Results

This study was conducted at Benha University Hospital during the period from March to october, 1990.

One hundred mothers and their newborn infants were grouped into three main groups. The first group consisted of 61 normal pregnant women and their offspring in whom oxytocin and intravenous fluids were given. The second group consisted of 22 normal pregnant women and their offspring in whom intravenous fluids only were administered. The third group consisted of 17 normal pregnant women and their offspring in whom neither oxytocin nor intravenous fluids were given.

Table (1) and figure (3) Showed the effect of oxytocin and intravenous fluid intake on levels of serum bilirubin in newborns on the $1\frac{\text{st}}{\text{st}}$, $4\frac{\text{th}}{\text{th}}$, $7\frac{\text{th}}{\text{th}}$ days post-natally. In the $1\frac{\text{st}}{\text{th}}$ day 100 newborns were studied, and significant difference was observed between group (3) and group (1) the highest mean serum bilirubin was observed in group (3) 1.61 \pm 0.73.

In the $4\frac{th}{t}$ day seventy six cases were studied, the mean serum bilirubin was 6.69 \pm 2.94 for the group (1), 8.44 \pm 2.36 for group (2) and 11.43 \pm 3.26 for group (3) and significant

difference was observed between group (3) and group (1) and also, between group (3) and group (2) but not between group (2) and (1).

Thirty seven infants were studied in the $7\frac{th}{t}$ day the mean indirect serum bilirubin in group (1) was 4.35 ± 2.96 , in group (2) was 6.02 ± 1.49 and in group (3) was 7.91 ± 3.22 . There is significant difference between group (3) and group (1) while the differences between group (3) and (2) and group (2) and (1) were not significant. It is to be noted that the peak value of serum bilirubin was in the $4\frac{th}{t}$ day postnatally and in group (3) (which was given oxytocin).

Table (2 A) and figure (4), showed the effect of oxytocin on levels of serum bilirubin in newborns regardless of the I.V.F. intake. In the 1st day no significant differece was observed in the mean serum indirect bilirubin between groups which were given < 10u. and > 10u. of oxytocin.

Significant difference was observed between these two groups in the $4\frac{th}{}$ and $7\frac{th}{}$ days post-natally. The peak value of serum bilirubin was in the $4\frac{th}{}$ day post-natally and in the group which was given more than 10u. of oxytocin (13.5 \pm 2.32).

Table (2 B) showed the effect of oxytocin dose on levels of serum bilirubin in newborns of mothers receiving 1001 C.C. 2000 C.C. I.V.F in the 1st, 4th, and 7th day post-natally.

In the 1st day no significant difference was observed between the two groups receiving \langle 10u. and \rangle 10u. of oxytocin. Singnificant difference was observed between these 2 groups in the 4th and 7th days.

Table (2 C) showed the effect of oxytocin dose on levels of serum bilirubin in newborns of mothers receiving 2001-3000 C.C. I.V.F. in the 1st, 4th and 7th days post-natally. No significant difference was observed between the 2 groups (\leqslant 10u. and \gt 10u.) on the 1st, 7th days while significant difference was observed on day 4.

Table (3 A) and figure (5) showed the effect of I.V.F. intake on serum bilirubin of newborns regardless of oxytocin intake in the, $1 \pm t$, $4 \pm t$ and $7 \pm t$ days post-natally. In the $1 \pm t$ day no significant difference was observed between the three groups (a, b and c). In the $4 \pm t$ day the mean serum bilirubin in group (a) was 8.7 ± 246 , in group (b) was 10.49 ± 3.44 and in group (c) was 12.89 ± 2.59 . Significant difference was observed between groups (c) and (a) as well as between groups (c) and (b) while the difference between group (b) and (a) was not significant. In the $7 \pm t$ day significant difference was observed between group (c) and (a) and group (b) and (a) but not between (c) and (b).

Tables (3 B, C, and D) show the effect of I.V.F. intake on serum bilirubin after neutralizing the effect of oxytocin by assessing each group separately according to the amount of

oxytocin administered to the mothers. Table (3 B), showed the effect of I.V.F. intake on serum bilirubin of newborns in infants of mothers who did not receive oxytocin in $1 \frac{\text{st}}{\text{th}}$ and $7 \frac{\text{th}}{\text{th}}$ days post-natally. No significant difference was observed between the three groups (a), (b) or (c) in the $1 \frac{\text{st}}{\text{th}}$ and $7 \frac{\text{th}}{\text{th}}$ days.

Table (3 C) showed the effect of amount of I.V.F. intake on serum bilirubin of newborns in infants of mothers who received up to 10 units of oxytocin in the $1 \frac{st}{t}$, $4 \frac{th}{t}$ and $7 \frac{th}{t}$ days post-natally. No significant difference was observed between the three groups a, b, c, in the $1 \frac{st}{t}$, $4 \frac{th}{t}$ and $7 \frac{th}{t}$ days post-natally.

Table (3 D) showed the effect of amount of I.V.F. intake on serum bilirubin of newborns in infants of mothers who received more than 10 units of oxytocin in the $1 \pm t$, $4 \pm h$ and $7 \pm h$ days post-natally. No significant difference between group (b) and (c) in the $1 \pm t$, $4 \pm h$ and $7 \pm h$ days.

N.B. Group (a) is not presented in this table due to the fact that all cases that received more than 10 units of oxytocin had an obligatory amount of I.V.F. beyond 1000 C.C.

Table (4 A) and figure (6) showed the effect of type of feeding (breast or artificial) on serum bilirubin values in newborns regardless of oxytocin intake in the 1st, 4th and 7th days post-natally. No significant difference was observed between the two groups in the 1st, 4th and 7th days.

Tables (4 B, C and D) showed the effect of type of feeding on serum bilirubin values in mother receiving no oxytocin, \langle 10 units and \rangle 10 units respectively. There is no significant difference between the two groups (breast and artificial) in the $\frac{1 + t}{2}$, $\frac{4 + t}{2}$ or $\frac{7 + t}{2}$ days post-natally.

Tables (5 A) and figure (7), showed the effect of infant sex on serum bilirubin levels in newborns regardless of oxytocin intake in the 1st, 4th and 7th days post-natally. No significant difference was observed.

Table (5 B, C, and D) showed the effect of infant sex on serum bilirubin levels in newborns in mothers receiving no oxytocin, less than or equal to 10 units and more than 10 units of oxytocin respectively in 1st, 4th and 7th days post-natally. No significant difference between males and females was observed in all of the above cases in 1st, 4th and 7th days post-natally.

Table (6) showed the effect of birht weight on serum bilirubin values of newborns at the 1st, 4th and 7th days post-natally. No significant difference was observed between the three groups I,II,III in the 1st, 4th or 7th days post-natally.

N.B. Birth weight less than 2500 gm was not included in our research.

Table (7 A) and figure (8) showed the effect of gravidity on serum bilirubin levels in newborns in the $1 \pm t$, $4 \pm t$ and $7 \pm t$ days post-natally. No significant difference was observed in the $1 \pm t$

day. In the $4\frac{th}{t}$ day the mean serum bilirubin in infants of primigravidae was 12.27 ± 2.94 , in infants of multiparae was 8.53 ± 3.3 and in infants of grandmultiparae was 8.27 ± 2.98 . Significant difference was observed between primigravidae and both multiparae and grandmultiparae while no significant difference was observed between multiparae and grandmultiparae.

In the 7th day there was significant difference between primigravidae and multipara but no significant difference between primigravidae and grandmultiparae nor between multiparae and grandmultiparae.

N.B. All primigravidae (32) were given oxytocin during labour.

Table (7 B) showed the effect of oxytocin dose (< 10u. and >10u.) on level of serum bilirubin in newborns of primigravidae mothers in the 1st, 4th and 7th days. No significant difference was observed in the 1st day post-natally.

In the $4\frac{th}{}$ and $7\frac{th}{}$ days significant difference was observed and higher mean serum bilirubin was found in the group which received more than 10 units of oxytocin.

Table (8) showed the effect of duration of labour (< 10 hours and > 10 hours) on the level of serum bilirubin values in newborns in the 1st, 4th and 7th days post-natally. No significant difference was observed between the two groups in the three chosen post-natal ages.

Table (9) and figure (9) showed the relation between Apgar score at 1st minute (< 6 and > 6) on serum bilirubin levels in the 1st, 4th and 7th days post-natally. In the 1st day no significant difference was observed between the two groups, in the 4th and 7th days significant difference was observed between these two groups. The mean serum bilirubin in the 4th day in group < 6 Apgar at 1st minute was 11.56 \pm 3.82 and > 6 Apgar at 1st minute was 9. 35 \pm 3.42. The mean serum bilirubin in the 7th day in < 6 Apgar at 1st minute was 9.1 \pm 2.16 and > 6 Apgar at 1st minute was 6.10 \pm 3.13.

Table (10 A,B,C,D) and figure (10) showed the effect of contraceptive pill usage on serum bilirubin of newborns regardless of oxytocin intake, in mothers who did not receive oxytocin, in mothers who had received up to 10 units of oxytocin and in mothers who had received more than 10 units of oxytocin respectively in the $1 \pm t$, $4 \pm h$ and $7 \pm h$ days post-natally. No significant difference was observed between users and non users in all cases.

Table (11) showed the effect of maternal age on serum bilirubin level in newborns in the $1\frac{st}{t}$, $4\frac{th}{t}$ and $7\frac{th}{t}$ days post-natally. No significant difference was observed in different age groups.

Table (12) and figure (11) showed the effect of maternal hyponatremia on serum bilirubin levels in newborns in $1 \frac{\text{st}}{4}$, $4 \frac{\text{th}}{4}$ and $7 \frac{\text{th}}{4}$ days post-natally. In the three days no significant difference was observed between the two groups (< 130 and > 130 mEg/1).

Table (13) showed the effect of infant serum sodium on his bilirubin level in the 1st day of life. No significant difference was observed between the two groups (< 130 mEq/l. and \geqslant 130 mEq/l.)

Table (14) and figure (12) showed the effect of oxytocin and intravenous fluid administration on level of serum sodium in newborns in the 1st, 4th and 7th days post-natally.

In the 1st day the mean serum sodium in group (1) was 137.41 ± 3.71 , in group (2) was 133.45 ± 2.6 and in group (3) was 131.3 ± 3.98 . Significant difference was observed between group (3) and group (1) also, between group (3) and group (2) and between group (2) and group (1). In the 4th day the mean serum sodium in group (1) was 136.81 ± 3.23 , in group (2) was 135.27 ± 2.05 and in group (3) was 134.41 ± 3.05 . Significant difference was observed only between group (3) and group (1) but not between group (3) and (2) nor group (2) and (1).

In the $7\frac{th}{}$ day no significant difference was observed between the three groups (1), (2) and (3).

Table (15 A) and figure (13) showed the effect of oxytocin dose on serum sodium of the newborns regardless of intravenous fluid intake in the $1\frac{\text{st}}{}$, $4\frac{\text{th}}{}$ and $7\frac{\text{th}}{}$ day post-natally. In the $1\frac{\text{st}}{}$ and $4\frac{\text{th}}{}$ day there was significant difference between the two groups (< 10 units and > 10 units of oxytocin) and mean serum sodium was lower in cases which were given more than 10 units of oxytocin.

Table (15 B) showed the effect of oxytocin dose on serum sodium of newborns at fluid values from 1001-2000 C.C. in the $1\frac{\text{st}}{\text{st}}$, $4\frac{\text{th}}{\text{th}}$ and $7\frac{\text{th}}{\text{th}}$ days post-natally. No significant difference was observed between the two groups (\langle 10 units and \rangle 10 units).

Table (15 C) showed the effect of oxytocin dose on serum sodium of newborns at fluid values from 2001-3000 C.C. in the $1 \pm t$, $4 \pm t$ and $7 \pm t$ days post-natally. No significant difference was observed in the $1 \pm t$ and $7 \pm t$ days but significant difference was observed in the $4 \pm t$ day the mean serum sodium in the group which was given \langle 10 units was 138 ± 1.2 and \rangle 10 units was 123.32 ± 2.12

Table (16 A) and figure (14) showed the effect of intravenous fluid administration on serum sodium of the newborns regardless of oxytocin adminstration in the $1\frac{st}{t}$, $4\frac{th}{t}$ abd $7\frac{th}{t}$ days post-natally.

Table (16 D) showed the effect of intravenous fluid administration on serum sodium of newborns in mothers receiving more than 10 units of oxytocin during labour in the 1^{st} , 4^{th} and 7^{th} days post-natally. No significant difference was observed between the two groups (b), (c).

N.B. group (a) was not present here because mothers which were given more than 10 units oxytocin always received more than 1000 C.C. of intravenous fluids.

Therefore, our general observation was that concomitant administration of I.V.F. with oxytocin is the cause of hyponatremia and not I.V.F. only.

Table (17) and figure (15) showed the effect of the mother's serum sodium value during labour on serum sodium in their newborns in the $1^{\underline{st}}$, $4^{\underline{th}}$ and $7^{\underline{th}}$ days post-natally. In the $1^{\underline{st}}$ day the mean serum sodium in newborns was 128 ± 1.79 in mothers whose serum sodium was less than 130 mEq/l. In mothers whose serum sodium was equal to or more than 130 mEq/l. the mean serum sodium in newborns was 133.17 ± 4.29 . Significant difference was observed between the two groups. In the $4^{\underline{th}}$ day in mothers with serum sodium less than 130 mEq/l. the mean serum sodium in newborns was 132 ± 2.1 and in mothers with serum sodium equal to or more than 130 mEq/l. the mean serum sodium in newborns was

135.34 \pm 3.01. Significant difference was observed between the two groups. In the $7\frac{th}{}$ day no significant difference was observed between the two groups.

Table (18) showed the effect of mother's haemoglobin on their infant's haemoglobin in the $1\frac{s+t}{2}$ day post-natally. No significant difference was observed between the two groups (< 12 gm% and > 12 gm%).

Table (19) showed the arrangement of factors affecting infant serum bilirubin according to the regression analysis in the 1st, 4th and 7th days post-natally. The arrangement of factors in the 1st day according to regression analysis was: gravidity of the mother, maternal age, infant weight, maternal serum sodium, I.V.F., duration of labour, oxytocin, infant serum sodium and Apgar score respectively (In the first day the effect of these factors was not established and was not significant for any of the studied factors).

In the 4th and 7th days the arrangement of factors according to regression analysis was: oxytocin, I.V.F. and these two factors had a perfect positive correlation with serum bilirubin levels then gravidity of the mother and Apgar score and these two factors had perfect negative correlation with serum bilirubin levels. The previous four factors have a significant effect on serum bilirubin. Duration of labour, maternal age, infant weight, maternal and infant serum sodium followed the previous four

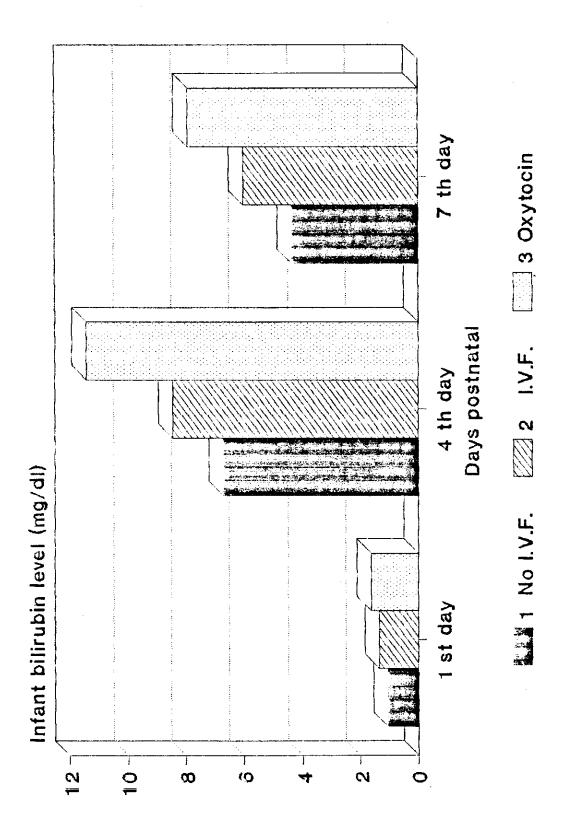
factors respectively but did not have significant effect on serum bilirubin levels. Regressive analysis was not possible for three studied factors namely, the type of feeding, infant sex and maternal usage of contraceptive pills as these factors could not be assessed quantitavely.

bilirubin of newborns in the 1st, 4th and 7th days post-natally. Effect of oxytocin and I.V.F. intake on levels of serum Table (1)

| | | | 1 st day | | | 4 th day | | | , | |
|-----------------------------|-----------|-------------|------------------|-----------|-------------|-------------------------|-----------|-------------|-------------------------|-------------|
| | | | | | | (A) 100 (1) | | | 7 th day | |
| | Group | Group (1) | Group (2) | Group (3) | Group (1) | Group (2) | Group (3) | Group (1) | Group (2) | Group (3) |
| Serum indirect bilirubin | Mean | 1.03 | 1.35 | 1.61 | 6.89 | 8.44 | 11.43 | 4.35 | 6.02 | 7.91 |
| | S.D. | ±0.47 | ±0.48 | ±0.73 | +2.94 | +2.36 | +3.26 | +2.98 | +1.49 | +3.22 |
| | No. | 17 | 22 | 61 | 16 | 15 | 45 | 6 | 6 | 18 |
| . | Ţ | | 5.31 | | | 15.75 | | | 4.64 | |
| - , , , | | | | | P<0.05 | 5 | | | | |
| | Result | Significant | cant differences | nces | Signific | Significant differences | tces | Signific | Significant differences | nces |
| | | Group (1) | Group (2) | p (2) | Group (1) | Group (2) | , (2) | Group (1) | Grou | Group (2) |
| | Group (3) | 0.59 (0.37) | 0.26 (0.33) | | 4.74 (1.79) | | | 3.55 (2.42) | | 1.88 (2.42) |
| | Group (2) | | | | 1.75 (2.21) | | | 1.67 (2.82) | | |

Group (1) (No I.V.F.) Group (2) (I.V.F.) Group (3) (Oxytocin)

Fig. (3):Effect of Oxytocin and I.V.F. Intake on Levels of Serum Bilirubin in Newborns in the 1st, 4th and 7th Days Postnatally.



I.V.F.(Intravenous Fluids)

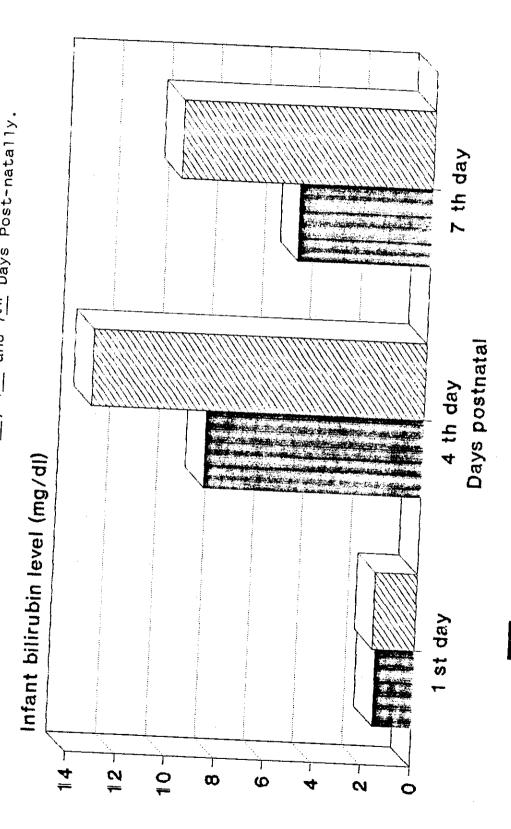
levels of serum bilirubin in newborns Effect of oxytocin dose on *Table (2 4)*

in the 1 st, 4 th and 7 th days post - natally. regardless of amount of I.V.F.

| • | | | | | | |
|---------------------|----------|-----------------|-------------|----------|-------------|---|
| | l st | 1 st day | 4 th | 4 th day | 7 th | 7 th day |
| | < 10 U. | > 10 U. | < 10 U. | > 10 U. | < 10 U. | > 10 1 |
| | | | | | | • |
| Serum indirect Mean | 1.55 | 1.67 | 8.84 | 13.50 | 5.36 | 10.20 |
| 40 | 000 | | | | | |
| | E0.01 | ∓0.80 | +2.27 | ±2.32 | ±1.75 | ±2.41 |
| No. | 31 | 30 | 20 | 25 | O. | 10 |
| | 0. | 0.63 | 9 | 6.6 | 4.7 | 2 |
| | Not sign | Not significant | Significant | icant | Significant | icant |

 $P \leqslant 0.05$

Fig. (4): Effect of Oxytocin Dose on Levels of Serum Bilirubin in Newborns in the 1st, 4th and 7th Days Post-natally.



1 10 U.Oxytocin

bilirubin in newborns of mothers receiving from in the 1 st, 4 th and 7 th days post - natally Effect of oxytocin dose on levels of serum 1001 c.c. - 2000 c.c. I.V.F. Table (2 B)

| Г | _ | T | | т | | | <u>-</u> | | | _ | | |
|----------|----------|---------|-------|-----------------------------|-------|-------|------------|-------------|-----|----------|-----------------|-------------|
| | / th day | 1101 | 70 0. | | 12.47 | | ± 1.54 | | ro | | 1 | cant |
| | 5 | < 10 U. | | | 4.40 | | +0.4 | _ | 1 | 3.71 | | Significant |
| 4 th day | · | > 10 U. | | 12 83 | 19.00 | +2 35 | 20:2 | 9 | | 33 | | cant |
| 4 1 | | < 10 U. | | 7.73 | | ±0.12 | | က | | 3.83 | | Significant |
| 1 st day | | > 10 U. | | 1.72 | | ±0.52 | | 10 | | + | fionat | ıcanı |
| 1 st | × 10 T | | | 1.28 | | ±0.30 | ı | | 127 | ,) • T | Not significant | |
| | | | Mee | Mean | C V | | No | | - | <u>.</u> | | |
| | | | | Serum indirect bilirubin | | | | | | | | |

 $P \ll 0.05$

bilirubin in newborns of mothers receiving from 2001 c.c. - 3000 c.c. I.V.F. in the 1 st, 4 th Effect of oxytocin dose on levels of serum Table (2 C)

and 7 th days post - natally.

| | | | | İ | | | |
|-----------------------------|------|-------------------|----------|-------------|----------|-----------------|---------------|
| | | 302 | 1 st day | 4 tt | 4 th day | 7 th | 7 th day |
| | | < 10 U. | > 10 U. | < 10 U. | > 10 U. | 7 10 II | |
| | | | | | | TO O. | , 10 U. |
| Serum indirect bilirubin | Mean | 2.40 | 1.65 | 10.30 | 13.46 | 8.50 | 86 6 |
| • | | | | | | | 2 |
| | S.D. | - 0.60 | €8.0∓ | ±0.70 | +2.31 | +0.83 | +2.03 |
| | - | | | | | | 1 |
| | No. | 1 | 21 | - | 19 | _ | 2 |
| | | | | | | | |
| | · | 0.1 | 0.80 | 1.29 | 66 | 0.31 | 31 |
| | | Not significant | uficant | Significant | cant | Not significant | 1, 6, 0, 0, 1 |
| | | | | ָ פ | | TATE DOL | |

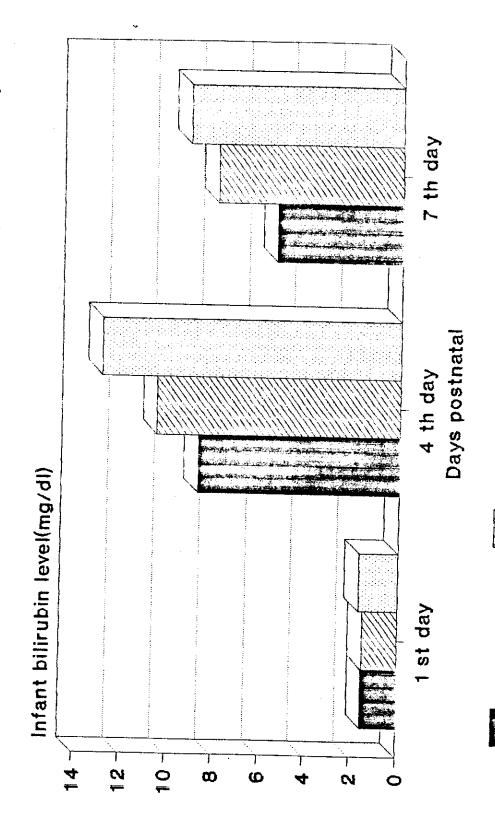
 $P \leqslant 0.05$

bilirubin in newborns regardless of oxytocin intake in the 1 st, 4 th and 7 th days post-natally. Effect of I.V.F. intake on levels of serum *Table* (3.4)

| | | | 1 st day | | | | | | | |
|---------------|-----------|-----------|----------------------------|-----------|-------------|-------------------------|-----------|-------------|-------------------|---------------------|
| | Grown | 7 7 100 2 | | | | 4 th day | | | | |
| | | GIOUP (a) | Group (b) | Group (c) | Groun (a) | | | | th day | |
| Spring in the | | | | | (a) dinor | Group (b) | Group (c) | Group (a) | Group (h) | Group (h) Group (c) |
| bilirubin | mean | 1.50 | 1.49 | 1.67 | œ œ | | | | | aroup (c) |
| | S.D. | +0 88 | | | | 10.49 | 12.89 | 5.41 | 7.98 | 0 17 |
| | | 20:54 | ±0.44 | +0.86 | +2.46 | +3 44 | 0 H 6 T | | | 6.14 |
| | No. | 33 | 26 | 7.0 | | 11.0 | RC.2∃ | ±1.57 | ±3.52 | +1.92 |
| | 5 | | 2 | 44 | 23 | 15 | 22 | 11 | | |
| | I | | 0.55 | | | | | T T | מכ | œ |
| | | | | | | 12.18 | | | 5.25 | |
| • | | | | į | P<0.05 | | | | | |
| | ָר מ־ | No signi | No significant differences | ronoss | | | | | | |
| | result | | | caces | Significa | Significant differences | ıces | Significan | nt distan | |
| | | | | | Group (L) | | | Partical | S-man dillerences | ces |
| | Group (a) | | | | (a) dnorn | Group (c) | (c) | Group (b) | Cround (a) | (2) |
| | (1) | | | | 1.79 (1.90) | 7 20 8 | | 7 | dnow | (a) |
| | Group (b) | | | | (agus) | 4.¢U (1.7U) | | 2.57 (2.40) | 3.73 (2.4R)* | 4H)* |
| | | | | | | 2.40 (1.91) | - | | | (2) |
| | | | | | | | | | 1.16 (2.59) | .59) |

Group (a) (I.V.F.) < 1000 c.c. Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

in Newborns in the 1st, 4th and 7th Days Post-natally. Fig. (5): Effect of I.V.F. Intake on Levels of Serum Bilirubin



c 2001-3000 c.c. **22** b 1001-2000 c.c. 41000c.c.

bilirubin in newborns of mothers who did not receive oxytocin in the 1 st,4 th and 7 th days post-natally. Effect of L.V.F. intake on levels of serum Table (3 B)

| | | | 1 st day | | | 4 th day | | | 7 th day | |
|----------------|--------|-----------|----------------------------|-----------|-----------|----------------------------|-----------|-----------|----------------------------|-----------|
| | Group | Group (a) | Group (b) | Group (c) | Group (a) | Group (b) | Group (c) | Group (a) | Group (b) | Group (c) |
| Serum indirect | Mean | 1.34 | 1.39 | 1.10 | 8.20 | 8.72 | 8.70 | 5.73 | 6.05 | 6.24 |
| | S.D. | ±0.57 | ₹0.28 | ±0.46 | ±2.22 | +2.69 | +1.94 | ±2.01 | +1.79 | +2.23 |
| | No. | 12 | Ø | 1 | 8 | 9 | - | 7 | 9 | 4 |
| | ÎΨ | | 0.17 | | | 0.07 | | | 0.34 | |
| • | | | | | P& | P<0.05 | | | | |
| | Result | No signi | No significant differences | rences | No signi | No significant differences | ences | No sign | No significant differences | rences |

Group (a) (I.V.F.) < 1000 c.c. Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

bilirubin in newborns of mothers who received up to 10 U. of oxytocin in the 1 st, 4 th and 7 th days post-natally. Effect of L.V.F. intake on levels of serum *Table (3 C)*

| | | | 1 st day | | | 4 th day | | | 7 th day | |
|-----------------------------|--------|-----------|-----------------------|-------------|-----------|----------------------------|-----------|-----------|--------------------------|-----------|
| | Group | Group (a) | Group (b) | Group (c) | Group (a) | Group (b) | Group (c) | Group (a) | (4) | |
| | | | | | | | | (a) June | (a) dinara | eroup (c) |
| Serum indirect bilirubin | Mean | 1.58 | 1.28 | 2.11 | 8.96 | 7.73 | 9.6 | 5.04 | 4.40 | 8.50 |
| | | | | | | | | | ; | 3 |
| | S.D. | +0.69 | ±0.30 | ₹0.30 | +2.54 | +0.12 | +0.70 | +1.52 | +1.36 | +1.14 |
| | , | | | | | | | • | | - |
| | NO. | 23 | }~ | ດາ | 15 | 60 | જા | 2 | _ | - |
| | ¢ | | | | | | | | | • |
| | 4 | | 1.31 | | | 0.44 | | | 2.14 | |
| | | | | | | | | | | |
| | | | | | | P<0.05 | | | | |
| | Regult | No sign | No significant differ | lifferences | No sign | No significant differences | Section | N esta | Different At 80 | |
| | | | | |) ; | | | | No exgranceae dinerences | rences |

Group (a) (I.V.F.) \leqslant 1000 c.c. Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

bilirubin in newborns of mothers who received more than 10 U. of oxytocin in the 1 st, 4 th and 7 th days post-natally. Effect of I.V.F. intake on levels of serum Table (3 D)

| | | 1 st. | t day | 4 th | 4 th day | | |
|----------------|--------|----------------|---------------|----------------------------|-------------|----------------------|---------------|
| _ | Group | Channe (L) | | | | di , | ' th day |
| | | (a) dnns | Group (c) | Group (b) | Group (c) | Group (b) | Group (c) |
| Serum indirect | Mean | 1.72 | 1.65 | 13.63 | 13.48 | | |
| <u>L</u> | | 7.7/ | | | 04:01 | 14.4 | 9.23 |
| l) | S.D. | ₹0.52 | €8.0∓ | +2.35 | ±2.31 | +1.54 | 6V 6T |
| | 2 | 4 | | | | | Po:×H |
| | INO. | ði. | 21 | 9 | 19 | en | r |
| | + | | | | | | - |
| | - | 0.2) | 21 | 0.15 | co. | 2.2 | 2.21 |
| | | | | P≤0.05 | | | |
| À | Dennis | | | | - | | |
| W | neau r | No significant | t differences | No significant differences | differences | No significant diff. | 4 4:66 |
| | | | | | ! | | c differences |

Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

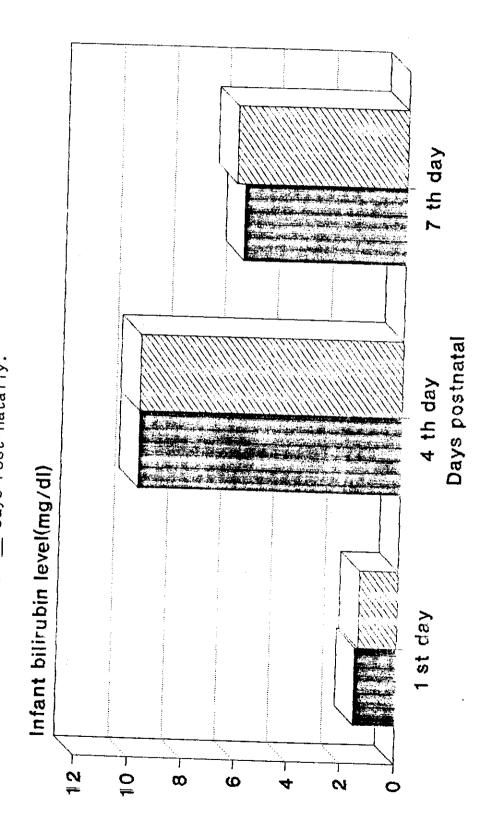
Note:

because it's not found with oxytocin > 10 U. Group (a) (\leqslant 1000 c.c.) not found here

on serum bilirubin values in newborns regardless of oxytocin intake in the 1 st, 4 th and 7 th days post-natally. Effect of type of feeding (breast VS. artificial) *Table (4 4)*

| | | | | | i | | |
|-----------------------------|--------|---------------|----------------------------|---------------|----------------------------|---------------|--------------------------|
| | | | at day | 4 t | 4 th day | 1 | 4. |
| | 20000 | | | | | | C C CAR |
| | dnow | Dreast | Artificial | Brenst | Artificial | Breast | Artificial |
| | Magn | | | | | | |
| Serum indirect bilirubin | MCALL | 1.52 | 1.41 | 9.84 | 9.83 | 6.05 | e e e |
| | ţ | | | | | | 00:0 |
| | S.D. | ±0.73 | €0.70 | +3.39 | +3.99 | +2.85 | 19.40 |
| | 12 | | | | | | r F F F I |
| | NO. | 47 | 30 | 47 | 29 | 22 | _ |
| | + | | | | | | רי |
| | ر | 0 | 0.64 | · o | 0.01 | _ | 121 |
| | | | | | | | |
| | | | | P<0.05 | | | |
| | D14 | | | | | | |
| | result | No significan | No significant differences | No significan | No significant differences | No significan | No significant different |
| | | | | | | TO OFFITTION | r anterences |

4th ٥ د Levels of Serum Bilirubin in Newborns in the 1st, Fig. (6): Effect of Type of Feeding (Breast VS. Artificial) and 7th Days Post-natally.



Breast Feeding 🔯 Artifici

② Artificial Feeding

Table (4 B)

on serum bilirubin values in newborns of mothers who did not receive oxytocin in the 1 st, 4 th and 7 th Effect of type of feeding (breast VS. artificial) days post-natally.

| | | 1 st | t day | 4 ti | 4 th day | D 2 | 7 th day |
|----------------------------|--------|--------|----------------------------|--------------|----------------------------|--------------|----------------------------|
| | Group | Breast | Artificial | Breast | Artificial | Breast | Artificial |
| | Mean | 81. | 98-1 | 8.28 | 5.72 | 5.25 | 2.07 |
| Serum mairect bilirubin | S.D. | +0.45 | ₹0.62 | ±3.02 | ±0.61 | +2.94 | +1.15 |
| | No. | 1 C2 | 6 | 22 | 6 | 12 | 9 |
| | + | | 0.92 | | 2.04 | 0 | 0.14 |
| | | | | P<0.05 | | | |
| | Result | | No significant differences | No significa | No significant differences | No significe | No significant differences |
| | | ı | | | | | |

Table (4 C)

on serum bilirubin values in newborns of mothers who received up to 10 U. of oxytocin in the 1 st, 4 th Effect of type of feeding (breast VS. artificial) and 7 th days post-natally.

| | | | | 4 th | 4 th day | 7 th | 7 th day |
|----------------|--------|--------------|--|--------------|----------------------------|-------------|----------------------------|
| | | 56 T | ı day | | | | 10:00:00 |
| | Group | Breast | Artificial | Breast | Artificial | Breast | Artiliciai |
| | | | | | | | |
| to only one of | Mean | 1.70 | 1.45 | 8.66 | 8.81 | 5.40 | 5.30 |
| Serum manere | | | and the second s | | | 0 | 1 29 |
| bilirubin | C S | +0.72 | +0.70 | +1.95 | +2.60 | cn:27 | 22:11 |
| | 2 | 1 | | | | 1 | 7 |
| | Z | , | 10 | 11 | 6 | င | |
| | : : | | | | | | 0 |
| | + | | 0.71 |) | 0.05 | | 0.00 |
| | | | The same of the sa | | | | |
| | | | | P<0.05 | | | |
| | | | | | | | ののないまである。 |
| | Result | | No significant differences | No significa | No significant differences | No signific | No significant differences |
| | | 1 | | | | | |

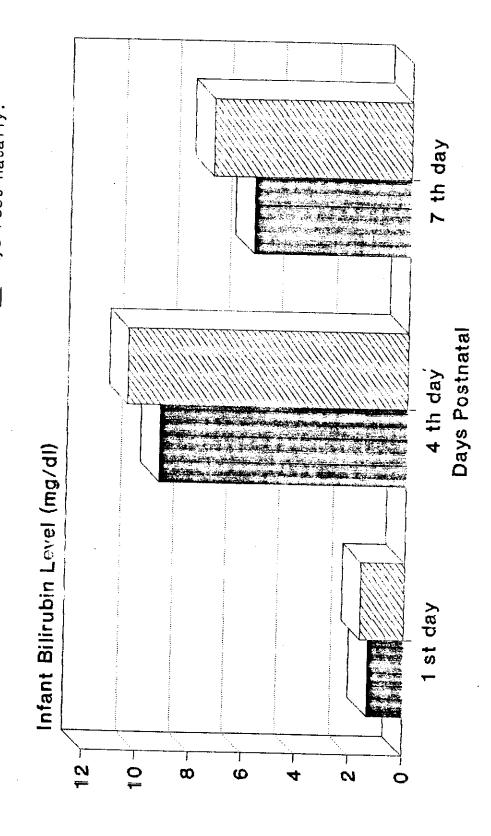
on serum bilirubin values in newborns of mothers who received more than 10 U. of oxytocin in the 1 st, Effect of type of feeding (breast VS. artificial) 4 th and 7 th days post-natally. Table (4 D)

| | | | | | | 4+ 4 | 7 th day |
|----------------|--------|--------|----------------------------|--------------|----------------------------|--------------|----------------------------|
| | | 1 st | t day | 4 th | 4 th day | | far t |
| | Group | Breast | Artificial | Breast | Artificial | Breast | Artificial |
| | | | | | | | |
| Serum indirect | Mean | 1.86 | 1.41 | 13.08 | 14.04 | 8.64 | 11.76 |
| bilirubin | S.D. | +0.84 | ±0.75 | ±2.51 | +1.94 | ±1.45 | +2.15 |
| | | | | 14 | 11 | 5 | ۍ |
| | No. | | ₹ | 1 | | | |
| | + | | .34 | | 1.0 | 77 | 2.04 |
| | | | | P<0.05 | | | |
| | Result | 1 | No significant differences | No significa | No significant differences | No significa | No significant differences |
| | | | | | | | |

levels in newborns regardless of oxytocin intake in the 1 st, 4 th and 7 th days post-natally. Effect of infant sex on serum bilirubin *Table (5 4)*

| | | 1 st | st day | 4 th day | day | 41 Z | 7 th day |
|----------------|--------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|
| | Group | Male | Female | Male | Female | Male | Female |
| Serum indirect | Mean | 1.33 | 1.61 | 9.26 | 10.48 | 5.82 | 7.39 |
| | S.D. | ₹0.62 | +0.70 | +3.67 | ±3.48 | ±2.55 | +3.58 |
| | No. | 53 | 47 | 40 | 36 | 19 | 18 |
| | ı, | 9 | 1.58 | 1.46 | 9 | 1.51 | 51 |
| | | | | P<0.05 | | | |
| | Result | No significant differences | differences | No significant differences | differences | No significant differences | differences |

Fig. (7): Effect of Infant Sex on Levels of Serum Bilirubin in 4th and 7th Days Post-natally. Newborns in the 1st,



Male Englemale

oxytocin in the 1 st, 4 th and 7 th days post-natally. levels in newborns of mothers who did not receive Effect of infant sex on serum bilirubin Table (5 B)

| | | 1 st | st day | 4 th | 4 th day | 7 th | 7 th day |
|----------------|--------|----------------------------|---------------|----------------------------|-------------|----------------------------|-------------|
| | Group | Male | Fernale | Male | Female | Male | Female |
| Serum indirect | Mean | 1.17 | 1.29 | 7.44 | 7.73 | 5.40 | 4.76 |
| III On III O | S.D. | ±0.47 | ∓0.50 | +2.66 | ±3.10 | ±2.40 | +2.60 |
| | No. | 25 | 14 | 21 | 10 | 12 | 9 |
| | + | 0.7 | 0.70 | 0.26 | 96 | 0.49 | 19 |
| | | | | P<0.05 | | | |
| | Result | No significant differences | t differences | No significant differences | differences | No significant differences | differences |

Table (5 C)

up to 10 U. of oxytocin in the 1 st, 4 th and levels in newborns of mothers who received Effect of infant sex on serum bilirubin 7 th days post-natally.

| | | 1 st | st day | 4 th | 4 th day | 7 +13 | 7 th day | |
|-----------------------------|---------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|---|
| | Group | Male | Female | Male | Female | Vole | | |
| | | | | | | 21.42.10 | remale | |
| Serum indirect bilirubin | Mean | 1.40 | 1.69 | 8.61 | 9.03 | 4.60 | 5.98 | |
| | נ | | | | | | | |
| | 3.D. | ±0.61 | ∓0.63 | +2.86 | ±1.61 | ±1.80 | +1.45 | |
| | ř | | | | | | 1 | |
| | NO. | 15 | 16 | 6 | 11 | 4 | iO | |
| | • | | | | | | | - |
| | ر | 1.2 | .21 | 0.39 | 89 | 1.11 | 11 | |
| | | | | | | | | |
| | | | · | P<0.05 | | | | |
| , | Dog:11+ | , | | | | | | _ |
| | INCOURT | No significant differences | differences | No significant differences | differences | No significant differences | differences | |
| | | | | | |) | | - |

levels in newborns of mothers who received more than 10 U. of oxytocin in the 1 st, Effect of infant sex on serum bilirubin 4 th and 7 th days post-natally. Table (5 D)

of serum bilirubin in newborns on the 1st, Effect of birth weight on levels 4th and 7th days post-natally. Table (6)

| | · | | 1 st day | | | | | | | | |
|--|--------|---------------------------------------|----------------------------|--------|-----------|----------------------------|--------|----------|----------------------------|--------|--------|
| | | | (m) | | | 4 th day | | | 7 th don | | Г |
| | Group | (I) | (II) | (III) | (I) | | | | , (ray | | |
| | | | | | | (III) | (III) | £) | (II) | | |
| Serum indirect bilirubin | Mean | 1.65 | 1.39 | 1.31 | 10.20 | 66.6 | G 5 | | | | |
| | C U | 200 | | | | | 0.74 | 7.51 | 6.13 | 5.15 | |
| | .a.o. | +0.67 | +0.67 | ₹0.60 | +3.52 | +3.71 | 20 07 | | | | \top |
| | Š | 35 | | | | 7 | 10.07 | +3.37 | ±3.16 | ₹0.62 | |
| - ! - | , | 30 | 90 | 12 | 25 | 40 | - | u · | | | _ |
| 7. | Ē, | | 1 00 | | | | * • | er | 18 | 4 | |
| - | | | 1.60 | | | 0.63 | | | 1.19 | | |
| | | | | | , Ž | P<0.05 | | | | | |
| | Regult | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | | | | | | | |
| | 2 | no signii | No significant differences | rences | No signii | No significant differences | renoes | | | | |
| | | | | | , | A 1111 | CICCO | No signi | No significant differences | rences | |
| | | | | | 1 | | | | | | _ |

Group (I) 2500 – 3000 gms. Group (II) 3001 – 3500 gms. Group (III) >3500 gms.

on the 1st, 4th and 7th days post-natally. levels of serum bilirubin in newborns Effect of maternal gravidity on *Table* (7 4)

| | | | 1 st day | | | 1 4 7 | | | | |
|--------------|-----------|-----------|----------------------------|-----------|-------------|---|-----------|-------------|-------------------------|-----------|
| | Group | Group (V) | (1) | | | t cn day | | | 7 th day | |
| | | (v) dans | aroup (r) | Group (Z) | Group (X) | Group (Y) | Group (Z) | Group (Y) | 1/2/ 411042 | |
| | | | | | | | | (w) J | droup (1) | Group (Z) |
| bilirubin | Usaw | 1.61 | 1.42 | 1.11 | 12.27 | 20 20 20 20 20 20 20 20 20 20 20 20 20 2 | Č. | 4 | | |
| | C V | 2 | | | | 20.0 | 0.67 | 8.77 | 5.35 | 6.87 |
| | | ±0.72 | 70.65 | ±0.43 | +2.94 | +3 30 | 19 00 | 0. | | |
| | Ž | 99 | | | | -1 | 16.80 | 13.02 | +2.42 | ±1.68 |
| | 701 | 36 | 61 | ~ | 27 | 43 | e, | 10 | | |
| | Ē | | | | | | • | יי | 2,2 | က |
| | 4 | | 1.64 | | | 12.02 | | | 900 | |
| _ | | | | | | | | | 9.08 | |
| | | | | | P<0.05 | | | | | |
| | | No Signi | No Significant differences | Potrono | | | - | | | |
| | Result | 9 | | Saaret | Significa | Significant differences | rces | Significa | Significant differences | 2000 |
| - | | Group (Y) | Group (Z) | (2) | Groun (v) | | | | - | 2771 |
| <u> </u> | (4) | | 4 | | oroup (I) | Group (Z) | (Z) | Group (Y) | Group (Z) | (Z) |
| | eroup (A) | | | | 3.74 (1.57) | *(00 G) 10 P | - | * | + | |
| | Group (Y) | | | | , , , , , | 4) TO:1 | | 3.41 (2.11) | 1.9 (3.80) | (08) |
| | | | | | | 086/280 | (08 | | | |
| | | | | | _ | | | _ | 1 | |

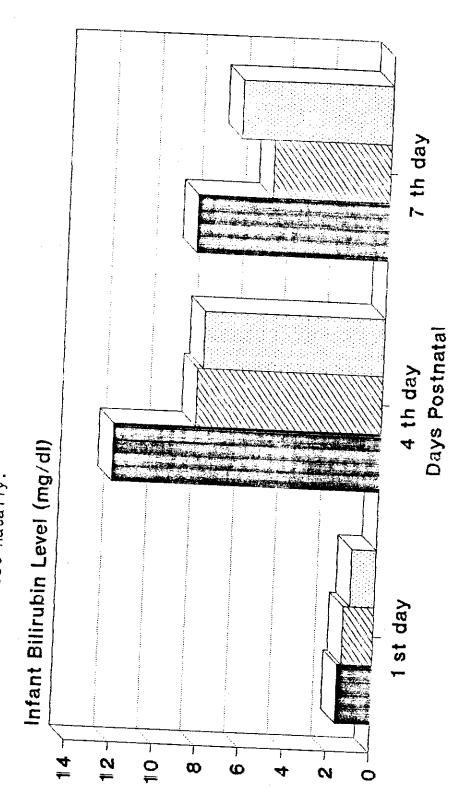
Group (X) Primigravidae. Group (Y) Multiparae. Group (Z) Grandmultiparae.

on levels of serum bilirubin in newborns regardless of primigravidae mothers in the 1 st, 4 th and Effect of oxytocin dose (<10 U. and>10 U.) 7 th days post - natally. Table (7 B)

| Γ | | | T | | _ | | | _ . | | | | |
|----------|---------|---------|----------------|------|-------|-------|-----|----------------|------|-----------|-----------------|--|
| 7 63, 3. | r uay | > 10 U. | | 10.6 | | ±2.49 | 60 |) | ιĊ | | cant | |
| 14 12 | 3 | < 10 U. | | 5.1 | | ±4.14 | 4 | | 3,45 | | Significant | |
| 4 th day | | > 10 U. | | 13.5 | +2.42 | ~ . | 19 | | 4 | | cant | |
| 4 th | | < 10 U. | , o | 1.00 | ±1.42 | | 2~ | | 4.54 | | Significant | |
| day | > 10 11 | | 1.60 | | ±0.78 | | 21 | | | ficant | Not significant | |
| 1 st day | < 10 U. | | 1.7 | | ∓0.56 | | 1.1 | 76.0 | 0.0 | Not signi | | |
| | | | Mean | 6 | 3.D. | No. | | | | | | |
| | | | Serum indirect | | | | | | | | | |

 $P \leqslant 0.05$

Bilirubin in Newborns in the 1st, 4th and 7th Days Fig. (8): Effect of Maternal Gravidity on Levels of Serum Post-natally.



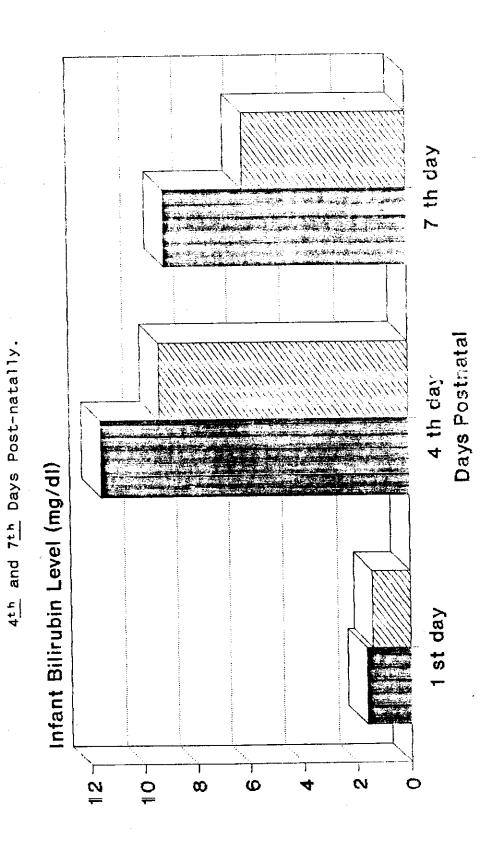
X:Primigravidae Y:Multiparae Z:Grandmultiparae

in the 1 st, 4 th and 7 th days post - natally. serum bilirubin of the newborns. Effect of duration of labour on Table (8)

| | * | | | | | |
|-------------------------------|------------|-------------|----------------|------------|-----------------|------------|
| | 18 1 | 1 st day | 4 th | 4 th day | 7 th | 7 th day |
| | < 10 hours | > 10 hours | < 10 hours | > 10 hours | < 10 hours | > 10 hours |
| _ | | | | | | |
| Serum indirect Mean bilirubin | 1.46 | 1.50 | 9.43 | 11.53 | 6.25 | 8.74 |
| S.D. | ±0.65 | ±0.79 | ±3.58 | ±3.33 | ±3.09 | +2.98 |
| | | | | | | 1 |
| No. | 84 | 16 | 61 | 15 | 32 | 5 |
| + | 0.23 | 53 | 1.93 |)3 | 1.64 | 34 |
| , | Not sign | significant | Not sgnificant | ificant | Not significant | ificant |

 $P \leqslant 0.05$

Fig. (9): Effect of Perinatal Asphyxia (Apgar Score at 1 minute) on Levels of Serum Bilirubin in Newborns in the 1st



9 < 区② > P

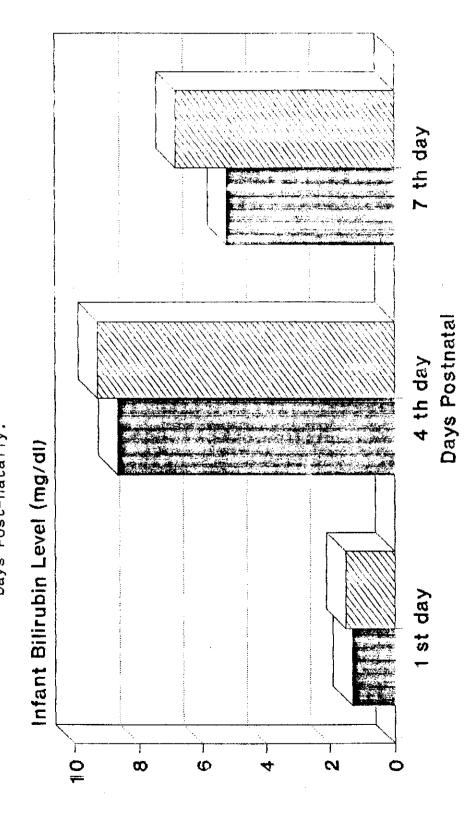
Table (10 A)

bilirubin of newborns regardless of oxytocin intake in the 1st, 4th and 7th days post - natally. Effect of contraceptive pill usage on serum

| | | 1 s | 1 st day | 4 1 | 4 th day | 7 + | 7 th day |
|----------------|------|---------|-----------------|---------|-----------------|---------|-----------------|
| | | User | Non user | User | Non user | User | Non user |
| Serum indirect | Мевп | 1.30 | 1.51 | 8.64 | 9.28 | 5.23 | 6.84 |
| | S.D. | ±0.55 | +0.70 | ±2.70 | +3.45 | ±1.48 | +3.4 |
| | No. | 24 | 26 | 20 | 56 | 11 | 26 |
| | + | - | 1.45 | | 1.53 | 1 | 1.78 |
| | د | Not sig | Not significant | Not sig | Not significant | Not sig | Not significant |

P < 0.05

of Serum Bilirubin in Newborns in the 1st, 4th and 7th Fig. (10): Effect of Maternal Contraceptive pill Usage on Levels Days Post-natally.



User Non User

in the 1 st, 4 th and 7 th days post - natally. in mothers who did not receive oxytocin usage on serum bilirubin of newborns Effect of contraceptive pill Table (10 B)

| | | 1 8 | 1 st day | 4 € | 4 th day | 7 t | 7 th day |
|----------------|------|---------|-----------------|---------|-----------------|---------|-----------------|
| | | User | Non user | User | Non user | User | Non user |
| Serum indirect | Mean | 1.45 | 1.1 | 7.03 | 8.23 | 4.57 | 5.81 |
| | S.D. | +0.54 | ±0.41 | ±1.66 | 12.97 | ±1.32 | +3.14 |
| | No. | 14 | 24 | 13 | 18 | 6 | 6 |
| | + | 2 | 2.01 | - | 1.95 | | 1.03 |
| | د | Not sig | Not significant | Not sig | Not significant | Not sig | Not significant |

$P \leqslant 0.05$

in mothers who received up to 10 U. of oxytocin usage on serum bilirubin of newborns Effect of contraceptive pill Table (10 C)

in the 1 st, 4 th and 7 th days post - natally.

| | | 1 8 | 1 st day | 4 t. | 4 th day | 7 t | 7 th day |
|----------------|------|---------|-----------------|---------|-----------------|---------|-----------------|
| | | User | Non user | User | Non user | User | Non user |
| Serum indirect | Мевп | 1.27 | 1.69 | 9.37 | 8.56 | 5.7 | 5.26 |
| | S.D. | ±0.55 | +0.59 | +2.9 | ±1.77 | ±1.80 | ±1.72 |
| | No. | 8 | 24 | ~ | 13 | 2 | ~ |
| | - | 1 | 1.93 | 0 | 0.74 | 0 | 0.28 |
| | J. | Not sig | Not significant | Not sig | Not significant | Not sig | Not significant |

in mothers who received more than 10 U. of oxytocin in the 1st, 4th and 7th days post - natally. usage on serum bilirubin of newborns Effect of contraceptive pill Table (10 D)

| | | 8 1 | 1 st day | 4 t | 4 th day | 7 t | 7 th day |
|-------------------|------|---------|-----------------|---------|-----------------|---------|-----------------|
| | | User | Non user | User | Non user | User | Non user |
| Serum indirect | Мевп | 1.07 | 1.72 | 12.87 | 13.5 | 9.85 | 10.2 |
| H TGD-JHTG | S.D. | ±0.07 | ±0.81 | +1.9 | ±2.32 | #2.2 | +2.41 |
| | No. | æ | 28 | 11 | 25 | 8 | 10 |
| | - | 1 | 1.09 | | 1.54 | 0 | 0.96 |
| | د | Not sig | Not significant | Not sig | Not significant | Not sig | Not significant |

 $P \leqslant 0.05$

Effect of maternal age on levels of serum bilirubin in newborns on the 1st, 4th and 7th days post-natally. *Table (11)*

| | | | 1 st day | | | 4 th day | | | 7 th day | |
|----------------|----------|---------------|----------|-------------|---------|----------------------------|--------|---------|----------------------------|---------|
| | Group | (0) | (d) | (b) | (0) | (d) | (4) | (0) | (d) | (b) |
| Serum indirect | Жеап | 1.85 | 1.43 | 1.55 | 11.63 | 10.02 | 77.49 | 8.5 | 6.83 | 4.13 |
| | S.D. | ±0.48 | ₹0.68 | 79.0∓ | +2.78 | ±3.51 | ±3.95 | +2.64 | ±3.17 | ±2.46 |
| | No. | KC. | 86 | 6 | 4 | 64 | ھ | - | 32 | 4 |
| | 1 | | 0.98 | | | 2.29 | | | 1.46 | |
| | | | | | ₽< | P<0.05 | | | | |
| | Regult | No significan | ابدا | differences | No sign | No significant differences | rences | No sign | No significant differences | grences |

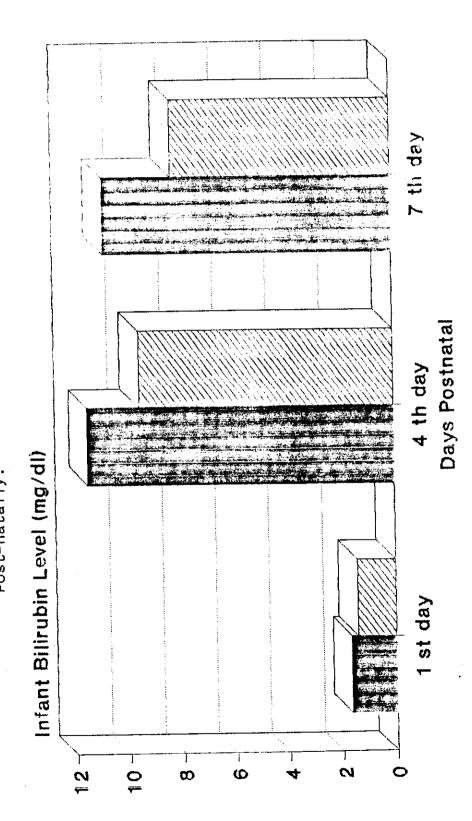
Group (o) < 20 years. Group (p) 20 - 34 years. Group (q) $\geqslant 35$ years.

Table (12)

on serum bilirubin of newborns in the 1 st, 4 th and 7 th days post - natally. Effect of maternal hyponatremia

| | | 1 st | 1 st day | 4 th day | day | 7 th day | day |
|---------------------|------|------------|-----------------------|------------|-----------------------|------------------------|-----------------|
| | | < 130 meq. | < 130 meq. > 130 meq. | < 130 meq. | < 130 meq. > 130 meq. | < 130 meq. > 130 meq. | ≥ 130 meq. |
| Serum indirect Mean | Mean | 1.64 | 1.42 | 11.48 | 9.54 | 10.8 | 8.23 |
| | S.D. | ₹0.85 | ±0.65 | ±2.91 | ±3.48 | ±1.95 | ±3.05 |
| | No. | Ç | 88 | 5 | 69 | တ | 33 |
| | + | 0 | 0.72 | 1. | 1.43 | 1. | 1.48 |
| | د | Not sign | significant | Not sign | Not significant | Not sign | Not significant |

P < 0.05



**** 130 meq/l 22 > 130 meq/l

Sodium on his bilirubin level in the 1st day post - natally. Effect of infant serum Table (13)

| | | 1 st day | дау |
|----------------|------|-----------------|------------|
| | | < 130 meq. | > 130 meq. |
| Serum indirect | Mean | 1.85 | 1.45 |
| DIIII UDIII | S.D. | ±0.85 | +0.65 |
| | No. | 9 | 86 |
| | + | 1.42 | .2 |
| | ſ | Not significant | ificant |

P < 0.05

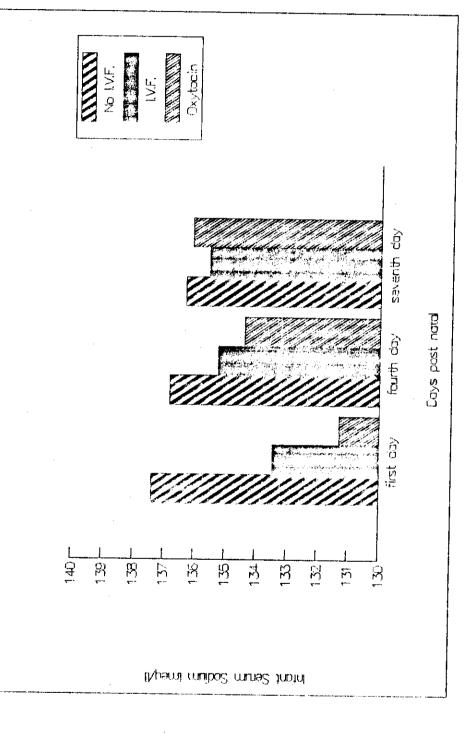
Sodium of newborns in the 1st, 4th and 7th days post-natally. Effect of oxytocin and I.V.F. intake on levels of serum *Table (14)*

| | | | 1 st day | | | 4 th day | 1 | | 7 th day | |
|--|-----------|-------------|-----------------|--------------|-------------|-------------------------|--------------|-----------|----------------------------|-----------|
| | group. | Group (1) | Group (2) | Group (3) | Group (1) | Group (2) | Group (3) | Group (1) | Group (2) | Group (3) |
| Service Servic | Mean | 137.41 | 133.45 | 131.3 | 136.81 | 135.27 | 134.41 | 136.33 | 135.56 | 136.11 |
| um moc mm rec | S.D. | ±3.71 | +2.6 | ±3.98 | ±3.23 | ±2.05 | +3.05 | ±3.13 | +1.77 | +2.15 |
| | No. | 17 | 22 | 91 | 16 | 15 | 46 | G | G | 19 |
| | [±4 | | 17.96 | | | 3.88 | | | 0.25 | |
| | | | | | P<0.05 | 5 | | | | |
| | Regult | Significant | ant differences | nces | Significe | Significant differences | sect | No sign | No significant differences | rences |
| | | Group (2) | Group (3) | p (3) | Group (2) | Group (3) | (3) | | | |
| | Group (1) | 3.96 (2.46) | 6.11 (| 6.11 (2.05)* | 1.55 (2.14) | | 2.40 (1.73)* | | | |
| | Group (2) | | 2.15 (| 2.15 (1.92) | | | 1.77) | | | |

Group (1) (No I.V.F.) Group (2) (I.V.F.) Group (3) (Oxytocin)

Fig. (12): Effect of Oxytocin and I.V.F. on Levels of Serum

Sodium in Newborns in the 1st, 4th and 7th Days Post-natally.

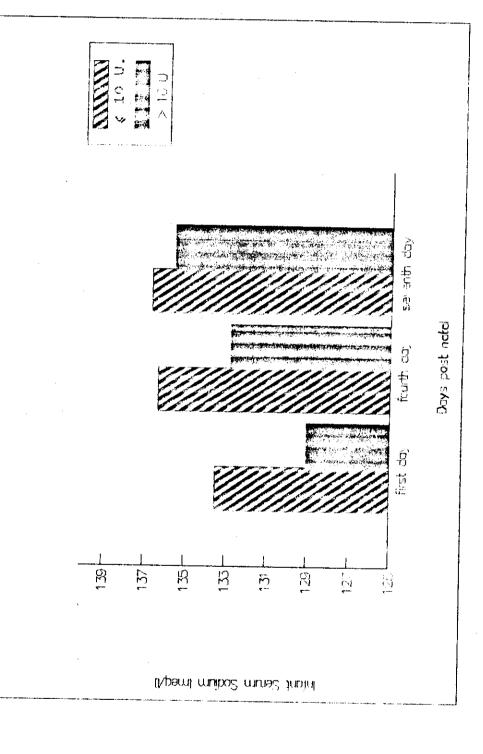


in the 1 st, 4 th and 7 th days post - natally. levels of serum Sodium in newborns regardless of amount of I.V.F. Effect of oxytocin dose on *Table (15 4)*

| | | 1 st day | day | 4 th | 4 th day | 7 th | 7 th day |
|--------------|------|-------------|---------|---------|-------------|---------|-----------------|
| | | < 10 U. | > 10 U. | < 10 U. | > 10 U. | < 10 U. | > 10 U. |
| | Mean | 133.53 | 129.07 | 136.33 | 132.8 | 136.67 | 135.6 |
| Serum Sodium | | | | | 2 | | |
| | S.D. | ±4.14 | ±2.16 | ±2.71 | ±2.30 | ±2.21 | ±1.96 |
| | No. | 31 | 30 | 21 | 25 | 6 | 10 |
| | + | 5. | 5.15 | 4.0 | 4.68 | | 1.05 |
| | ٠ | Significant | icant | Signif | Significant | Not sig | Not significant |

 $P \leqslant 0.05$

Fig. (13): Effect of OXytocin Dose on Serum Sodium in Newborns in the 1st, 4th and 7th Days Post-natally.



of mothers who received I.V.F. from 1001 - 2000 c.c. in the 1st, 4th and 7th days post - natally. levels of serum Sodium in newborns Effect of oxytocin dose on *Table (15 B)*

| | | 1 st day | day | 4 th day | day | 7 th | 7 th day |
|--------------|----------|----------|-----------------|-----------------|----------|---------|-----------------|
| | | < 10 U. | > 10 U. | < 10 U. | > 10 U. | < 10 U. | > 10 U. |
| | Mean | 131.29 | 129.78 | 136.0 | 134.33 | 136.0 | 136.67 |
| mnibos imnas | S.D. | ±1.03 | ±2.35 | +2.45 | +2.49 | +0.86 | ±0.94 |
| | No. | 7 | 6 | 4 | 9 | 7 | ಣ |
| | 4 | 1. | 1.48 | 0.93 | 93 | 0. | 0.50 |
| | <u>.</u> | Not sign | Not significant | Not significant | nificant | Not sig | Not significant |

 $P \leqslant 0.05$

of mothers who received I.V.F. from 2001 - 3000 c.c. in the 1 st, 4 th and 7 th days post - natally. levels of serum Sodium in newborns Effect of oxytocin dose on *Table (15 C)*

| | | 1 st | 1 st day | 4 th | 4 th day | 7 th | 7 th day |
|---------------|------|----------|-----------------|----------|-----------------|-----------------|----------|
| | | < 10 U. | > 10 U. | < 10 U. | > 10 U. | < 10 U. | > 10 U. |
| Series Coding | Mean | 131.0 | 128.76 | 138.0 | 132.32 | 134 | 135.14 |
| | S.D. | ∓0.97 | ±2.0 | ±1.2 | ±2.0 | ±0.78 | ±2.1 |
| | No. | 23 | 21 | | 19 | | 7 |
| | + | 1. | 1.07 | 2.1 | 2.69 | 0',0 | 0.47 |
| | ٥ | Not sign | Not significant | Not sign | Not significant | Not significant | nificant |

 $P \leqslant 0.05$

Sodium in newborns regardless of oxytocin intake in the 1 st, 4 th and 7 th days post-natally. Effect of I.V.F. intake on levels of serum Table (16 4)

| | | | 1 st day | | | 4 th day | | | 7 th day | |
|--------------|-----------|-------------|-----------------|---------------------|--------------|-------------------------|---------------------|-----------|----------------------------|-----------|
| | Group | Group (a) | Group (b) | Group (b) Group (c) | Group (a) | Group (b) | Group (b) Group (c) | Group (a) | Group (b) | Group (c) |
| Serum Sodium | Mean | 134.68 | 131.16 | 128.88 | 136.39 | 134.81 | 132.64 | 136.45 | 136.11 | 135.0 |
| | S.D. | ∓3.89 | ±2.24 | ±1.94 | ±2.62 | ±2.16 | ±2.23 | ±2.15 | ±1.66 | ±2.00 |
| | No. | 33 | 26 | 24 | 23 | 16 | 22 | 11 | 6 | 8 |
| | ഥ | | 26.55 | | | 13.55 | | | 1.19 | |
| , | | | | | P≼0.05 | 5 | | | | |
| | Result | Significant | unt differences | nces | Significa | Significant differences | nces | No signi | No significant differences | erences |
| | 200 | Group (b) | Group (c) | (c) | Group (b) | Group (c) | o (c) | | | |
| | Group (a) | 3.52 (1.59) | | 5.8 (1.61)* | 1.59 (1.58)* | | 3.75 (1.45)* | | | |
| | Group (b) | | 2.29 (1.69) | 1.69)★ | | | 2.18 (1.59)* | | | |

Group (a) (I.V.F.) \langle 1000 c.c. Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

Fig. (14): Effect of I.V.F. on Serum Sodium in Newborns in the

1st, 4th and 7th Days Post-natally. 3 137 133 **影** 23 <u>3</u> Mant Serum Sodium ImegAl

Seventh Co.

机子岛

first day

125

127

Lays post notal

Sodium in newborns of mothers who did not receive oxytocin in the 1 st, 4 th and 7 th days post-natally. Effect of I.V.F. intake on levels of serum Table (16 B)

| | | | 1 st day | | | 4 th day | | | 7 th day | |
|--------------|--------|----------------|-----------|-------------|-----------|----------------------------|-----------|-----------|----------------------------|-----------|
| | Group | Group (a) | Group (b) | Group (c) | Group (a) | Group (b) | Group (c) | Group (a) | Group (b) | Group (c) |
| | ивей | 134.70 | 132.44 | 130 | 136.25 | 134.50 | 132.0 | 135.2 | 134.87 | 136.11 |
| umpos um jas | S.D. | ±2.49 | ±2.01 | 16.11 | +2.11 | ∓0.96 | €9.0∓ | ±1.73 | ±2.04 | ±1.46 |
| | No. | 12 | 6 | - | 8 | 9 | _ | 9 | 4 | က |
| | Œ | | 3.17 | | | 3.21 | | | 2.16 | |
| | | | | | P& | P≤0.05 | | | | |
| | Result | No significant | | differences | No sign | No significant differences | rences | No sign | No significant differences | erences |

Group (a) (I.V.F.) < 1000 c.c. Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

received up to 10 U. of oxytocin in the 1 st, Effect of I.V.F. intake on levels of serum Sodium in newborns of mothers who 4 th and 7 th days post-natally. *Table (16 C)*

| | | | 1 st day | | | 4 th day | | | 7 th day | |
|--------------|--------|----------------|-----------|-------------|-----------|----------------------------|-------------------------------|-----------|----------------------------|-----------|
| | Group | Group (a) | Group (b) | Group (c) | Group (a) | Group (b) | Group (b) Group (c) Group (a) | Group (a) | Group (b) | Group (c) |
| | Mean | 134.67 | 131.29 | 129.50 | 136.47 | 136.00 | 136.0 | 137.14 | 136.0 | 134.0 |
| mnipog mnjag | S.D. | ±4.40 | ±1.03 | ±1.50 | ±2.85 | ±2.45 | ±2.00 | ±2.23 | ±2.15 | ±1.56 |
| | No. | 22 | ٢ | N | 15 | 4 | 82 | 2 | 1 | - |
| | Ē | | 3.06 | | | 0.05 | | | 0.79 | |
| | | | | | P& | P≼0.05 | | | | |
| | Result | No significant | اددا | differences | No sign | No significant differences | erences | No sign | No significant differences | ferences |

Group (a) (I.V.F.) < 1000 c.c. Group (b) (I.V.F.) 1001-2000 c.c. Group (c) (I.V.F.) 2001-3000 c.c.

Fig. (15): Effect of Mother Serum Soduim on Serum Sodium of thier Newborns in the 1st, 4th and 7th Days Post-natally.

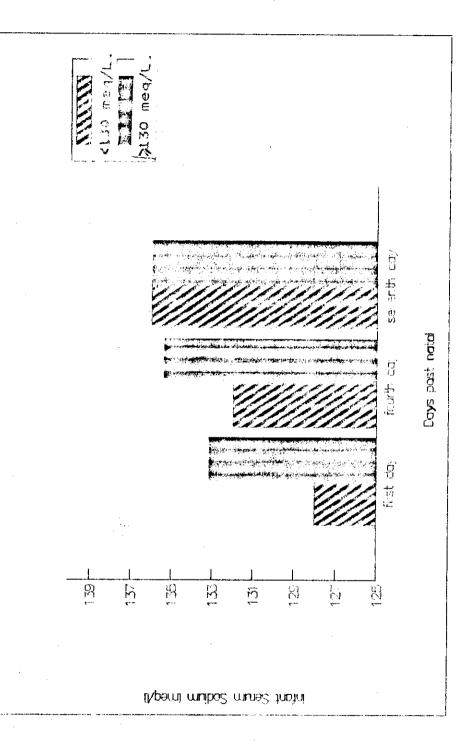


Table (18)

on infant hemoglobin in the 1st Effect of mother hemoglobin day post - natally.

| | | 1 st day | |
|------------|------|-------------|-----------------|
| | | < 12~ m gm% | > 12 gm% |
| | | | |
| | Mean | 15.66 | 15.58 |
| nemoglobin | S.D. | +0.83 | ±0.81 |
| | No. | 44 | 56 |
| | - | J | 0.46 |
| | ٠. | Not si | Not significant |

 $P \leqslant 0.05$

Arrangement of factors affecting infant bilirubin according to the correlation analysis. Table (19)

| Ser. No. | Factor | Corre | Correlation coefficient (r) | at (r) | |
|----------|--------------------|----------|-----------------------------|----------|------------------|
| | | 1 st day | 4 th day | 7 th day | Correlation type |
| - | Oxytocin | + 0.10 | 62 U T | . o we | |
| 2 | 311 | | 00 | + 0.75 | + |
| ! (| 1. V.F. | + 0.11 | + 0.57 | + 0.50 | 4 |
| 20 | Gravidity | - 0.19 | - 0.40 | 000 | +] |
| 4 | | | 0#:0 | 0.39 | ł |
| | Apgar score | - 0.05 | - 0.24 | - 0 33 | |
| rc - | Maternal sodium | 1 | | 20.0 | 1 |
| | Timbog that to | cI:I + | - 0.23 | - 0.19 | |
| 9 | Duration of labour | + 0 11 | 1001 | | |
| 7 | | • | 0.61 | 0.20 | + |
| | maternal age | - 0.18 | - 0.18 | - 0.18 | |
| 8 | Infant weight | | | 07.0 | |
| | TERM LEGIC | cI.0 - | - 0.10 | - 0.14 | |
| 6 | Infant sodium | - 0.10 | | | |
| | | | | 1 | ţ |

Note:

5-9 Not significant.