18	29	0.9838
	No	45	73	118	
Total		56	91	147	
Transient tachypnea of newborn	Yes	2	4	6	0.8063
	No	54	87	141	
Total		56	91	147	
Hypoglycemia	Yes	8	14	22	0.8561
	No	48	77	125	
Total		56	91	147	
Respiratory distress syndrome	Yes	9	15	24	0.9477
	No	47	76	123	
Total		56	91	147	
Apnea	Yes	7	12	19	0.9041
	No	49	79	128	
Total		56	91	147	

DISCUSSION:

There has been an attending ascend in the pace of morbidities among infant conveyed as preterm gestation. Our investigation indicated that out of 147 neonates 62% i.e. 91 neonates were born at 36 weeks of gestation period while 38% i.e. 56 were born at the gestation period of 35 weeks. Mean gestational weeks was 36 ± 2.341 . 18% i.e. 26 neonates had the weight of less than 1.5kg while 72% i.e. 106 neonates had weight between 1.5 to 2.5kg that means, mean weight was 1.7 ± 1.116 kg. Late preterm neonates have high risk of dangerous outcomes and morbidities. These kind of neonates as compared to term babies have high risk of both long- and short-term consequences such as apnea, syndrome of respiratory distress, hypoglycemia, transient tachypnea, intrauterine growth restriction, sepsis, hyperbilirubinemia and feeding difficulties. Out of 147 neonates 13% had apnea, 16% had syndrome of respiratory distress, 15% had hypoglycemia, 4% had transient tachypnea, 20% had intrauterine growth restriction, 28% had sepsis, 25% had hyperbilirubinemia. In another study of Pakistan, it was documented that 13% of neonates had apnea,

16.5% had syndrome of respiratory distress, 38% had bilirubin, 5.2% had hypoglycemia, 4% had transient tachypnea, 24.8% had intrauterine growth restriction, 5% had sepsis, 25% had hyperbilirubinemia. It is necessary to make people aware about the mortalities and morbidities associated with the late preterm deliveries so that future complications can be anticipated and managed properly. Another study revealed that among late preterm 13.06% created respiratory misery 52.56% late preterm had jaundice, 10.99% scenes of hypoglycemia, Hypothermia happened in 7.94% late preterm youngsters, 4.24% late preterm experienced at least one scenes of apnea. 18.06% late preterm infants had taking care of issues, 9.79% term children had affirmed sepsis.

CONCLUSION:

In this study it was concluded that in neonate's apnea, syndrome of respiratory distress, hypoglycemia, transient tachypnea, intrauterine growth restriction, sepsis, and hyperbilirubinemia are linked with late preterm.

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