births

2/5/23

Brief overview of variables measured:

17 variables were measured across 141 patients.

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Rows: 141
Columns: 17
$ mother_age       <dbl> 32, 22, 22, 22, 22, 24, 30, 31, 33, 18, 19, 34, 20, 2~
$ education        <fct> Secondary, Secondary, Secondary, Secondary, Secondary~
$ marital_status   <fct> Married, Married, Married, Married, Married, Married,~
$ occupation       <fct> Self-Employed, Self-Employed, Stay At Home, Stay At H~
$ prev_term        <fct> 4, 1, 2, 1, 2, 0, 2, 3, 3, 1, 0, 3, 2, 3, 2, 2, 3, 3,~
$ prev_pre_term    <fct> 0, 0, 0, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 2, 0, 1,~
$ gestational_age  <dbl> 31, 36, 28, 34, 28, 36, 34, 33, 35, 32, 30, 34, 31, 3~
$ complication     <fct> No, No, No, No, Yes, Yes, No, No, No, Yes, Yes, Yes, ~
$ mode_of_delivery <fct> Caesarean section, Caesarean section, Caesarean secti~
$ onset_of_labor   <fct> Spontaneous, Spontaneous, Induced, Induced, Induced, ~
$ anc_visits       <dbl> 3, 3, 3, 3, 3, 4, 3, 2, 2, 3, 3, 3, 3, 3, 3, 3, 4, 5,~
$ HIV              <fct> Reactive, Non-Reactive, Non-Reactive, Non-Reactive, N~
$ blood_group      <fct> O, B, A, O, A, B, O, O, O, B, O, O, A, B, O, B, A, B,~
$ rhesus           <fct> Positive, Negative, Positive, Negative, Positive, Pos~
$ sex              <fct> Female, Female, Male, Female, Male, Male, Male, Male,~
$ birth_weight     <fct> <2500, <2500, <2500, 2500-3000, <2500, 2500-3000, <25~
$ nature           <fct> Pre-term, Pre-term, Pre-term, Pre-term, Pre-term, Pre~
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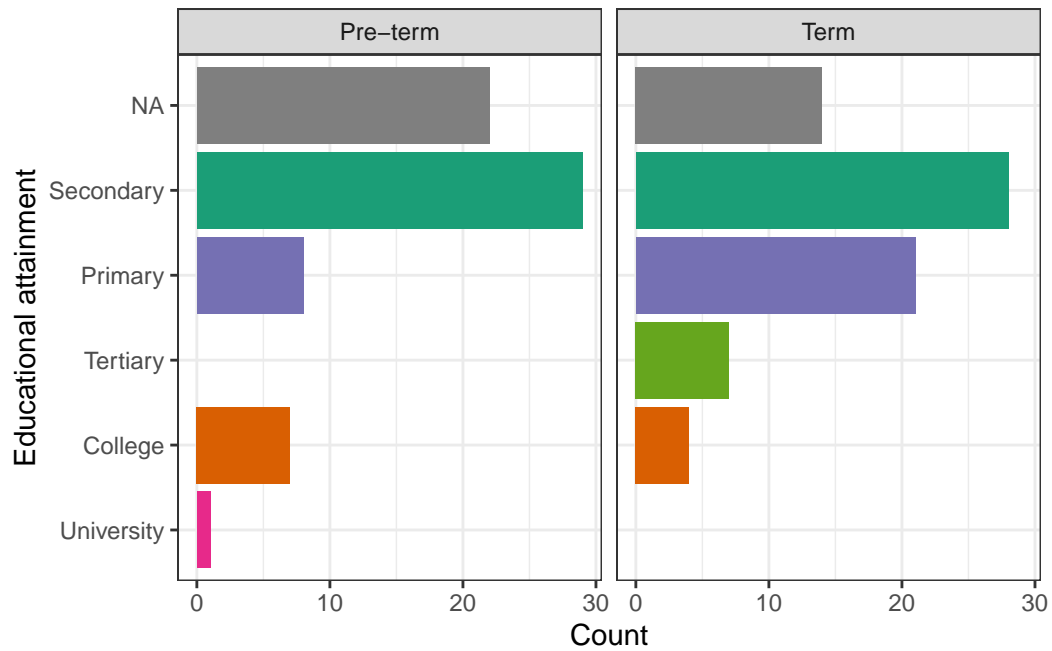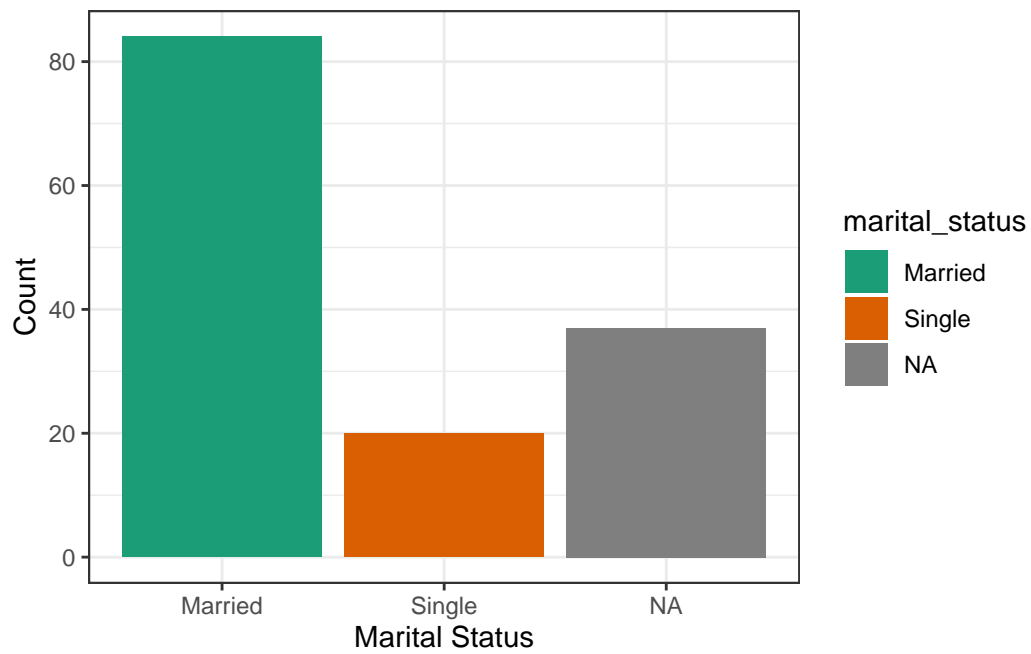
Overall age is somewhat evenly distributed

Histogram of mothers' age
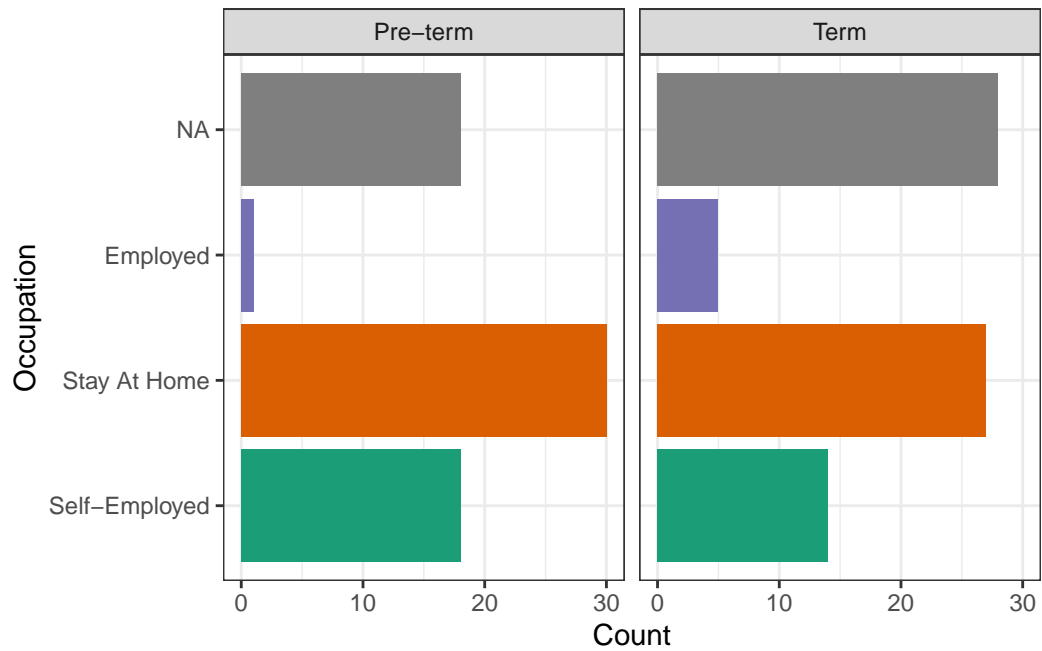

Histogram of mothers' age
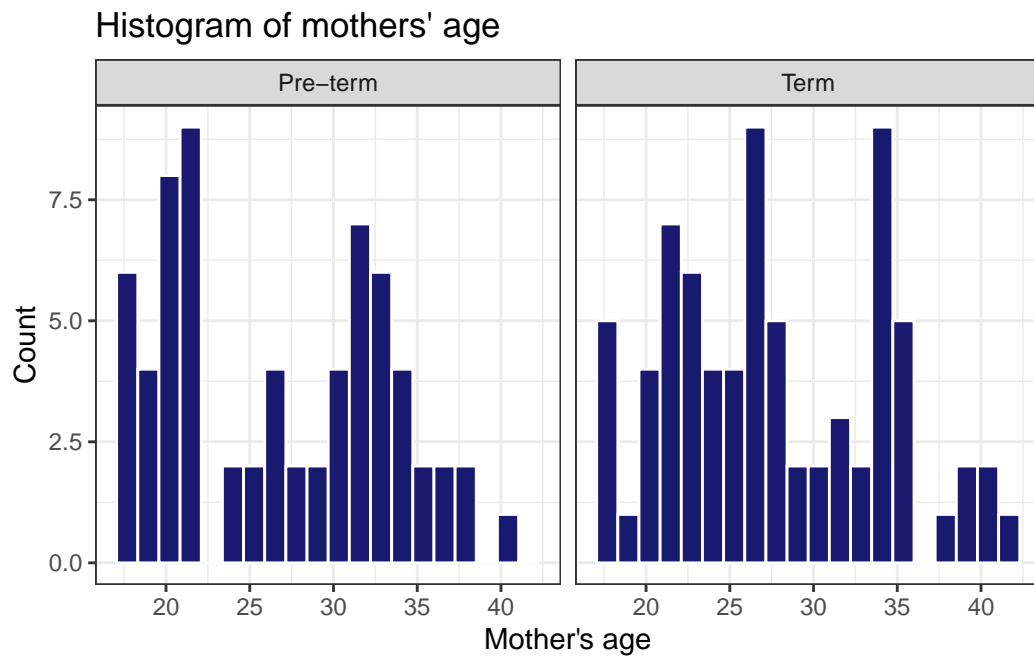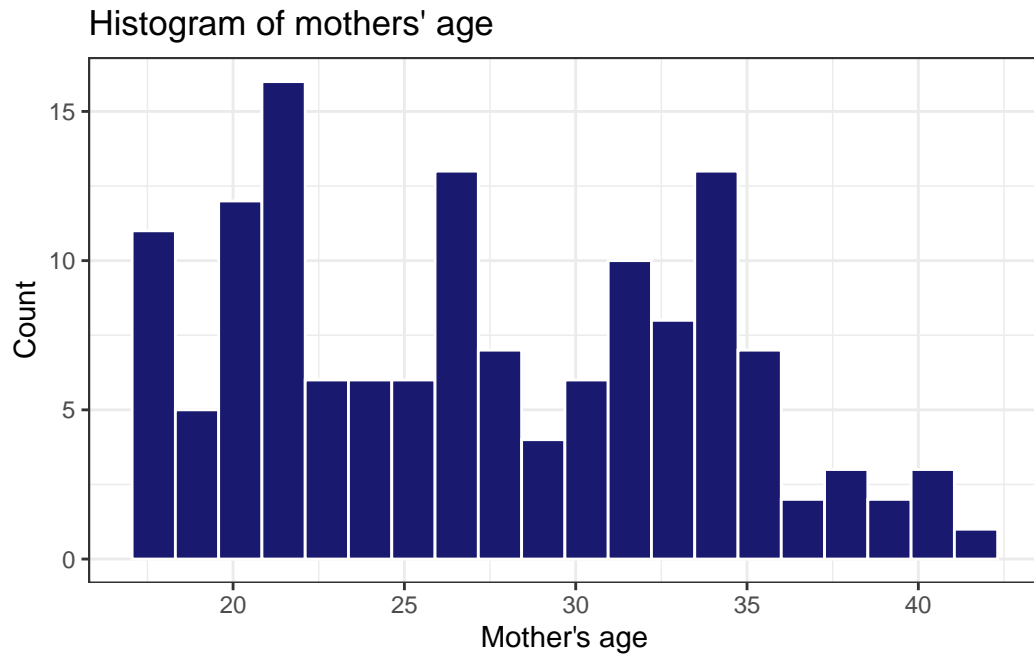
Level of education was missing for a significant number of the interviewed mothers. A few made it to university while most had completed secondary school.
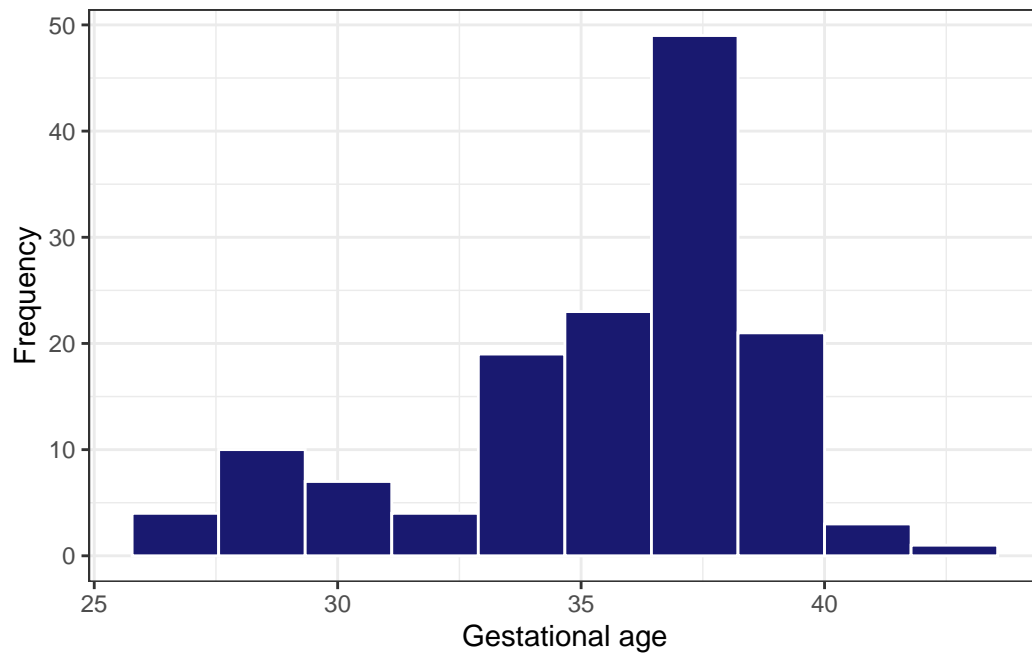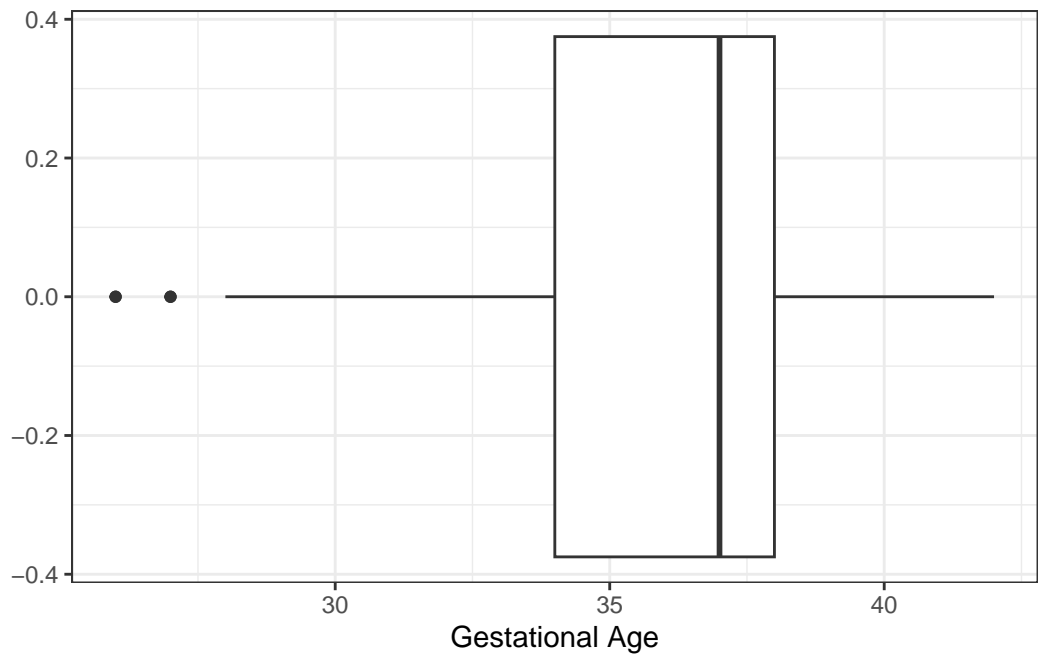
More mothers were married.

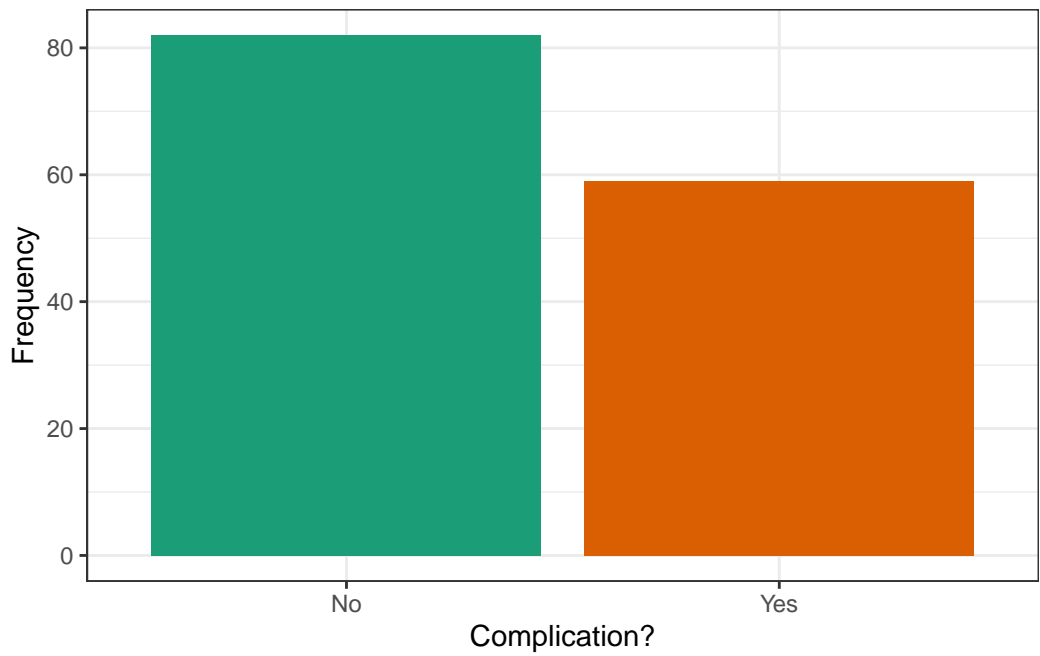Among mothers who reported, most were stay at home moms, followed by the self-employed and employed.

A significant number of mothers were in the mid to late thirties.
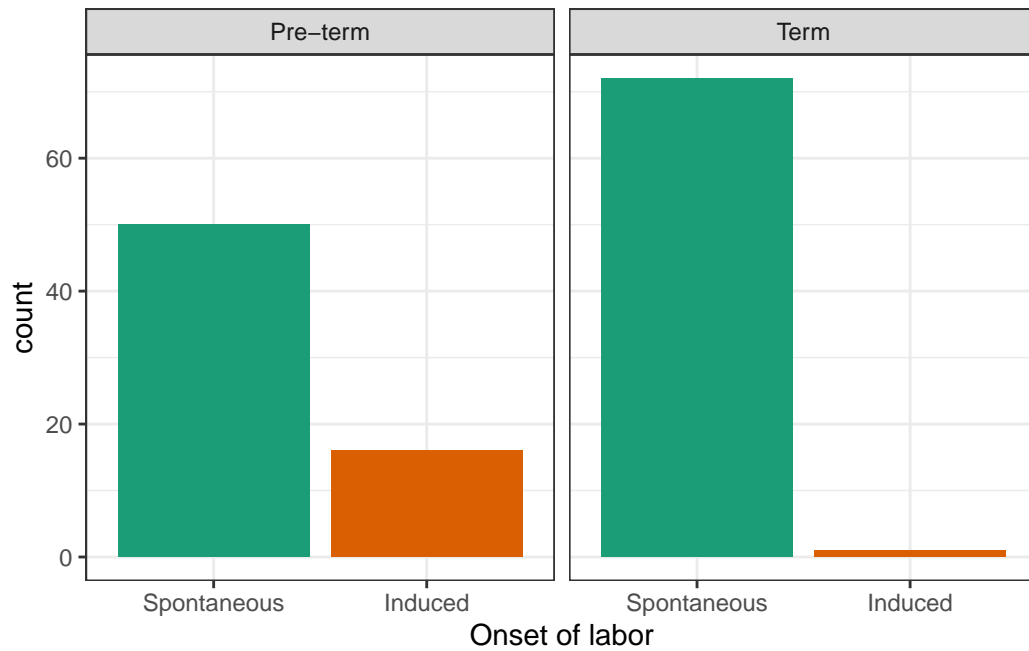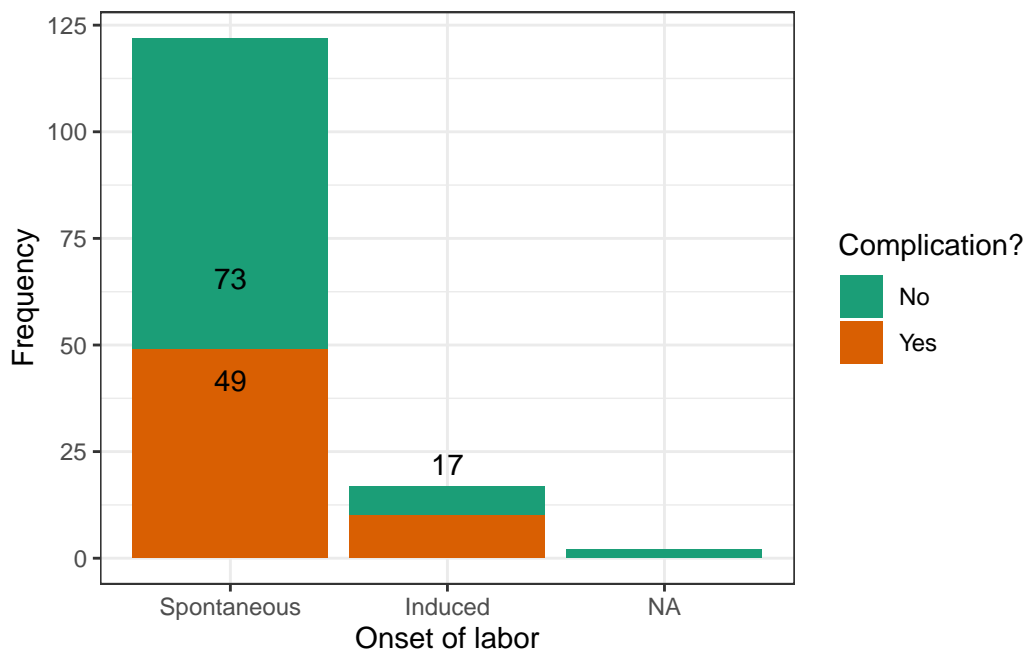
There were more births that had complications

Onset of labor for most mothers was spontaneous

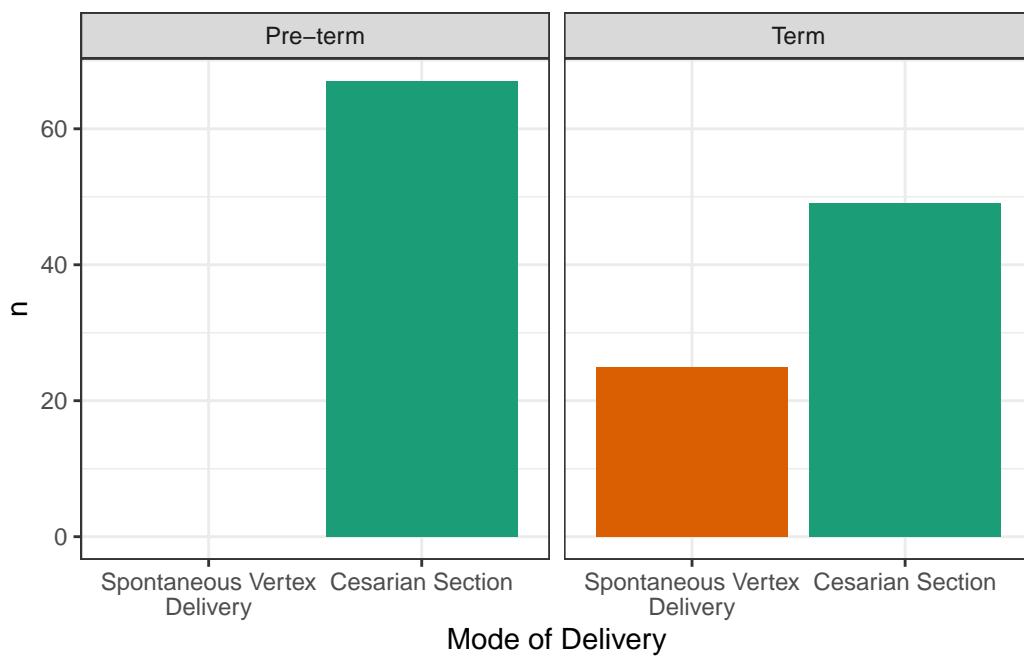Complications were common among women with induced on set of labor (59%) compared to those who had spontaneous onset of labor(40%)

Moreover, most of the pre-term and term births were by Caesarian Section . No pre-term

births reported were by spontaneous vertex delivery.

A majority of deliveries were spontaneous for term and pre-term births
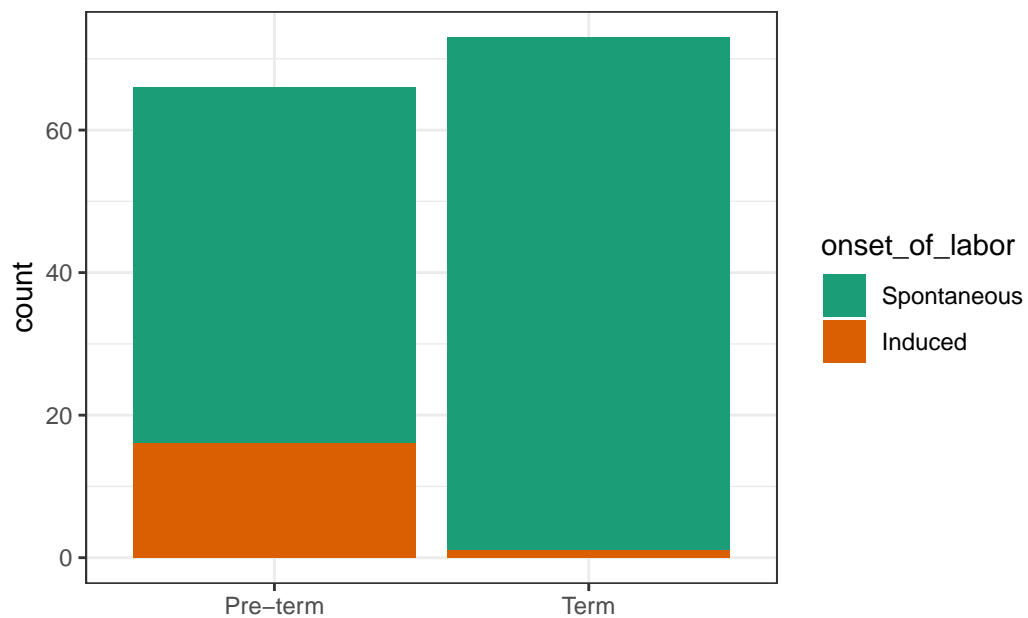
For the interviewed mothers, the were more male newborns than female newborns.

Most new borns weighed less than 2500 grams compared 17 who weighed more than 3000 grams

However, differences in weight across male and female newborns are not significant

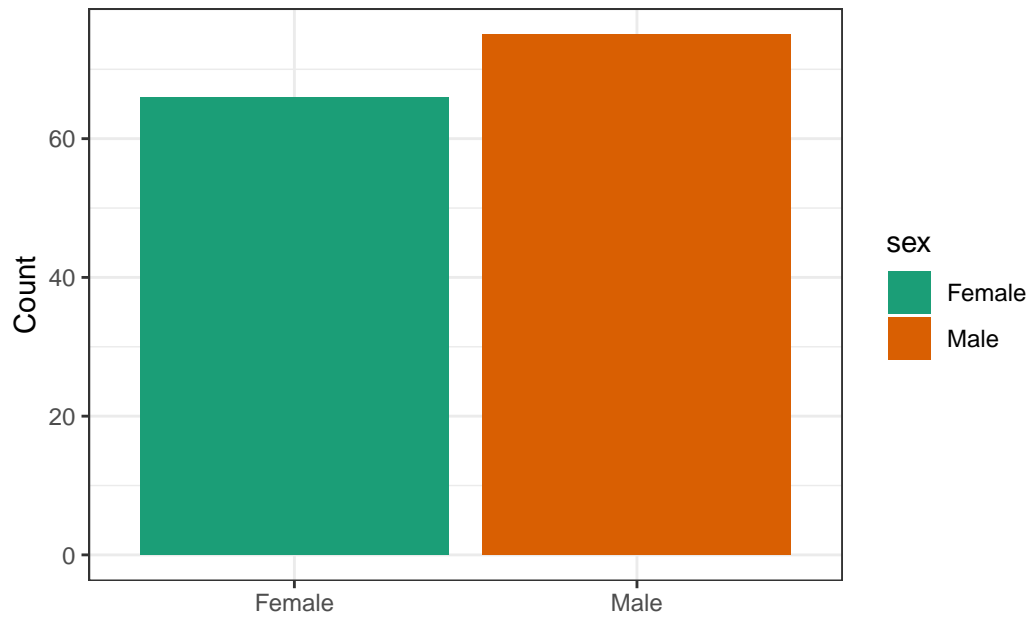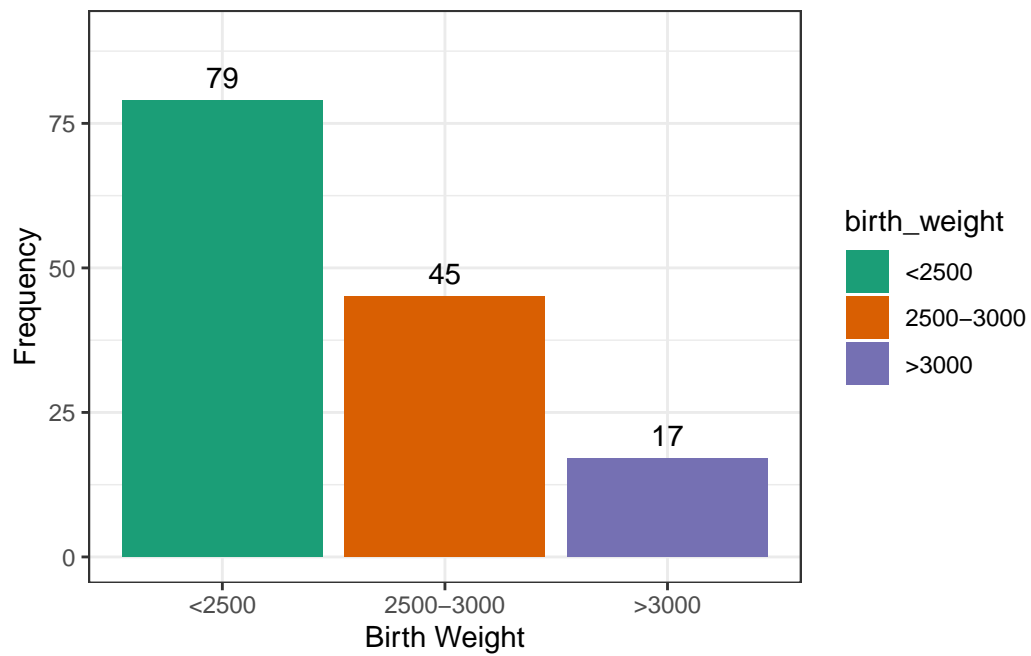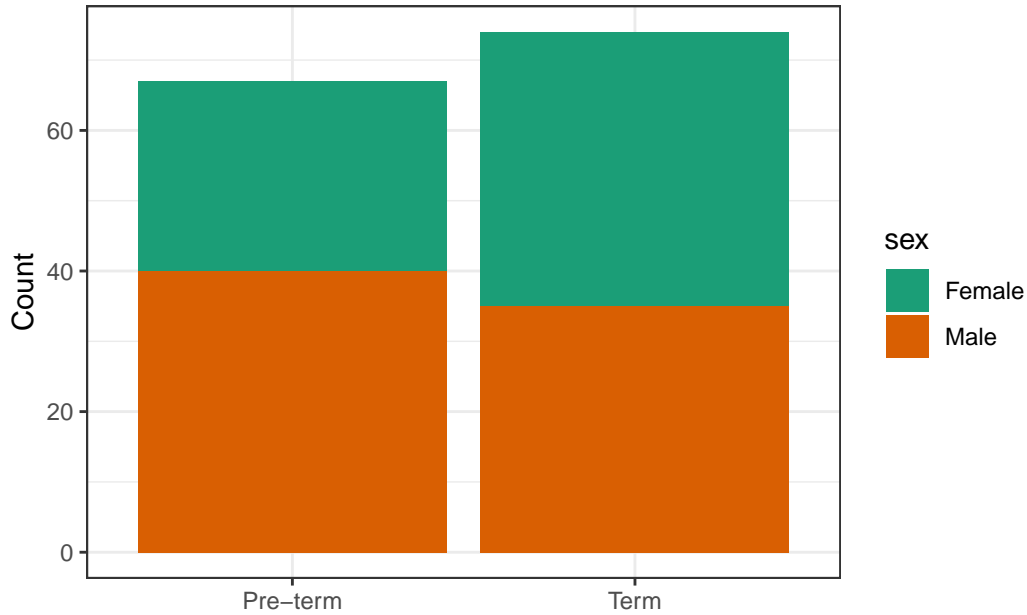| Characteristic	**Pre-term**, N = 67	**Term**, N = 74	**p-value**
Birth Weight			0.064
<2500	42 (63%)	37 (50%)	
2500-3000	15 (22%)	30 (41%)	
>3000	10 (15%)	7 (9.5%)	

The distribution across both sexes of the newborns is almost similar for both pre-term and term births.

Hb levels reported

N	Average
75	12.86364

There is a significant association between the number of antenatal clinic visits

Characteristic	**Pre-term**, N = 41	**Term**, N = 63	**p-value**
Clinic Visits			0.034
1	5 (12%)	0 (0%)	
2	8 (20%)	15 (24%)	
3	20 (49%)	37 (59%)	

Characteristic	Pre-term, N = 41	Term, N = 63	p-value
4	5 (12%)	10 (16%)	
5	2 (4.9%)	1 (1.6%)	
6	1 (2.4%)	0 (0%)	

Mother's age is not a risk factor influencing the occurrence of term and pre-term births in the sample considered.

Characteristic	Pre-term, N = 67	Term, N = 74	p-value
Mother's Age	27 (20, 32)	27 (23, 34)	0.3

Characteristic	Pre-term, N = 66	Term, N = 73	p-value
Onset of Labor			<0.001
Spontaneous	50 (76%)	72 (99%)	
Induced	16 (24%)	1 (1.4%)	

There is close association between complications and the mode of delivery.

Complication?

Characteristic	No, N = 82[1]	Yes, N = 59[1]	p-value[2]
Mode of Delivery			<0.001
Caesarean section	59 (72%)	57 (97%)	
Spontaneous Vertex Delivery	23 (28%)	2 (3.4%)	

[1]n (%)
[2]Pearson's Chi-squared test

Mode of delivery is a highly significant risk factor influencing the occurrence of term and pre-term births as confirmed by a Chi-squared test.

Characteristic	Pre-term, N = 67	Term, N = 74	p-value
Mode of Delivery			<0.001
Caesarean section	67 (100%)	49 (66%)	
Spontaneous Vertex Delivery	0 (0%)	25 (34%)	