RESULTS

The results of this study are presented in (23) tables. They include the following:

Part (I): Biosocial characteristics of**:**

1- Premature infant: it includes sex, birth weight, gestational age, proportion to gestational age, birth order, and duration of hospital stay (table 1).

2- Mothers: it includes age, level of education, and working status (table 2).

Part (II): Mothers' knowledge regarding premature infants (table 3-8) (pre and post) the discharge guide program, it includes: concept of premature infant, causes that leads to birth of premature infant, problems that might face premature infants, needs, and prevention of infection for premature infants.

Part (III): Mothers' practice regarding care of their premature infants (pre and post) the discharge guide program (table 9-11). It includes; infants' eye care, cord care, bathing, diaper care, crying, dealing with health problems, breast feeding, artificial feeding, preparation of bottle feeding, bottle care, feeding problems, drug administration, and importance of medical follow-up.

Part (IV): Mothers' confidence and their bonding behaviors towards their premature infants (pre and post) the program (table 12-13).

Part (V): Effect of the discharge guide program on the infants' health problems, anthropometric measurements, breast feeding problems, and pattern of breast feeding during follow-up periods (table 14-17).

Part (VI): Statistical relationship between mothers' knowledge and practice and their age, level of education, and working status pre and post the discharge guide program (table 18-23)

PART (I): Biosocial Characteristics of Premature Infants and their Mothers

Table (1): Number and Percentage Distribution of Premature Infants in Both Groups According to their Socio-Demographic Characteristics.

Characteristics of Premature Infants	Study group (No. =50 (100%)		Control group (No.=50 (100%)	
	No.	%	No.	%
I- Sex:				
▪ Male	29	58.0	36	72.0
▪ Female	21	42.0	14	28.0
II- Birth weight in grams:				
▪ < 1500 grams	18	36.0	10	20.0
▪ 1500- <2000 grams	20	40.0	16	32.0
▪ 2000- <2500	12	24.0	24	48.0
$\bar{X} \pm$ SD	1703.4 ± 429.2 gms		1929.6 ± 444.1 gms	
III- Gestational age in weeks:				
▪ 30- 32	23	46.0	13	26.0
▪ 33- <34	8	16.0	14	28.0
▪ 35- ≤ 37	19	38.0	23	46.0
$\bar{X} \pm$ SD	33.14 ±2.3 weeks		34.1 ±1.9 weeks	
IV- Proportion to Gestational age:				
▪ Small for gestational age	40	80.0	41	82.0
▪ Appropriate for gestational age	10	20.0	8	16.0
▪ Large for gestational age	0	0.0	1	2.0
V- Birth order:				
▪ First	23	46.0	24	48.0
▪ Second	10	20.0	12	24.0
▪ Third	10	20.0	10	20.0
▪ Fourth and more	7	14.0	4	8.0
VI- Hospital stay:				
▪ < one week	8	16.0	7	14.0
▪ One - <2 weeks	10	20.0	10	20.0
▪ 2-<3 weeks	7	14.0	8	16.0
▪ 3 weeks or more	25	50.0	25	50.0

Table (1): Number and percentage distribution of premature infants in both groups according to their socio-demographic characteristics, it was showed that more than half (58%) of premature infants in the study group were males, and the rest of them (42%) were females. While more than two thirds (72%) of premature infants in control group were males and the rest of them were females. The mean birth weight in the study group was 1703.4 ± 429.2 grams, and in the control group was 1929.6 ± 444.1 grams. The mean gestational age of infants in study and control groups was 33.14 ±2.3 and 34.1 ±1.9 weeks respectively; the majority of premature infants (80% and 82%) were small for gestational age respectively. Regarding birth order, it was found that nearly half percent (46% and 48%) in both groups were ranked as first infant. Regarding to hospital stay, exactly half of the infants (50%) in both groups were stay in the hospital for more than 3 weeks.

Table (2): Number and Percentage Distribution of Mothers in Both Groups According to their Biosocial Characteristics.

Characteristics of Mothers	Study group (No. =50 (100%)		Control group (No.=50 (100%)	
	No.	%	No.	%
I- Age in years:				
▪ <20 years	7	14.0	4	8.0
▪ 20-<30	26	52.0	31	62.0
▪ 30-<40	12	24.0	13	26.0
▪ 40 and more	5	10.0	2	4.0
$\bar{X} \pm$ **SD**	27.7 ± 7.1 years		27.5 ± 6.1 years	
II- Education:				
▪ Illiterate	2	4.0	3	6.0
▪ Read and write	12	24.0	12	24.0
▪ Moderate education	23	46.0	20	40.0
▪ High education	11	22.0	14	28.0
▪ Postgraduate education	2	4.0	1	2.0
III- Employment:				
▪ Employee	14	28.0	16	32.0
▪ House wife	36	72.0	34	68.0

Table (2): Number and percentage distribution of mothers in both groups according to their biosocial characteristics, it showed that more than half of mothers' age (52%) and (62%) between 20 and 30 years respectively in both groups. This table also clarify that the mean age for mothers in the study group was 27.7 $\pm$ 7.1 years and in control group was 27.5 $\pm$ 6.1 years. Regarding mothers' education, 46% and 40% of them in both study and control groups were moderate education respectively. Nearly three quarters of mothers (72%) in the study group were house wives compared by 68% of control group.

Part (II): Mothers' Knowledge Regarding Premature Infants.

Table (3): Percentage Distribution of Mothers Regarding their knowledge about Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Knowledge	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre %		Post %			Pre %		Post %		
	Correct	Incorrect	Correct	Incorrect		Correct	Incorrect	Correct	Incorrect	
- Concept of premature infant	22	78	92	8	23.6 (P<0.001)	18	82	20	80	1.6 (P<0.001)
- Causes of prematurity	44	56	98	2		46	54	44	56	
- Problems of premature infants	30	70	100	0		48	52	54	46	
- Premature infants' needs	58	42	98	2		38	62	42	58	
- Occurrence of complications after discharge.	38	62	90	10		26	74	30	70	
- Premature infants' protection from infection	38	62	96	4		30	70	32	68	
$\bar{X}$	1.62		1.92			1.56		1.58		
±SD	0.31		0.18			0.42		0.41		
T^* -test = 18.8 (P<0.001)										

T^* - test between study and control groups post program.

Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (3): Percentage distribution of mothers' knowledge about premature infants, it was found that there was an increase in mothers' knowledge of study group with a high statistical significant difference ($p<0.001$) between pre and post program. Meanwhile, there was an improvement in knowledge of the study group in comparison to the control group with a high statistical significant difference ($p<0.001$) at post program.

Table (4): Percentage Distribution of Mothers Regarding their knowledge about Breast Feeding of their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Knowledge	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre %		Post %			Pre %		Post %		
	Correct	Incorrect	Correct	Incorrect		Correct	Incorrect	Correct	Incorrect	
- Benefits of breast feeding for infants.	36	64	100	0	12.9 (P<0.001)	36	64	34	66	0.4 (P≥0.05)
- Benefits of breast feeding for mothers.	30	70	98	2		28	72	28	72	
- Frequency of breast feeding.	42	58	86	14		48	64	40	60	
- Technique of breast feeding.	16	84	96	4		28	72	30	70	
- Problems of breast feeding.	12	88	98	2		14	86	16	84	
- Management of breast feeding problems.	6	94	94	6		8	92	10	90	
- Dealing with breast milk.	10	90	96	4		8	92	8	92	
$\bar{X}$	1.9		4.4			1.8		1.84		
±SD	0.44		0.26			0.4		0.37		
T^*-test = 12.2 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (4): Percentage distribution of mothers' knowledge about breast feeding of their premature infants, the result indicated that, the majority of mothers had correct knowledge post program compared to pre program with a high statistical significant difference (T= 12.9, p<0.001) for study group. Meanwhile, approximately one third of mothers have correct knowledge pre and post program about benefits of breast feeding for both infants and their mothers, frequency and technique of breast feeding, with no statistical significant difference (T= 0.4, p>0.05) for control group, also there was a high statistical significant difference (T= 12.2 , p<0.001) between both groups post program.

Table (5): Percentage Distribution of Mothers Regarding their knowledge about Bottle Feeding of their Premature Infants in Both Groups Pre and Post Discharge Guide Program.

Mothers' Knowledge	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre %		Post %			Pre %		Post %		
	Correct	Incorrect	Correct	Incorrect		Correct	Incorrect	Correct	Incorrect	
- Materials used for bottle preparation.	10	90	100	0	19.6 (P<0.001)	8	92	8	92	0.6 (P>0.05)
- Technique for bottle preparation.	8	92	94	6		6	94	8	92	
- Reuse of formula left over.	4	96	98	2		6	94	4	96	
- Technique of cleaning of bottle feeding.	4	96	94	6		4	96	6	94	
- Frequency of boiling of bottle feeding.	8	92	98	2		8	92	8	92	
$\bar{X}$	4.3		8.4			4.2		4.2		
±SD	2.2		0.9			2.04		2.1		
T^* -test = 20.4 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (5): Percentage distribution of mothers' knowledge about bottle feeding to their premature infants, it was found that, the majority of them had correct knowledge after implementation of the program post test for study group, while very few of them (4,3 ±2,01%) have correct knowledge pre and post program for control group. This reflected that there was a high statistical significant difference (T= 20.4, p<0.001) between both groups post program.

Table (6): Percentage Distribution of Mothers' knowledge Regarding Items of Care for their Premature Infants in Both Groups Pre and Post Discharge Guide Program.

Described Items	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre %		Post %			Pre %		Post %		
	Correct	Incorrect	Correct	Incorrect		Correct	Incorrect	Correct	Incorrect	
Hygienic measures:										
- Eye care.	20	80	98	2		18	82	18	82	
- Cord care.	14	86	94	6		10	90	12	88	
- Infant bathing	8	92	90	10		6	94	8	92	
$\bar{X}$	1.2		2.1			1.1		1.13		
±SD	0.3		0.2			0.3		0.4		
Immunization:										
- Concept of immunization.	6	94	98	2		8	92	8	92	
- Immunization schedule.	6	94	92	8		6	94	8	92	
$\bar{X}$	2.6		4.1			2.1		2.2		
±SD	0.7		0.3			0.6		0.7		
Sleeping:										
- Sleeping hours.	6	94	98	2		6	94	8	92	
- Sleeping position	8	92	100	0		10	90	10	90	
$\bar{X}$	2.4		4.9			2.3		2.34		
±SD	1.1		0.4			0.9		0.92		
Infant's crying:										
- Causes.	38	62	100	0		34	66	36	64	
- Mothers' role	10	90	100	0		8	92	8	92	
$\bar{X}$	2.4		4.0			2.6		2.4		
±SD	0.8		0.0			0.8		0.9		
Follow-up visits:										
-Importance of follow-up	26	74	100	0.0		28	72	26	74	
$\bar{X}$	1.3		2.0			1.2		1.3		
±SD	0.4		0.0			0.4		0.3		
T^*-test = 15.7					**(P<0.001)**					

16.9 (P<0.001)

0.9 (P>0.05)

T^* - test between study and control groups post program.

Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (6): Percentage distribution of mothers' knowledge in both groups regarding items of care for their premature infants, this table illustrated that, the mothers' knowledge regarding care of their infants were correct post program in comparison to pre discharge guide program with a high statistical significance difference (T= 16.9, P<0.001) for study group. For control group, approximately one third of mothers had correct knowledge pre and post program with no statistical significance difference (P>0.05). Also, there was a high statistical significance difference (T= 15.7, P<0.001) between both groups post discharge guide program.

Table (7): Percentage Distribution of Mothers' Knowledge regarding Warning Signs to Call Medical Intervention for their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Warning Signs to Call Medical Intervention	Study group (No. =50 (100%)				Control group (No. =50 (100%)			
	Pre %		Post %		Pre %		Post %	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
- Refuse feeding	32	68	100	0	20	80	22	78
- Projectile vomiting.	14	86	100	0	18	82	16	84
- Convulsion and irritability.	24	76	100	0	24	76	22	78
- Tachypnea.	14	86	100	0	16	84	18	82
- Periodic apnea.	0	100	98	2	2	98	2	98
- Nasal obstruction	14	86	90	10	6	94	10	90
- Skin discoloration as jaundice or cyanosis	16	84	100	0	10	90	12	88
- hypothermia	2	98	100	0	0	100	0	100
- Hyperthermia.	100	0	100	0	100	0	100	0
- Sleeping disturbance.	30	70	100	0	22	78	20	80
- Redness and discharge of eyes or umbilicus.	22	78	96	4	20	80	18	82
- Excessive weight loss.	26	74	96	4	14	86	16	84
- Failure to gain weight.	30	70	100	0	66	34	68	32
- Excessive crying.	98	2	100	0	66	34	68	32
$\bar{X}$	**27.3**		**94.3**		**20.2**		**20.3**	
±SD	**2.7**		**0.38**		**2.3**		**2.2**	

Table (7): Percentage distribution of mothers' knowledge regarding warning signs of their premature infants, it was showed that, the most common warning signs were refused feeding, projectile vomiting, convulsion, tachypnea, skin discoloration, hypo and hyperthermia, sleeping disturbances, excessive weight loss, and excessive crying as reported by all of studied mothers post program. Meanwhile, approximately all of mothers in control group (100%) pre and post program stated that hyperthermia only was the most common warning signs for their premature infants. This table also clarified that the mean score of mothers' knowledge pre program was 27.3 $\pm$ 2.7 for the study group as compared to 20.2 $\pm$ 2.3 in the control group. While, post program the mean score was 94.3 $\pm$ 0.38 and 20.3 $\pm$ 2.2 for both groups respectively.

Table (8): Number and Percentage Distribution of Total Score Level of Mothers' Knowledge toward their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Knowledge	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre		Post			pre		Post		
	No.	%	No.	%		No.	%	No.	%	
- Correct	3	6.0	49	98.0	22.9 (P<0.001)	2	4.0	4	8.0	1.32 (P>0.05)
- Incorrect	47	94.0	1	2.0		48	96.0	46	92.0	
$\bar{X}$	1.2		2.0			1.03		1.1		
±SD	0.2		0.2			0.2		0.3		
T^* -test = 24.7 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (8): Number and percentage distribution of total score level of mothers' knowledge toward their premature infants in both groups pre and post discharge guide program, it was showed that the majority of mothers (94% and 96%) in the study and control groups had incorrect knowledge pre discharge guide program respectively. Meanwhile, there was a high statistical significant difference (T= 24.7, P<0.001) between both groups post discharge guide program, whereas, the majority of the studied mothers (98%) had correct knowledge post program compared to 8% of them in control group.

Part (III): Mothers' practice regarding care of their premature infants pre and post Discharge Guide Program.

Table (9): Percentage Distribution of Mothers' Practices Regarding Care of their Premature Infants in both Groups Pre and Post Discharge Guide Program.

$\bar{X}$ +SD of Mothers' practices	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre %		Post %			Pre %		Post %		
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory		Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory	
- Eye care.	8	92	96	4	14.9 (P<0.001)	10	90	12	88	0.3 (P>0.05)
$\bar{X}$	1.88		1.2			1.8		1.7		
±SD	0.4		0.18			0.4		0.4		
- Cord care.	6	94	98	2		6	94	8	92	
$\bar{X}$	1.8		1.1			1.7		1.8		
±SD	0.3		0.3			0.4		0.3		
- Diaper care	12	88	96	4		12	88	14	86	
$\bar{X}$	2.3		1.9			2.1		2.06		
±SD	0.6		0.42			0.54		0.51		
- Infant bathing	14	86	96	4		14	86	10	90	
$\bar{X}$	6.7		18.9			6.6		6.8		
±SD	2.3		3.4			2.1		2.2		
- Measuring axillary temperature.	4.0	96.0	94.0	6.0		2.0	98.0	4.0	96.0	
$\bar{X}$	3.4		4.6			3.6		3.4		
±SD	1.3		1.1			1.3		1.2		
- Breast feeding technique	32.0	68.0	98.0	2.0		28.0	72.0	32.0	68.0	
$\bar{X}$	20.3		24.6			21.0		20.8		
±SD	4.6		3.2			4.6		4.3		
- Bottle feeding technique	6.0	94.0	94.0	6.0		6.0	94.0	8.0	92.0	
$\bar{X}$	8.9		9.4			8.6		8.7		
±SD	2.04		1.7			2.01		2.1		
T^*-test = 15.4 (P<0.001)										

Table (9): Percentage distribution of mothers' practices regarding care of their premature infants in both groups pre and post discharge guide program, it was found that there was marked increase in mothers' practices of the study group post test in comparison to the control group, with a high statistical significant difference (T= 15.4, P<0.001) regarding care of their premature infants.

Table (10): Percentage Distribution of Mothers' Practices Regarding Drugs Administration at Home for their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Practices Regarding Drugs Administration	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre %		Post %			Pre %		Post %		
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory		Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory	
- Oral drug administration.	28	72	100	0	4.9 (P<0.05)	32	68	36	64	0.4 (P>0.05)
$\bar{X}$	2.6		3.3			2.6		2.5		
±SD	0.3		0.5			0.3		0.4		
- Otic drug administration.	20	80	96	4		16	84	14	86	
$\bar{X}$	2.9		3.8			3.0		2.9		
±SD	1.2		0.8			1.0		1.1		
- Optic drug administration	14	86	96	4		20	80	20	80	
$\bar{X}$	3.1		3.5			3.2		3.2		
±SD	0.35		0.46			0.3		0.34		
- Rectal drug administration	22	78	100	0		26	74	22	78	
$\bar{X}$	2.6		3.4			2.6		2.7		
±SD	0.8		0.4			0.7		0.8		
- Nasal drug administration	26	74	98	2		24	76	26	74	
$\bar{X}$	2.8		3.3			2.8		2.9		
±SD	0.18		0.2			0.19		0.2		
T^* -test = 7.3 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (10): Percentage distribution of mothers' practices regarding drugs administration at home for their premature infants in both groups pre and post program, it was showed that there was a marked increase in mothers' practices of the study group post test with statistical significant difference (T= 4.9, p<0.05) compared to pre program for the study group. Conversely, 36%, 14%, 20%, 22%, 26% of mothers in the control group had satisfactory practices in oral, otic, optic, rectal, and nasal drugs administration respectively post program with no statistical significant difference (T= 0.4, P>0.05). There was a high statistical significant difference (T=7.3, P<0.001) between both groups post program.

Table (11): Number and Percentage Distribution of Total Score Level of Mothers' Practice toward Care of their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Practice	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre		Post			pre		Post		
	No.	%	No.	%		No.	%	No.	%	
- Satisfactory	9	18.0	46	92.0	38 (P<0.001)	6	12.0	7	14.0	2 (P>0.05)
- Unsatisfactory	41	82.0	4	8.0		44	88.0	43	86.0	
$\bar{X}$	0.3		0.4			0.5		0.6		
±SD	0.43		0.17			0.24		0.32		
T^*-test = 71 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

Table (11): Number and percentage distribution of total score level of mothers' practice toward care of their premature infants in both groups pre and post program, it was showed that the total mothers' practices are satisfactory (92%) post program in study group compared to 14.0% in control group. This reflects that there was a high statistical significance difference (T= 71, P<0.001) between both groups post program.

Part (IV): Mothers' confidence and their bonding behaviors towards their premature infants.

Table (12): Number and Percentage Distribution of Mothers' Confidence Behaviors towards their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Confidence	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre		Post			pre		Post		
	No.	%	No.	%		No.	%	No.	%	
- Highly Confident (Score 15-24)	9	18.0	42	84.0	9.8 (P<0.001)	5	10.0	6	12.0	0.5 (P>0.05)
- Indifferent Confident (Score 8- <15)	13	26.0	3	6.0		14	28.0	15	30.0	
- Poorly Confident (Score 0- <8)	28	56.0	5	10.0		31	62.0	29	58.0	
$\bar{X}$	10.8		2 0.6			9.3		9.9		
±SD	6.9		5.2			6.1		6.3		
T^* -test = 10.8 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

On investigating the mothers' confidence behavior as regards care of their premature infants, this table showed that the majority of mothers (84 %) in study group were highly confidant post discharge guide program, compared by the minority of them (12%) in the control group. Also this table showed that there was a high statistical significance difference (T = 10.8, p<0.001) between both groups post discharge guide program.

Table (13): Number and Percentage Distribution of Mothers' bonding Behaviors toward their Premature Infants in both Groups Pre and Post Discharge Guide Program.

Mothers' Bonding	Study group (No. =50 (100%)				T-test	Control group (No. =50 (100%)				T-test
	Pre		Post			pre		Post		
	No.	%	No.	%		No.	%	No.	%	
- Strong Bonding (Score 8-12)	7	14.0	37	74.0	9.6 (P<0.001)	8	16.0	8	16.0	0.5 (P>0.05)
- Indifferent Bonding (Score 4- <8)	10	20.0	8	16.0		13	26.0	12	24.0	
- Poor bonding (Score 0- <4)	33	66.0	5	10.0		29	58.0	30	60.0	
$\bar{X}$	3.9		8.7			4.3		4.4		
±SD	3.0		2.4			3.1		3.1		
T^* -test = 8.1 (P<0.001)										

T^* - test between study and control groups post program.
Insignificant statistical difference (p>0.05) High statistical significant difference (p<0.001)

This table showed that nearly three quarters (74.0%) of the studied mothers had strong bonding behavior post discharge guide program in contrast to the minority (16.0%) in control group. These results indicated a high statistical significant difference (T=8.1, p<0.001) between both groups post program. The mean score of mothers' bonding behaviors toward their premature infants was 8.7 ± 2.4 and 4.4 ± 3.1 in both groups respectively post program.

Part (V): Effect of the Discharge Guide Program on the Premature Infants' Health Problems, Anthropometric Measurements, Patterns and Problems of Breast Feeding.

Table (14): Percentage Distribution of Premature Infants' Health Problems on Discharge and During Follow-up Period in both Groups.

Health Problems	Study group (No. =50 (100%)				Control group (No. =50 (100%)			
	On discharge	1st visit	2nd visit	3rd visit	On discharge	1st visit	2nd visit	3rd visit
- No complaint.	76	64	80	96	52	12	26	10
- Central nervous system problems.	2	0	0	0	2	14	20	34
- Thermoregulatory problems	0	2	0	0	0	14	20	40
- Respiratory problems.	0	2	10	2	0	32	30	36
- Gastrointestinal problems.	4	2	0	0	2	14	20	34
- Refuse feeding.	0	4	0	2	0	18	10	10
- Slow weight gain	0	2	0	0	36	30	30	16
- Neonatal infection.	10	4	0	0	12	20	14	22
- Sleeping disturbance.	26	36	14	4	38	88	34	52
- Skin problems.	0	2	0	0	0	8	6	10
X^2 =276.6				**(P<0.001)**				

Table (14): Percentage distribution of premature infants' health problems on discharge and during follow-up periods in both groups, it was observed that about one quarter (26%) of premature infants had sleeping disturbance in comparison to 38% of them in control group on discharge. At the end of the third visit, the majority (96%) of the infants in the study group don't have any complaint. Meanwhile the most common infants' health problems in the control group were central nervous system problems, thermoregulatory problems, respiratory problems, gastrointestinal problems, and sleeping disturbances as reported by 34%, 40%, 36%, 34%, and 52% of mothers respectively.

Table (15): Percentage Distribution of Premature Infants regarding their Anthropometric Measurements on Discharge and During Follow-up Periods in both Groups.

Anthropometric Measurements	Study group (No. =50 (100%)				Control group (No. =50 (100%)			
	On discharge	1st visit	2nd visit	3rd visit	On discharge	1st visit	2nd visit	3rd visit
- Weight/kg. ▪ $\bar{X}$ ±SD	1883.4 ± 324.2 gms	2093.4 ± 311.5 gms	2436.4 ± 319.7 gms	2783.4 ± 337.6 gms	1903.4 ± 370.2 gms	2113.4 ± 329.7 gms	2453.4 ± 228.9gms	2740.4 ± 371.2 gms
- Length/cm ▪ $\bar{X}$ ±SD	49 ± 1.1 cm	51.6 ± 2.1 cm	53.2 ± 0.9 cm	53.9 ± 0.8 cm	49 ± 1.3 cm	51.9 ± 1.9 cm	52.7 ± 1.1 cm	53.9 ± 1.1 cm
- Head circumference/cm. ▪ $\bar{X}$ ±SD	35.3 ± 1.1	36.1± 0.9	36.7± 0.8	37.3 ± 1.3	35.2 ± 1.2	35.9 ± 1.1	36.5 ± 1.2	37.7± 1.1
X^2 =2.7		P>0.05		on discharge				
X^2 = 37.3		P<0.001		first visit				
X^2 = 58.2		P<0.001		second visit				
X^2 = 11.8		P<0.001		third visit				

Table (15): Percentage distribution of premature infants regarding their anthropometric measurements on discharge and during follow-up periods in both groups, it was found that there was no statistical significant difference (X^2 =2.7 P>0.05) between study and control groups on discharge. This reflects that there was a high statistical significant difference between study and control groups at the end of the first (X^2 = 37.3, P<0.001), the second (X^2 = 58.2, P<0.001), and the third visit (X^2 = 11.8, P<0.001) as regards premature infants' anthropometric measurements according to infants' growth charts.

Table (16): Percentage Distribution of Mothers according to their Patterns of breastfeeding on Discharge and During Follow-up Periods in both Groups.

Feeding Patterns	Study group (No. =50 (100%)				Control group (No. =50 (100%)			
	On discharge	1st visit	2nd visit	3rd visit	On discharge	1st visit	2nd visit	3rd visit
- Exclusive breast feeding	88	80	78	48	42	40	32	20
- Almost exclusive breast feeding	8	14	20	44	38	14	18	20
- Partial breast feeding	4	6	2	4	16	22	12	18
- Minimal breast feeding	0	0	0	2	4	12	22	16
- No breast feeding	0	0	0	2	0	12	16	26
$\bar{x}$	3.9	3.8	3.9	3.4	3.3	2.7	1.9	1.7
±SD	0.4	0.4	0.5	0.9	1.2	1.6	1.5	1.6
Total $\bar{x}$	3.7				2.1			
±SD	0.7				0.6			
T-test= 11.7				**(P<0.001)**				

Table (16): Percentage distribution of mothers according to their patterns of breast feeding on discharge and during follow-up periods in both groups, it was detected that the majority of the studied mothers (92% = (48+44) gave exclusive and almost exclusive breast feeding to their premature infants at the end of third visit compared to 40%(20+20) in the control group. This table also showed that the total mean scores of mothers were 3.7±0.7, and 2.1±0.6 in study and control groups respectively, and this reflect a high statistical significant difference (T= 11.7, P<0.001) between both groups.

Table (17): Percentage Distribution of Mothers according to Problems of breast Feeding on Discharge and During Follow-up Periods in both Groups.

Breast Feeding Problems	Study group (No. =50 (100%)				Control group (No. =50 (100%)			
	On discharge	1st visit	2nd visit	3rd visit	On discharge	1st visit	2nd visit	3rd visit
- Drowsy and sleepy infant.	94	14	0	0	98	36	0	0
- Easily fatigue	96	10	8	0	100	30	20	0
- Nipple problems	72	2	0	0	92	44	34	28
- Weak sucking	46	2	0	0	88	28	26	4
- Inadequate breast milk	0	16	4	4	0	28	34	56
$\bar{X}$	3.2	0.4	0.2	0.06	3.8	1.9	1.2	0.8
±SD	2.3	1.2	0.6	0.5	2.3	2.4	2.1	1.9
Total $\bar{X}$	1.33				2.28			
±SD	1.19				1.15			
T-test= 4.7				**(P<0.05)**				

Table (17): Percentage distribution of mothers according to problems of breast feeding on discharge and during follow-up periods in both groups, it was found that the most common feeding problems immediately after discharge were drowsy and sleepy infant, easily fatigue, and nipple problems as reported by 94%, 96%, and 72% of mothers in study group and 98%, 100%, and 92% of them in control group respectively. These problems disappeared at the third visit in study group in comparison to the control group. Whereas, inadequate breast milk was the most common problem as reported by nearly more than half (56%) of mothers in control group. This table also reflects that there was statistical significance difference ($T= 4.6$, $P<0.05$) between study and control group regarding problems of breast feeding.