Results

Table (1): Demographic Characteristics of The studied Mothers

Variable		No.	%
Education	Educated	41	82.0
	Not educated	9	18.0
Occupation	House wife	34	68.0
	Working	16	32.0
Residence	Rural	23	46.0
	Urban	27	54.0
House painting	Recent	37	74.0
	Old	6	12.0
	Not	7	14.0
Husband job	Risky	13	26.0
	Not risky	37	74.0
Pipe system	Metal	32	64.0
	Plastic	18	36.0

Table (2): Age Characteristics of The studied Mothers

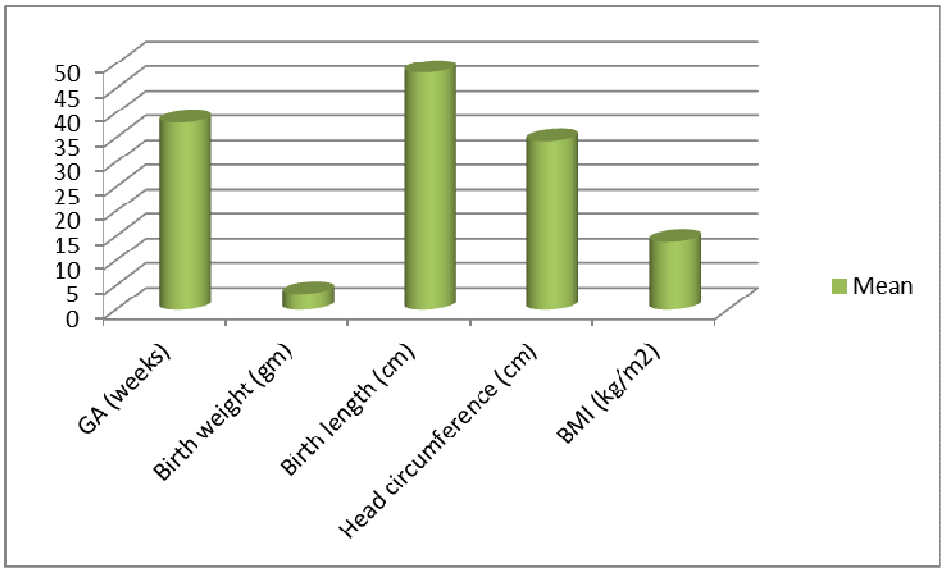
Variable	NO.	Mean	±SD	Range	
Age(in year)	50	27	4.39	19	36

Table (3): Descriptive table for Anthropometric Measures & Age of the Studied Neonates

	Cases				
	No.	**Mean**	**±SD**	**Range**	
GA (weeks)	50	38.06	0.8901	37	40
Birth weight (gm)	50	3258.7	405.42	2570	4530
Birth length (cm)	50	48.25	1.745	45	52
Head circumference (cm)	50	34.34	1.10398	33	38
BMI (kg/m^2)	50	13.8913	1.2156	11.4	16.78

GA: Gestational age **BMI:** Body mass index

Figure (1): Mean of gestational age and anthropometric values of the studied neonates

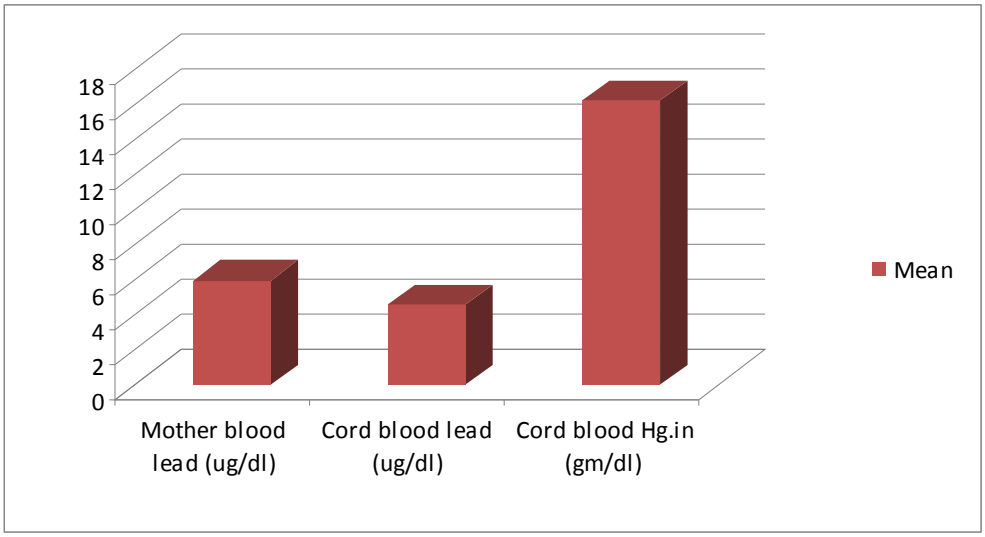


This figure shows mean of gestational age and anthropometric values of the studied neonates.

Table (4): Descriptive table for Mother blood lead, Cord blood lead, and Cord blood hemoglobin of the Studied Mothers and Neonates

	Cases				
	No.	**Mean**	**±SD**	**Range**	
Mother blood lead (ug/dl)	50	5.956	1.6775	3.3	9.9
Cord blood lead (ug/dl)	50	4.592	1.293	2.5	7.4
Cord blood Hg.(gm/dl)	50	16.244	1.9276	12.9	20

Figure (2): Mean of Mother blood lead, Cord blood lead, and Cord blood hemoglobin of the Studied Mothers and Neonates.



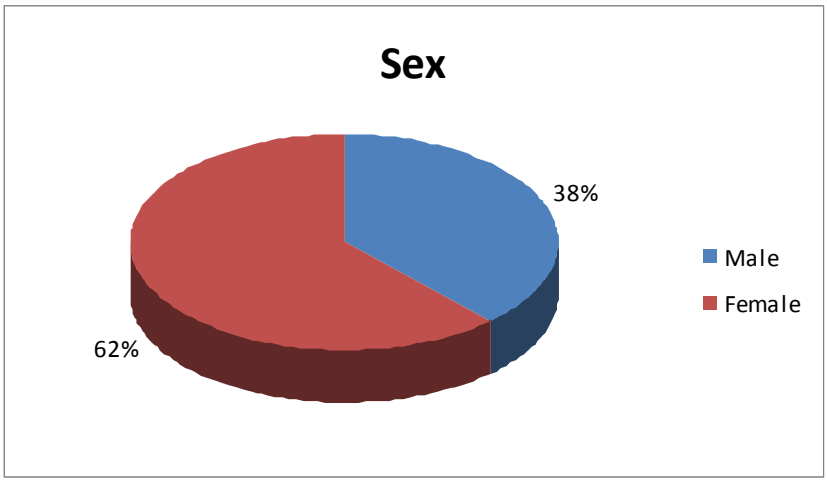
This figure shows Mean of Mother blood lead, Cord blood lead, and Cord blood hemoglobin of the Studied Mothers and Neonates.

Table (5): Show NO. & Percentage of the Studied Neonates according to Sex and Mode of Delivery

Variable		No.	%
Sex	Male	19	38.0
	Female	31	62.0
Mode of delivery	NVD	20	40.0
	CS	30	60.0

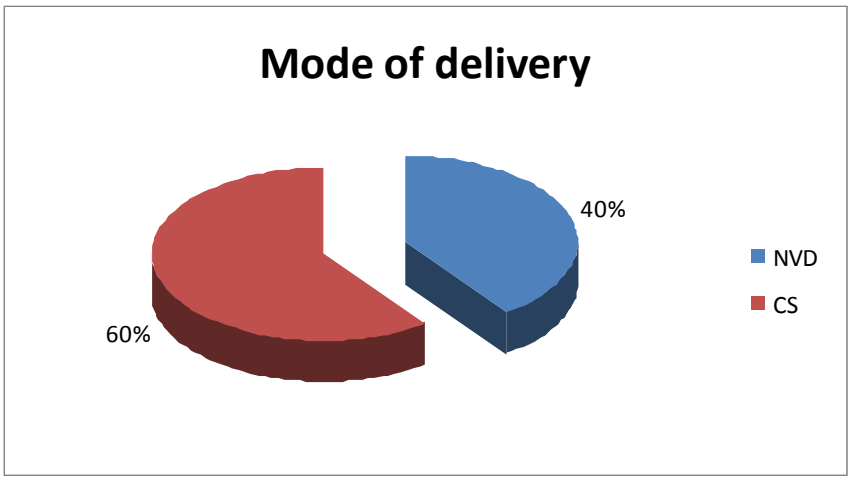
NVD: Normal vaginal delivery **C.S:** Cesarean section

Figure (3): Percentage the Studied Neonates according to Sex



This figure shows of Percentage the Studied Neonates according to Sex.

Figure (4): Percentage the Studied Neonates according to Mode of Delivery



This figure shows of Percentage the Studied Neonates according to Mode of Delivery.

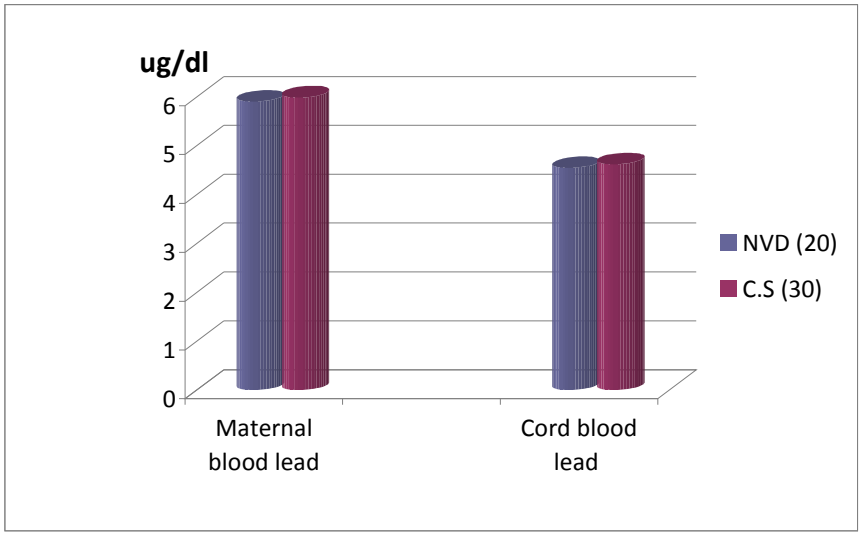
Table (6): Comparison between Mothers who delivered by NVD and those delivered by C.S according to Maternal blood lead and Cord blood lead

	Mothers (mode of delivery)				Student t test	P	Sig.
	NVD (20)		C.S (30)				
	Mean	±SD	Mean	±SD			
Maternal blood lead in ug\dl	5.905	1.813	5.99	1.612	-0.174	0.863	NS
Cord blood lead in ug\dl	4.545	1.4024	4.6233	1.2387	-0.208	0.836	NS

NVD: Normal vaginal delivery **C.S:** Cesarean section **P**> 0.05 (NS**)**

This table shows no statistically significant difference between mothers who delivered by NVD and those delivered by C.S as regard maternal blood lead or cord blood lead.

Figure (5): Comparison between Mothers who delivered by NVD and those delivered by C.S according to maternal blood lead and cord blood lead.



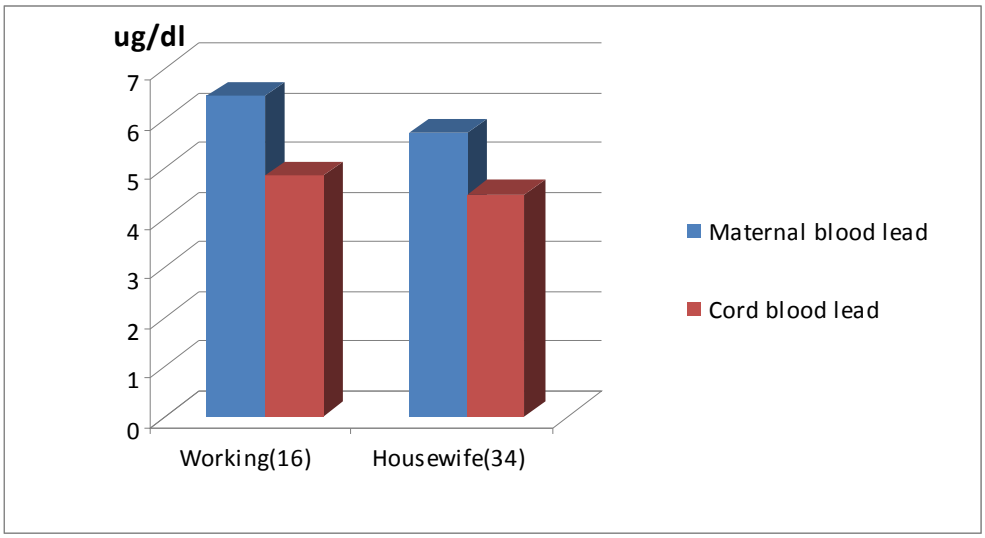
This figure shows comparison between Mothers who delivered by NVD and those delivered by C.S according to maternal blood lead and cord blood lead.

Table (7): Comparison between Working Mothers and Housewife according to Maternal blood lead and Cord blood lead

	Mothers occupation				Student t test	P	Sig.
	Working(16)		Housewife(34)				
	Mean	±SD	Mean	±SD			
Maternal blood lead in ug\dl	6.462	1.745	5.718	1.616	1.482	0.145	NS
Cord blood lead in ug\dl	4.856	1.412	4.468	1.236	0.991	0.327	NS

This table shows no statistically significant difference between Working Mothers and Housewife as regard maternal blood lead or cord blood lead.

Figure (6): Comparison between Working Mothers and Housewife according to Maternal blood lead and Cord blood lead



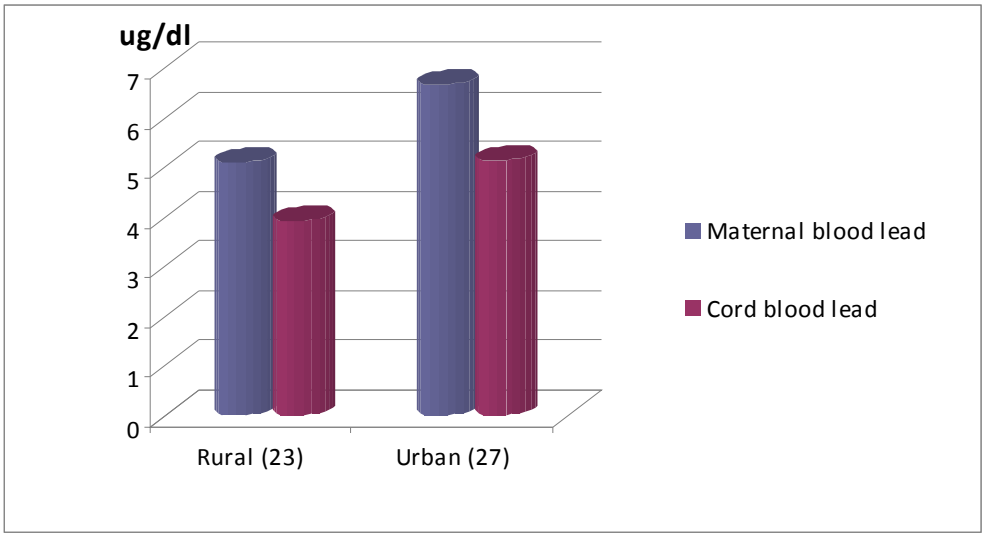
This figure shows comparison between Working Mothers and Housewife according to Maternal blood lead and Cord blood lead.

Table (8): Comparison between Mothers live in Urban and those in Rural area according to Maternal blood lead and Cord blood lead

	Residence				Student t test	P	Sig.
	Rural (23)		Urban (27)				
	Mean	±SD	Mean	±SD			
Maternal blood lead in ug\dl	5.1	1.342	6.685	1.61	3.747	0.001	HS
Cord blood lead in ug\dl	3.939	0.977	5.148	0.1.283	3.696	0.001	HS

This table shows there is increase in serum lead level of Mothers live in Urban in comparison to those live in Rural area .Also, there is increase in cord lead level of her neonate.

Figure (7): Comparison between Mothers live in Urban and those in Rural area according to Maternal blood lead and Cord blood lead.



This figure shows Comparison between Mothers live in Urban and those in Rural area according to Maternal blood lead and Cord blood lead.

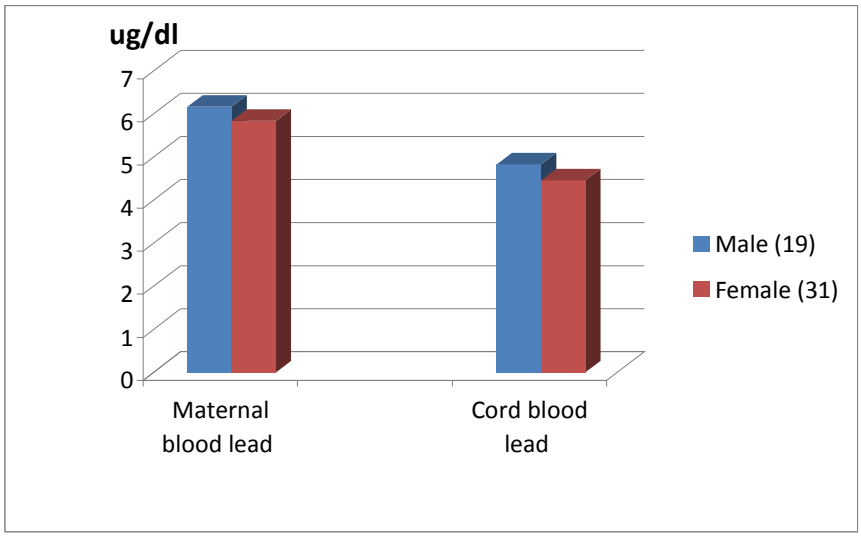
Table (9): Comparison between Males and Females according to Maternal blood lead and Cord blood lead

	Neonates				Student t test	P	Sig.
	Male (19)		Female (31)				
	Mean	±SD	Mean	±SD			
Maternal blood lead in ug\dl	6.163	2.0345	5.829	1.4383	0.68	0.500	NS
Cord blood lead in ug\dl	4.8263	1.51981	4.4484	1.13545	1.003	0.321	NS

P> 0.05 (NS)

This table shows no statistically significant difference between males and females as regard maternal blood lead or cord blood lead.

Figure (8): Comparison between Males and Females according to maternal blood lead and cord blood lead



This figure shows comparison between Males and Females according to maternal blood lead and cord blood lead.

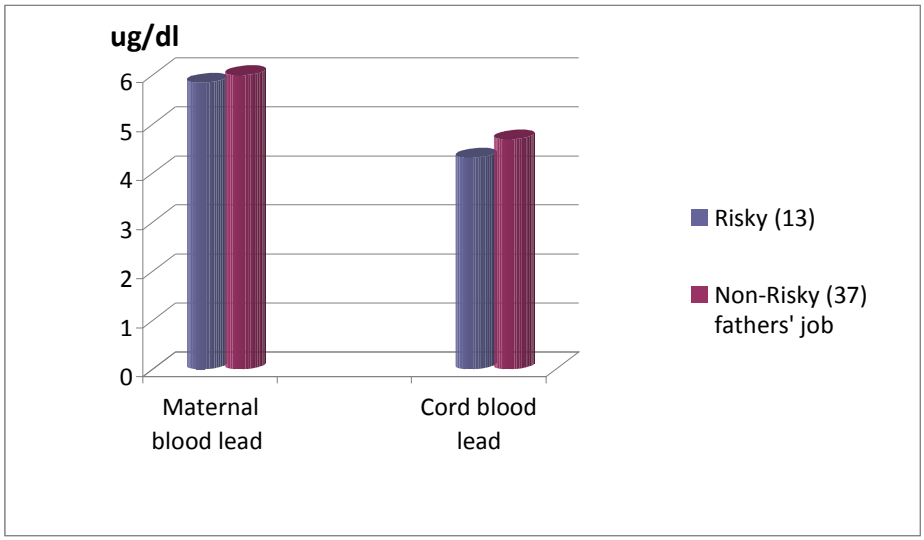
Table (10): Comparison between Risky and Non-Risky fathers' job according to Maternal blood lead and Cord blood lead

	Cases				Student t test	P	Sig.
	Risky (13) fathers' job		Non-Risky (37) fathers' job				
	Mean	±SD	Mean	±SD			
Maternal blood lead in ug\dl	5.846	1.111	5.995	1.8474	-0.272	0.787	NS
Cord blood lead in ug\dl	4.3154	0.95816	4.6892	1.3902	-0.895	0.375	NS

P> 0.05 (NS)

This table shows no statistically significant difference between risky and non-risky fathers' job as regard maternal blood lead and cord blood lead.

Figure (9): Comparison between risky and non-risky fathers' job according to maternal blood lead and cord blood lead



This figure shows comparison between risky and non-risky fathers' job according to maternal blood lead and cord blood lead.

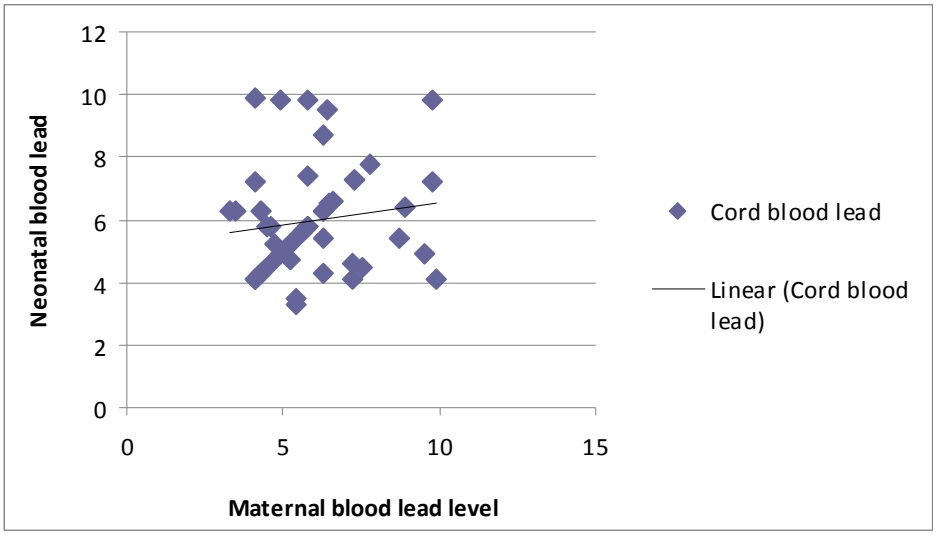
Table (11): Correlation coefficient between Maternal blood lead levels, Neonatal anthropometric measurements, Cord blood lead level and Cord blood Hemoglobin

	MBLLs		
	r	**P**	**Sig.**
Birth weight (gm)	-0.144	0.317	NS
Birth length (cm)	-0.082	0.573	NS
Head circumference (cm)	-0.169	0.242	NS
BMI (kg/m^2)	-0.264	0.064	NS
Cord blood lead	0.559	0.001	HS
Cord blood HB%	-0.198	0.168	NS

MBLLs (Maternal blood lead levels)

This table shows no significant correlation between Maternal blood lead level and Neonatal anthropometric measurement & Cord blood HB%. But shows significant correlation between Maternal blood lead level and Cord blood lead level.

Figure (10): Relation between Neonatal blood lead level and Maternal blood lead level



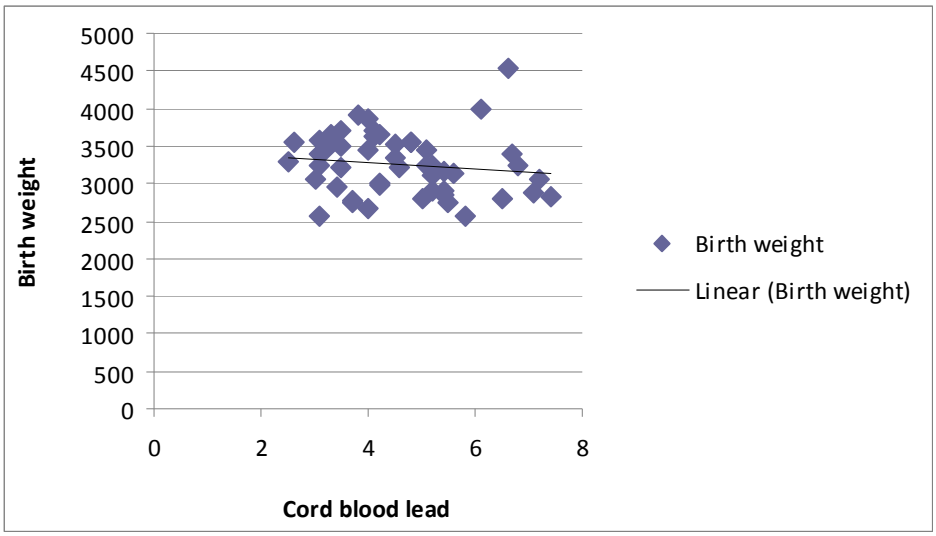
This figure shows correlation between maternal blood Lead and cord blood Lead among the study group **(r=0.559, p=0.001)**.

Table (12): Correlation coefficient between Cord blood lead levels and Neonatal anthropometric measurement & Cord blood HB

	Cord blood lead levels (ug/dl)		
	r	**P**	**Sig.**
Birth weight (gm)	0.219	0.127	NS
Birth length (cm)	0.204	0.155	NS
Head circumference (cm)	0.204	0.155	NS
BMI (kg/m^2)	0.173	0.229	NS
Cord blood HB%	-0.011	0.939	NS

This table shows no significant correlation between Cord blood lead level and Neonatal anthropometric measurement & Cord blood HB%.

Figure (11): Relation between Birth weight and Cord blood lead level



This figure shows no correlation between Birth weight and Cord blood lead level among study group.