RESULTS

It classified into four parts:

I-First part related to socio-demographic characteristics of the study subjects (tables 1,2,3).

II-Second part; deal with caregivers' knowledge before and after the program implementation (tables 4,5,6,7,8,9).

III-Third part deal with practice of caregivers before and after program implementation tables (10,11).

IV-Fourth part :

- Relationship between caregivers' knowledge and their socio-demographic characteristics tables (from 10 to 26).
- Relationship between caregivers' practices regarding measuring vital signs and their socio-demographic data (table 29).
- Relationship between caregivers' practices regarding first aids and their socio-demographic data (table 30).

I-First Part: socio-demographic characteristics of the study subjects

Table (1): Number and percentage distribution of caregivers according to their socio demographic data:

Characteristics	Total number of care givers = 50	
	No	%
Age in years		
< 20	15	30.0
20-	10	20.0
25-	16	32.0
≥ 35	9	18.0
X	24.6	
SD	± 5.8	
***Education**		
Middle (diploma)	31	62.0
High education (university)	19	38.0
***Marital status**		
Single	21	42.0
Married	18	36.0
Widowed	7	14.0
Divorced	4	8.0
***Sibling no**		
0	17	34.0
1	12	24.0
2	15	30.0
> 2	6	12.0
***Experience**		
< 3	32	64.0
3-	9	18.0
7-	5	10.0
≥ 11	4	8.0
Previous training	0	0.0

This table showed that the mean age of caregivers was 24.6 ± 5.8. Regarding the educational level, it was found that near to two thirds (62%) of them were in middle education, and near to one third (38%) were highly educated. In relation to marial status, this table clarified that 42%of caregivers were single, 36% married, 14% were widowed, while 8% were divorced. Also it was found that about on third of caregivers have no children. In relation to years of experience, it was found that 64% of them had less than 3-years, while 8% have (11+ years) of experiences. All participants have no previous training .

Fig (1-a): percentage distribution of caregivers according to their age in years

Fig (1-B): percentage distribution of caregivers according to their educational level

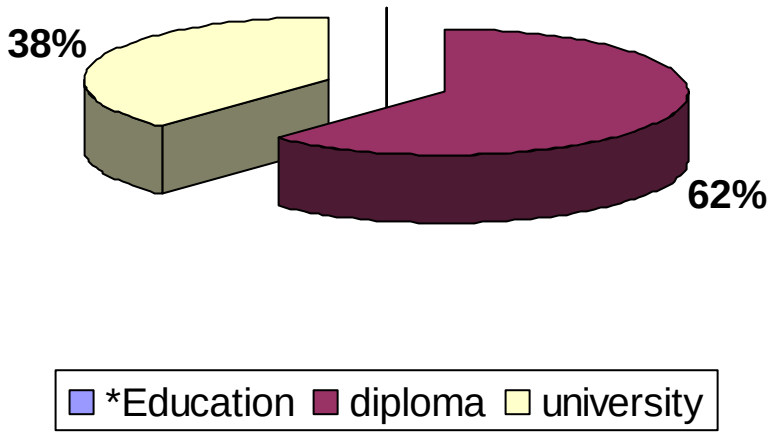


Fig (1-C): Percentage distribution of caregivers according to their Marital status

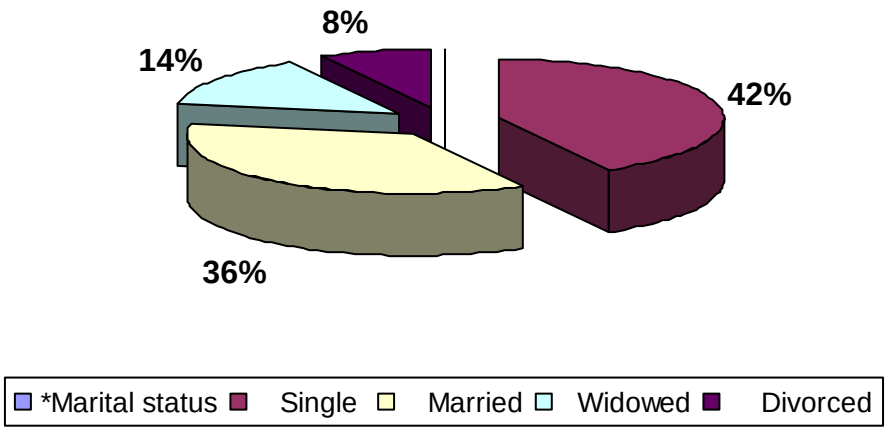


Fig (1-D):Percentage distribution of caregivers according to their sibling number

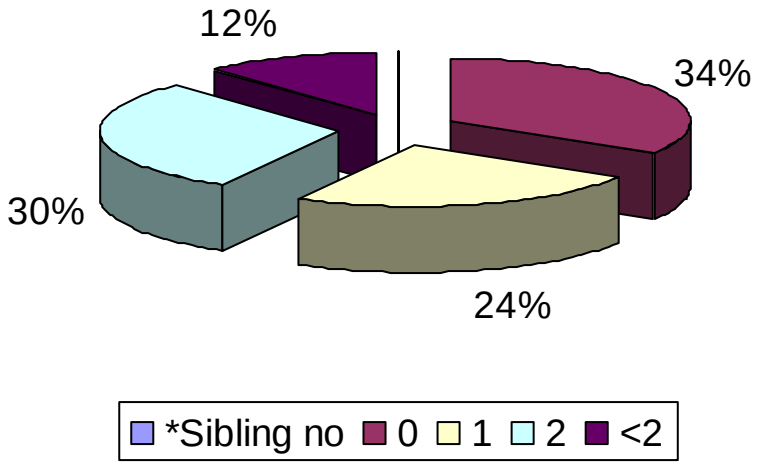


Fig (1-E): Percentage distribution of caregivers according to their experience

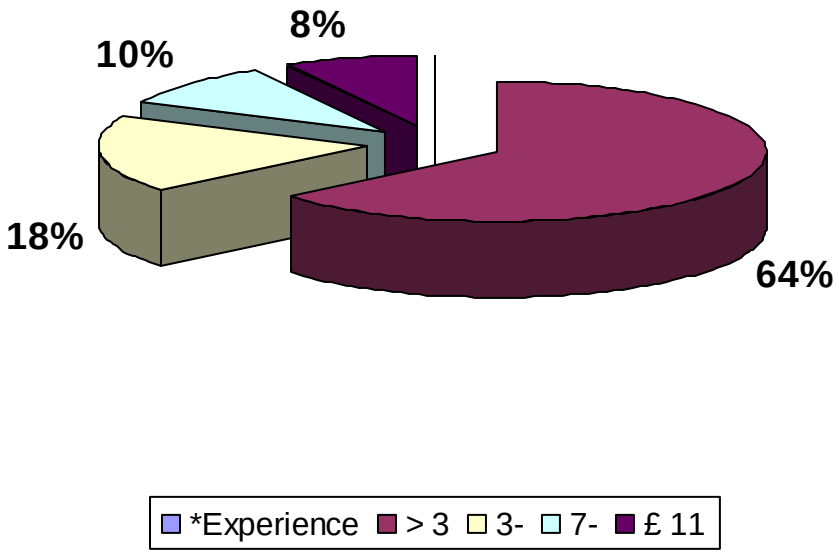


Table (2): Number and percentage distribution of children in relation to their characteristics

Characteristics	Total No of children = 100	
	No	**%**
Age in years		
3	34	34.0
4	37	37.0
5	29	29.0
	$\overline{X}$ 4.45	
	SD $\pm$ 0.79	
Sex		
Male	46	46.0
Female	54	54.0
Child ranking		
First	43	43.0
Second	35	35.0
Third	22	22.0

This table showed that the mean of age of childern was 4.45 ± 0.79 more than half of them (54%) were female and the rest (46%) were males. Reagarding, the child ranking 43% of them was the first and 35%, the second.

Fig (2) : Number and percentag distribution of children in relation to their characteristics

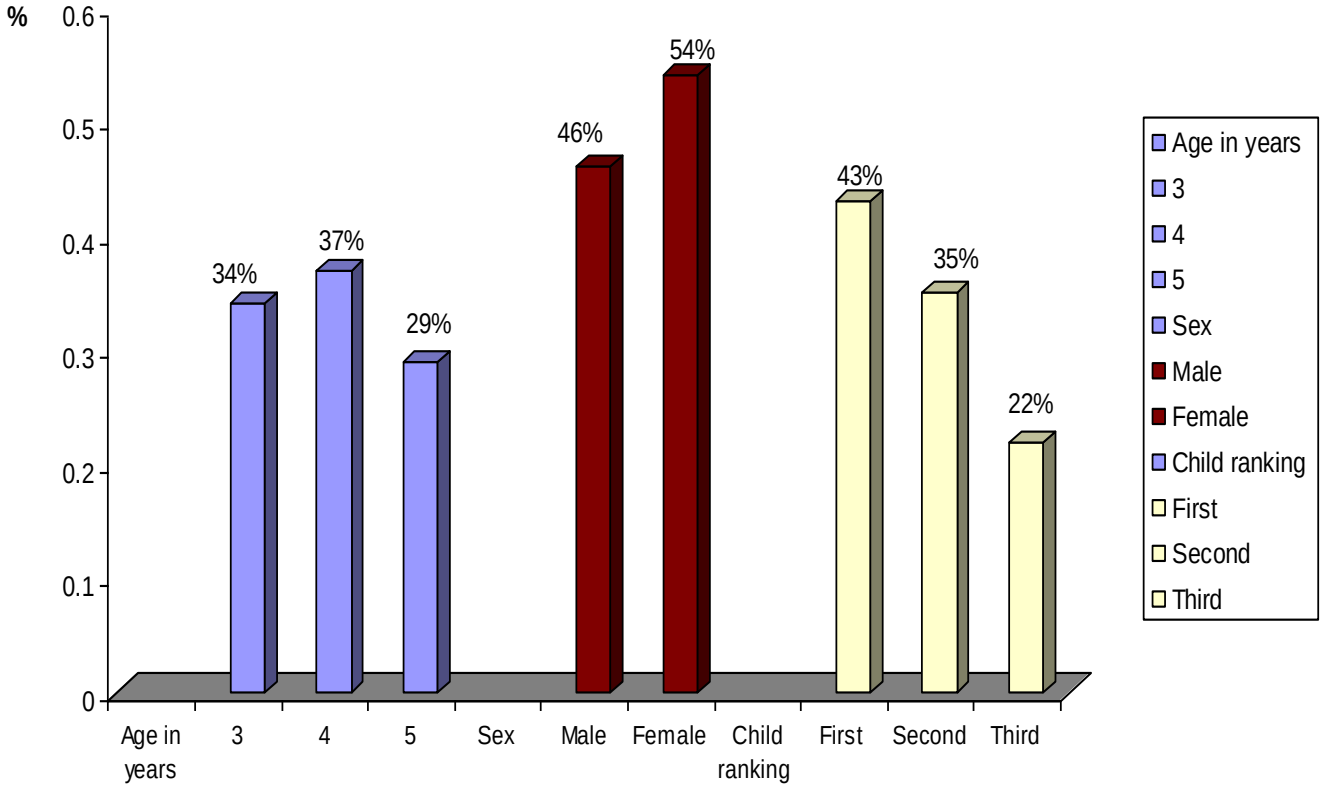
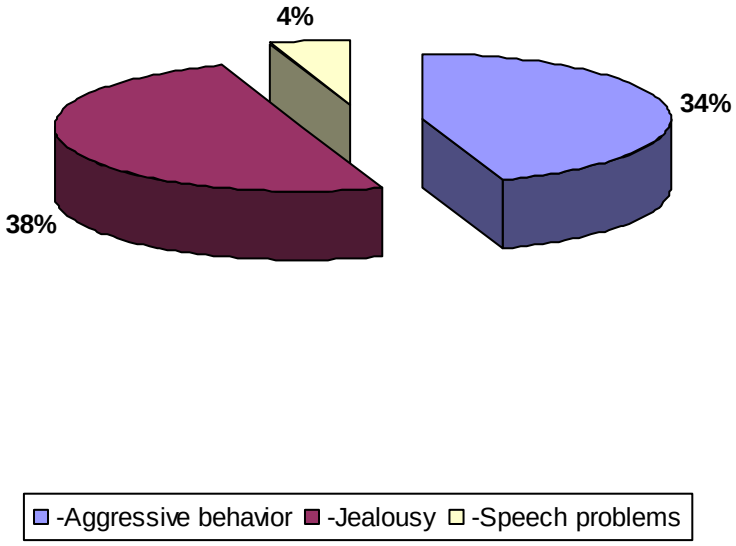


Table (3): Percentage distribution of the behavioral problems among the study group of children.

Problems	**Total No. of children = 100**	
	No.	**(%)**
-Aggressive behavior	34	34.0
-Selfishness	24	24.0
-Jealousy	38	38.0
-Fear	16	16.0
-Sleep disturbance	8	8.0
-Thumb sucking	8	8.0
-Masturbation	12	12.0
-Speech problems	4	4.0

This table illustrated that Jealousy (38%), Aggression (34%) and selfishness (24%) were the more problems between the children while, speech problems constitute (4%) only.

Fig (3): Percentage distribution of the behavioral problems among the study group of children



II-Second part: Caregivers knowledge before and after program implementation.

Table (4): Percentage distribution of caregivers' knowledge regarding the growth and development before and after the program.

Items	Total number of caregivers = 50				Z	P
	Pre		Post			
	Satis.		Satis.			
	No.	%	No.	%		
*Concept of growth and development	4	8.0	40	80.0	7.25	<0.001
*Concept of preschool period	10	20	50	100	9.05	<0.001
*Factors affecting growth& development.	5	10.0	47	94.0	4.1	<0.001

This table revealed that there was a highly significant difference between the pre and post program implementation regarding the concept of growth and development, factors affecting growth and development and the concept of preschool period (Z, 7.25, 4.1, 9.05, P < 0.001) respectively.

Fig (4): Caregivers' knowledge regarding physical growth before and after the program

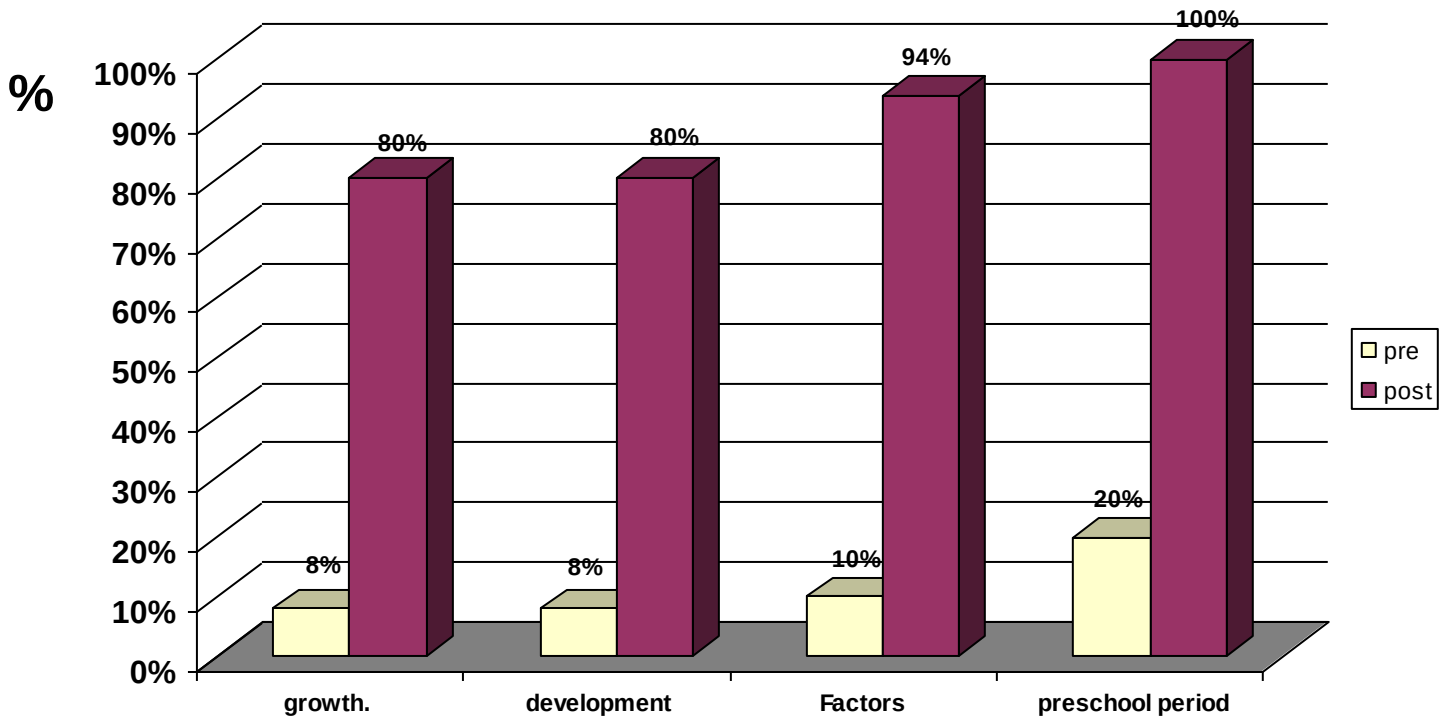


Table (5): Percentage distribution of caregivers knowledge regarding normal physical growth of presechool children before and after the program.

Items	Total number of caregivers = 50				Z	P
	Pre		Post			
	Satis.		Satis.			
	No	%	No	%		
Child weight:	5	10.0	44	88.0	9.05	<0.001
Child length	4	8.0	40	80.0	8.47	<0.001
No. of teeth	7	14.0	45	90.0	7.61	<0.001

This table revealed that, there was a highly statistical siginficant difference between the pre and post program regarding the caregivers knowledge about normal physical growth of preschool children (P<0.001).

Fig (5): Caregivers knowledge regarding the child weight length and teeth number before and after the program

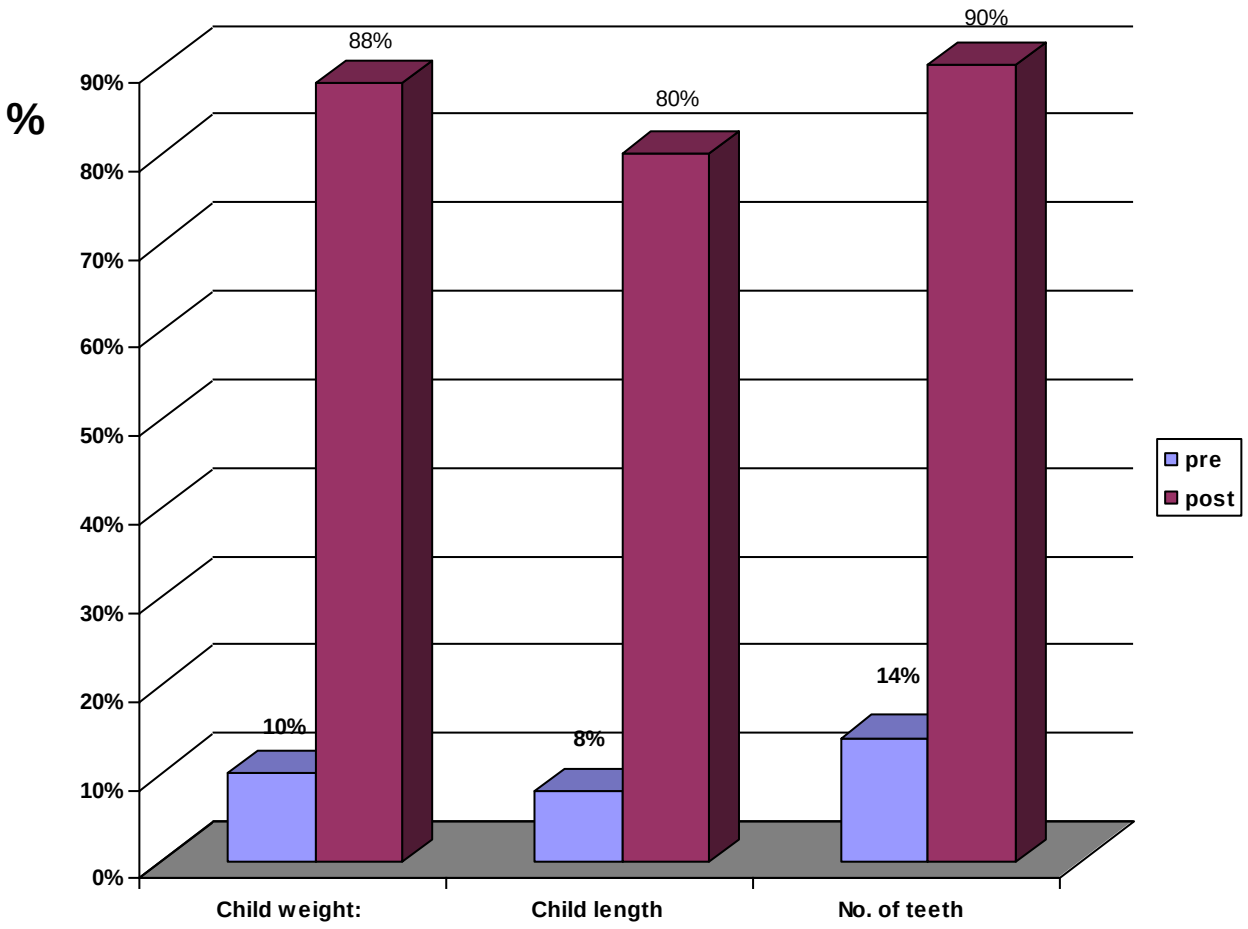


Table (6): Percentage distribution of caregivers' knowledge regarding physiological measurement before and after the program .

Items	Total number of caregivers = 50				Z	P
	Pre		Post			
	Satis.		Satis.			
	No	%	No	%		
*****Temperature	4	8.0	40	80.0	8.47	<0.001
*Pulse	4	8.0	40	80.0	8.47	<0.001
*Respiration	3	6.0	42	84.0	10.21	<0.001

This table illustrated that there was statistical significant (Z 8.47, 10.21, P < 0.001) differences between pre and post program regarding caregivers knowledge about normal temperature, pulse, and respiration of children respectively.

Fig (6): Caregivers' knowledge regarding measurement of vital signs before and after the program

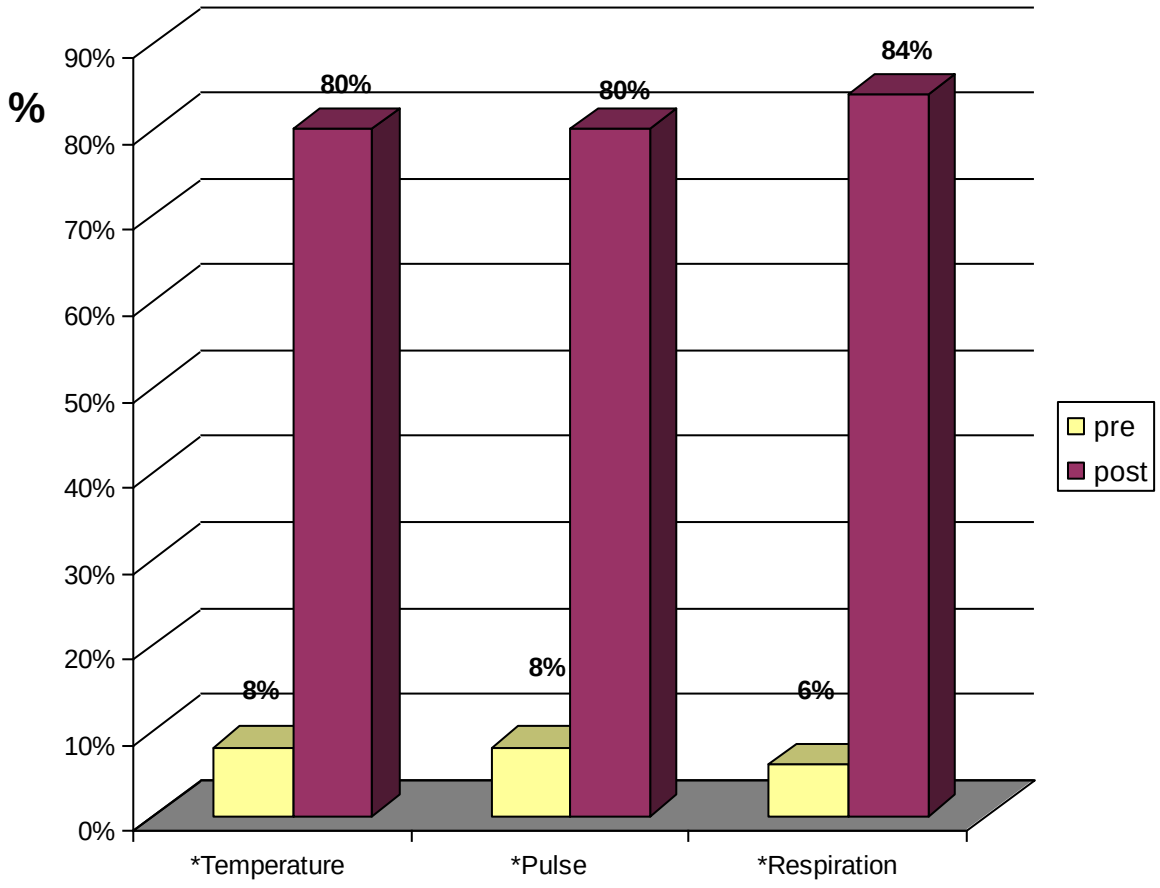


Table (7): Percentage distribution of caregivers knowledge regarding the development of pre-school children before and after program.

Items	Total number of caregivers = 50				Z	P
	Pre		Post			
	Satis.		Satis.			
	No	%	No	%		
***Motor development**						
-walking , running & Jumping	8	16.0	43	86.0	6.8	<0.001
-use scissor.	5	10.0	43	86.0	8.69	<0.001
-build tower of blocks	7	14.0	40	80.0	6.57	<0.001
***Emotional development**						
-Sense of initiation	5	10.0	45	90.0	9.43	<0.001
-oedipus conflicts.	3	6.0	44	88.0	11.21	<0.001
***Social development**						
-group sharing.	8	16.0	44	88.0	7.05	<0.001
-social behavior.	7	14.0	45	90.0	7.61	<0.001
***Cognitive development**						
-The ability to think& learn.	4	8.0	40	80.0	8.47	<0.001

This table revealed that there was a highly significant difference (Z= 6.8, 6.57, 9.43,7.05 and 8.47 P < 0.001), between pre and post program regarding the caregivers' knowledge about the development of perschool childern respectively.

Fig (7): Caregivers' satisfactory knowledge regarding the development of pre-school children before and after the porgram

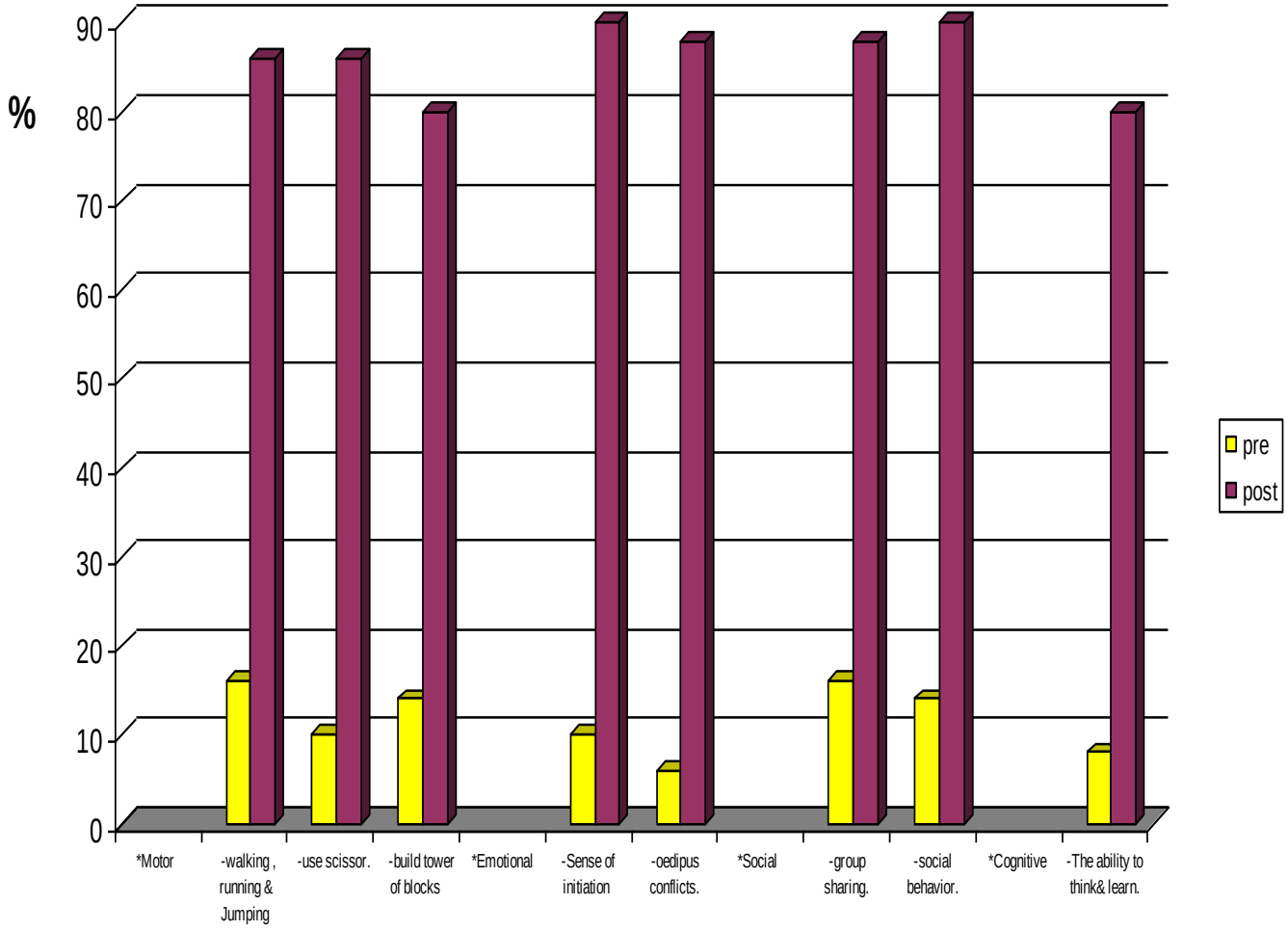


Table (8): Percentage distribution of caregivers knowledge regarding health promotion of preschool children.

Items	Total number of caregivers = 50				Z	P
	Pre		Post			
	Satis.		Satis.			
	No	%	No	%		
***Hygiene.**						
-Importance of hand washing	13	26.0	49	98.0	5.99	<0.001
-Importance of Bathing.	14	28.0	44	88.0	4.74	<0.001
-Dental care.	12	24.0	48	96.0	6.17	<0.001
***Toilet training:**						
-Age of bladder control	3	6.0	42	84.0	10.21	<0.001
-Age of bowel control	5	10.0	44	88.0	9.05	<0.001
-Problem related to urination & defecation	7	14.0	40	80.0	6.57	<0.001
***Safety measures**						
-Types of accident	8	16.0	43	86.0	6.8	<0.001
-Measures of prevention	6	12.0	44	88.0	8.27	<0.001
***Sleep & Rest:**						
-Sleeping hours at night.	8	16.0	44	88.0	7.05	<0.001
-Sleeping hours during day	7	14.0	47	94.0	8.53	<0.001
-Role toward sleep probloms.	5	10.0	43	86.0	8.69	<0.001
Play.						
-Value of play.	9	18.0	43	86.0	6.33	<0.001
-Role during play.	5	10.0	45	90.0	9.43	<0.001
Immunization.						
-Importance of immunization	7	14.0	48	96.0	8.87	<0.001
-Vaccination in preschool period.	3	6.0	44	88.0	11.21	<0.001
Nutrition						
-Importance of proper nutrition	10	20.0	45	90.0	6.34	<0.001
-Types of food given to preschool.	4	8.0	40	80.0	8.47	<0.001
-Number of meals for preschool perday.	7	14.0	47	94.0	8.53	<0.001

This table revealed that there was a highly significant differences between the per and the post program ($P < 0.001$) regarding caregivers' knowledge about health promotion of children (hygiene , toilet training, safety measures, sleep and rest, play, immunization and nutrition).

Fig (8): Caregivers knowledge regarding health promotion of preschool children

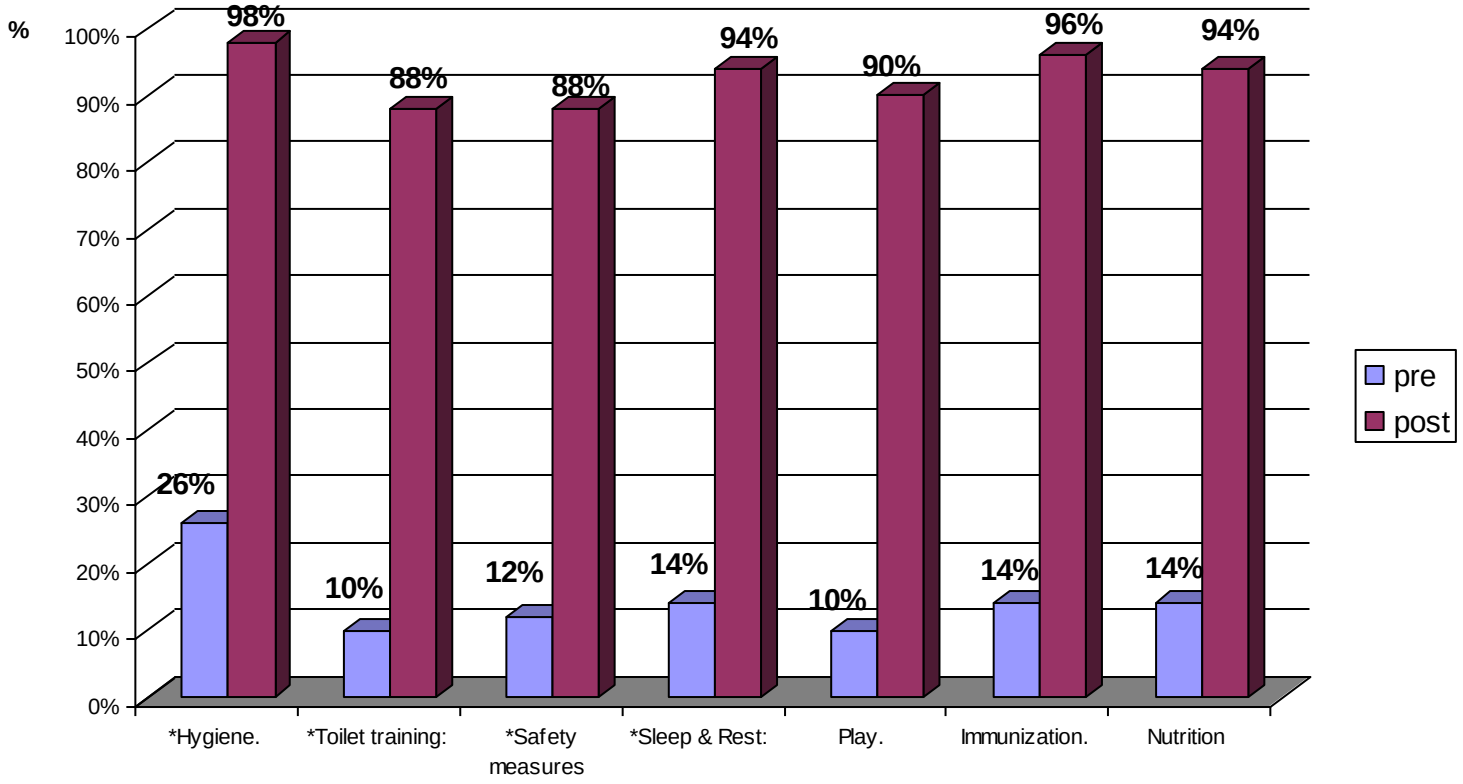


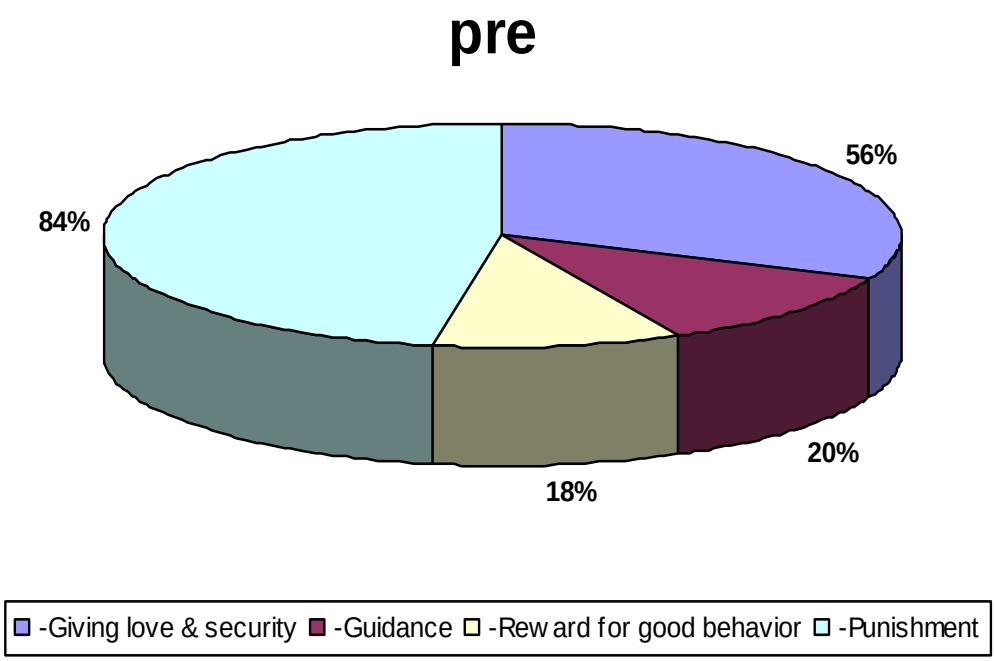
Table (9): Percentage distribution of caregivers' management of behavioral problems before and after the program.

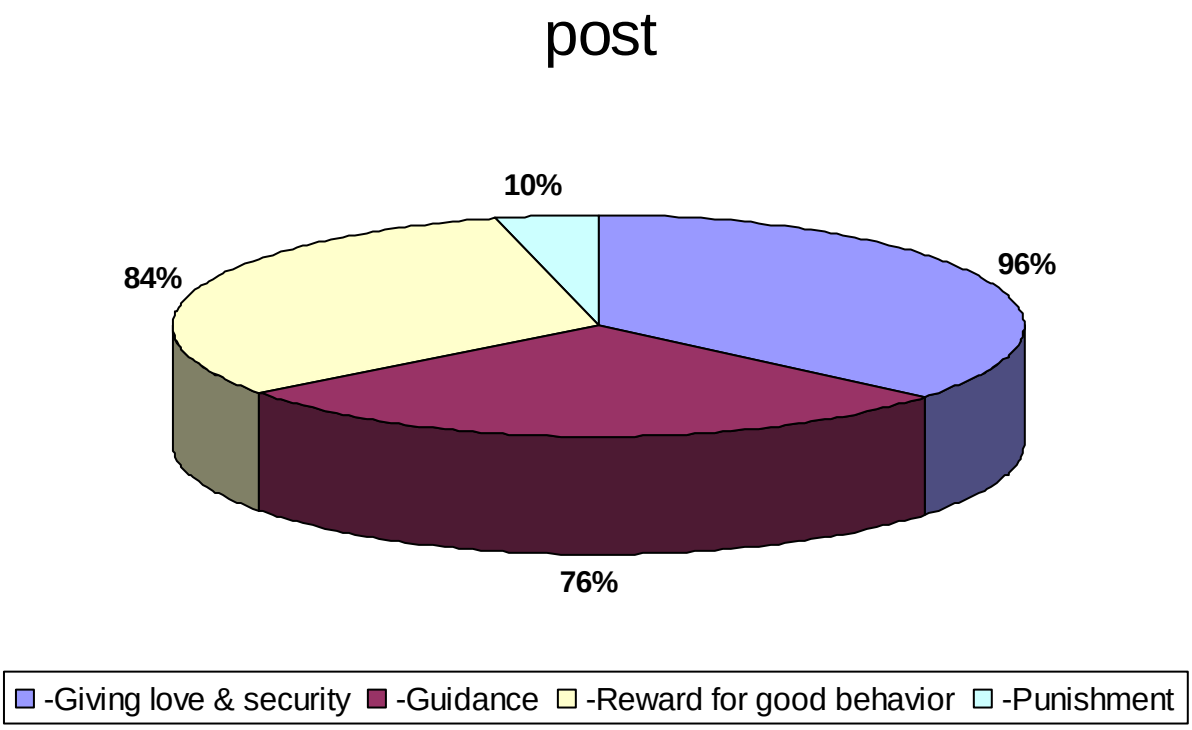
Accurate answer / Behavioral Management	N. of caregivers = 50				Z	P
	Pre		Post			
	No	%	No	%		
-Giving love & security	28	56.0	48	96.0	2.43	<0.01
-Guidance	10	20.0	38	76.0	4.93	<0.001
-Reward for good behavior	9	18.0	42	84.0	6.11	<0.001
-Neglection	21	42.0	10	20.0	2.06	<0.05
-Punishment	42	84.0	5	10.0	8.35	<0.001
-Sharing in play group	14	28.0	48	96.0	5.45	<0.001

** No. is not exclusive.

Regarding the management of the behavioral problems, it was found that reward and guidance stated by caregivers in a minor percent (20%) and (18%) before the program compared to 76% and 84% after the program. While 42% of caregivers stated that punishment as a way of management for the behavioral problems before the program compared to 10% after the program. On the other hand about 96% of caregivers gave love and security and sharing in play group after the program. This table also clarified that there was a statistically significant differences after the program.

Fig (9): Percentage distribution of caregivers' management of behavioral problems before and after the program





III-Three part : practices of caregivers before and after program implementation.

Table (10): Mean practice scores of caregivers about measuring vital signs before and after the application of the program (n = 50)

Program / variables	Before $\overline{X}$ ± SD	After $\overline{X}$ ± SD	$\overline{X}$ ± SD of the difference	SE	Test of singuific	
					Paired t	P
Temperature	1.94±0.96	6.58±0.81	4.64±1.24	0.18	26.43	<0.001
Pulse	0.92±0.57	6.7±0.81	5.78±0.89	0.13	46.06	<0.001
Respiration	1.06±0.68	7.22±0.79	6.16±0.91	0.13	47.78	<0.001
Total	1.31±0.55	6.83±0.34	5.52±0.73	0.15	36.8	<0.001

Table (10) showed there was a highly significant imporvement in the level of practice of measuring vital signs after the program implementation ($P < 0.001$).

Fig (10): Mean practice scores of caregivers about measuring vital signs before and after the programrm

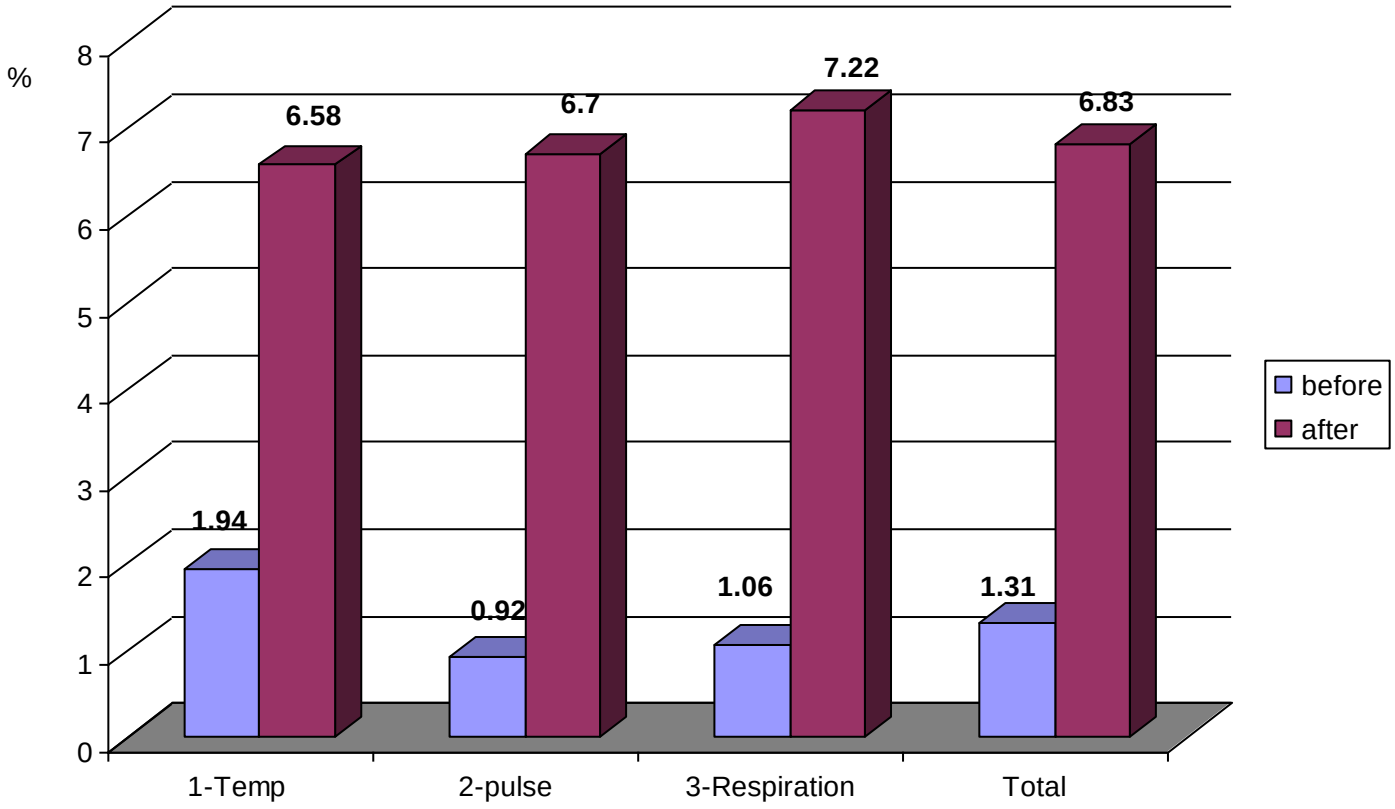
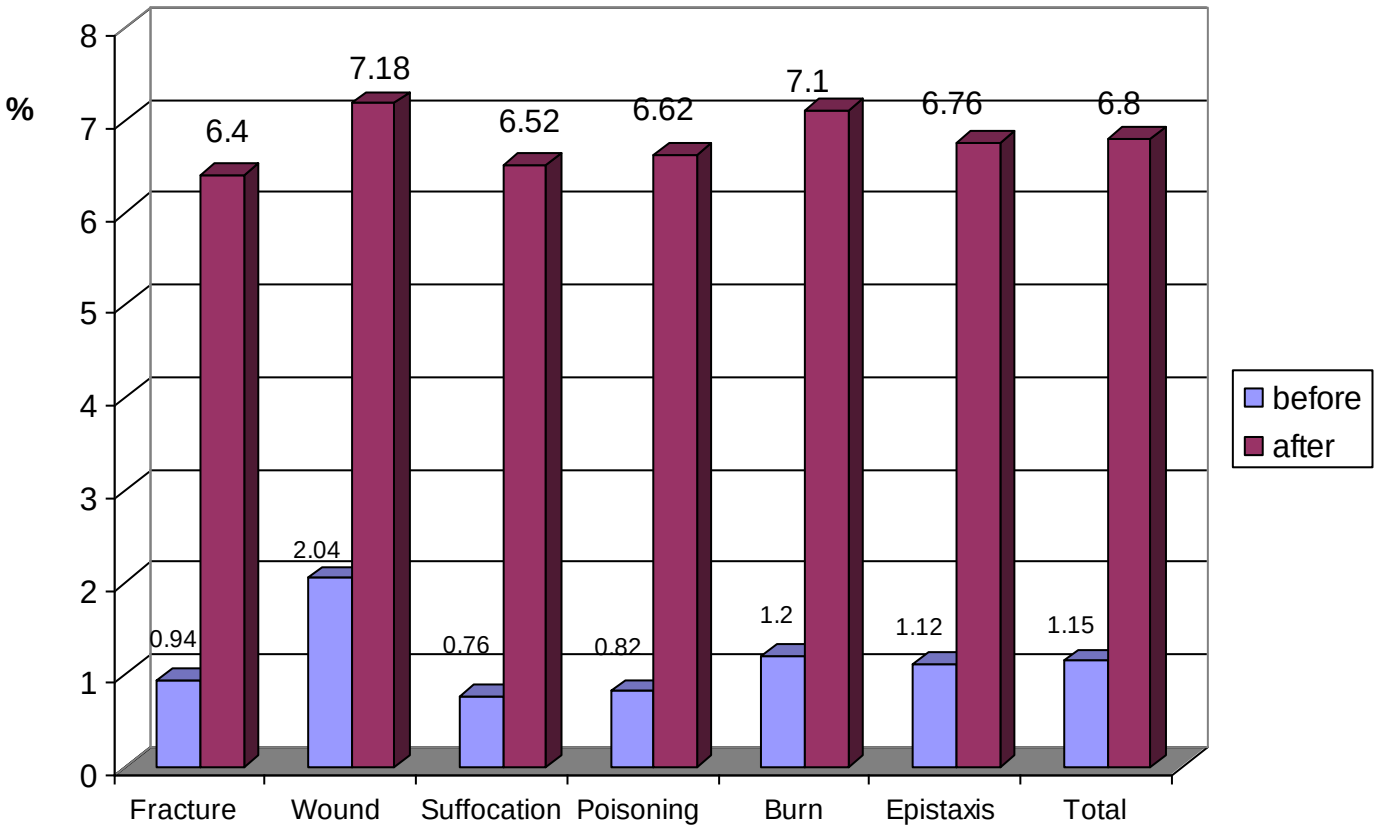


Table (11) : Mean practice scores of caregivers about first aids before and after the application of the program.

Program / Firstcid / Variables	Before $\overline{X}$ ± SD	After $\overline{X}$ ± SD	$\overline{X}$ ± SD of the difference	SE	Test of singuific	
					Paired t	P
Fracture	0.94±0.65	6.4 ±0.93	5.46±1.16	0.16	33.16	<0.001
Wound	2.04±0.95	7.18±0.96	5.14±1.29	0.19	28.09	<0.001
Suffocation	0.76±0.69	6.52±1.01	5.76 ±0.85	0.12	54.25	<0.001
Poisoning	0.82±0.63	6.62±0.97	5.8±0.89	0.11	47.07	<0.001
Burn	1.2±0.76	7.1±0.91	5.9±0.89	0.13	47.07	<0.001
Epistaxis	1.12±0.77	6.76±1.1	5.64±1.06	0.15	37.47	<0.001
Total	1.15±0.6	6.8±0.35	5.65±0.7	0.17	33.24	<0.001

Table (11) showed that there was a highly significant imporvement in the level of caregivers' practice of first aids after the program implementation ($P < 0.001$).

Fig (11): Mean practice scores of caregivers about first aids before and after the application of the program



IV: Fourth part:

Table (12): Relation between caregivers knowledge concerning the normal physical growth of preschool child in relation to their age.

Accurate answers / Normal Physical growth	Age group								*Total*	
	<20 (N=15)		20- (N=10)		25- (N=16)		35+ (N=9)		N= 50	
	No	%	No	%	No	%	No	%		
Weight										
Pre	0	0.0	1	10.0	2	12.5	2	22.2	5	10.0
Post	15	100.0	10	100.0	16	100.0	3	33.3	44	88.0
Z	-		5.29		5.84		0.45		9.05	
P			< 0.001		< 0.001		> 0.05		< 0.001	
Length										
Pre	0	0.0	0	0.0	1	6.3	3	33.3	4	8.0
Post	10	66.6	10	100.0	16	100.0	4	44.4	40	80.0
Z	5.47		-		8.71		0.38		8.47	
P	< 0.001				< 0.001		>0.05		< 0.001	
Vital signs										
Pre	0	0.0	1	10.0	1	6.3	2	22.2	4	8.0
Post	11	73.3	10	100.0	16	100.0	3	33.3	40	80.0
Z	6.42		5.29		8.71		0.045		8.47	
P	< 0.001		< 0.001		< 0.001		> 0.05		< 0.001	

Table (12) showed that there was a significant relation between caregivers' knowledge regarding physical growth of children and their age (P<0.001). It was noticed that caregivers whose age (20-25 years) the youngest, had a satificatory knowledge than the oldest whose age (35 + years).

Table (13) : Relation between caregivers knowledge concerning the child motor, emotional , social and cognitive development in relation to their age.

Satisfactory answers / Preschool Devlopment	Age group (year s)								*Total*	
	<20 (N=15)		20- (N=10)		25- (N=16)		35+ (N=9)		N= 50	
	No	%	No	%	No	%	No	%		
Motor develop.										
Pre	2	13.3	2	20	1	6.3	2	22.2	7	14.0
Post	15	100.0	8	80	13	81.3	6	66.6	42	84.0
Z	5.44		2.37		5.36		1.60		7.07	
P	< 0.001		< 0.01		< 0.001		> 0.05		< 0.001	
Emotional										
Pre	1	6.7	0	0.0	1	6.3	2	22.2	4	8.0
Post	15	100.0	8	80.0	15	93.8	6	66.6	4.4	88.0
Z	8.15		2.37		7.21		1.60		10	
P	< 0.001		< 0.01		< 0.001		> 0.05		< 0.001	
Social Develop.										
Pre	1	6.7	2	20.0	1	6.3	4	44.4	8	16.0
Post	14	93.0	10	100.0	14	87.5	6	66.6	44	88.0
Z	6.66		3.38		6.15		0.65		7.05	
P	< 0.001		< 0.001		< 0.001		> 0.05		< 0.001	
Cognitive D.										
Pre	1	6.7	1	10.0	1	6.3	1	11.1	4	8.0
Post	15	100.0	8	80.0	15		2	22.2	40	80.0
Z	8.15		3.46		7.21		0.59		8.47	
P	< 0.001		< 0.001		< 0.001		> 0.05		< 0.001	

Table (13) showed a significant relation between the caregivers' age and their knowledge regarding development of preschool children before and after the program, it was noticed that caregivres whose age (20 – 25 years) had a satisfactory knowledge than the oldest whose age (35 + years).

Table (14): Relation between caregivers knowledge regarding the health promotion of preschool children in relation to their age.

Satisfactory answers / Child care	Age group (year s)								*Total*	
	<20 (N=15)		20- (N=10)		25- (N=16)		35+ (N=9)		N= 50	
	No	%	No	%	No	%	No	%		
Hygienic care										
Pre	4	26.6	2	20.0	5	31.3	2	22.2	13	26.0
Post	15	100.0	9	90.0	14	87.5	6	66.6	47	94.0
Z	3.33		2.83		2.41		1.60		5.6	
P	<0.01		<0.01		<0.01		> 0.05		< 0.001	
Toilet training										
Pre	0	0.0	2	20.0	2	12.5	1	11.1	5	10.0
Post	15	100.0	9	90.0	14	87.5	4	44.4	42	84.0
Z	-		2.83		2.41		1.50		8.35	
P			<0.01		<0.01		> 0.05		<0.001	
Sleep										
Pre	1	6.7	2	20.0	2	12.5	2	22.2	7	14.0
Post	14	93.3	9	90.0	15	93.8	6	66.6	44	88.0
Z	4.75		2.83		5.1		1.60		7.61	
P	<0.001		<0.05		<0.001		>0.05		<0.001	
Nutrition										
Pre	2	13.3	2	20.0	2	12.5	1	11.1	7	14.0
Post	15	100.0	10	100.0	16	100.0	4	44.4	45	90.0
Z	5.44		3.38		5.84		1.50		7.9	
P	<0.001		<0.01		<0.001		> 0.05		< 0.001	
Play										
Pre	1	6.7	3	30.0	2	12.5	1	11.1	7	14.0
Post	14	93.3	10	100.0	16	100.0	4	44.4	44	88.0
Z	6.71		2.46		5.84		1.50		7.61	
P	<0.001		<0.01		<0.001		>0.05		<0.001	
Safety measures										
Pre	0	0.0	1	10.0	2	12.5	2	22.2	5	10.0
Post	15	100.0	10	100.0	16	100.0	5	55.5	46	92.0
Z	-		5.29		5.84		1.22		9.84	
P			<0.001		<0.001		>0.05		<0.001	
Immunization										
Pre	1	6.7	3	30.0	2	12.5	1	11.1	7	14.0
Post	14	93.3	10	100.0	16	100.0	4	44.4	44	88.0
Z	6.71		2.46		5.84		1.50		7.61	
P	<0.001		<0.01		<0.001		> 0.05		<0.001	

Table (14) showed a significant relation between the caregivers' age and their knowledge regarding health promotion of preschool children before and after the program, it was noticed that caregivres whose age (20 – 25 years) had a satisfactory knowledge than the oldest whose age (35 + years).

Table (15): Relation between caregivers' knowledge regarding physical growth of preschool children in relation to their educational level.

Educational level / Satisfactory knowledge	Mid N = 31		High N =19		Total N = 50	
	No	**%**	**No**	**%**	**No**	**%**
Weight						
Pre	5	16.1	3	15.8	5	10.0
Post	25	80.6	19	100.0	44	88.0
Z	4.84		5.48		9.05	
P	< 0.001		< 0.001		<0.001	
Length						
Pre	3	9.6	1	5.2	4	8.0
Post	23	74.1	17	89.4	40	80.0
Z	5.54		7.54		8.47	
P	< 0.001		< 0.001		<0.001	
Teeth No.						
Pre	2	6.5	5	26.3	7	14.0
Post	27	87.2	18	94.7	45	90.0
Z	8.41		3.46		7.9	
P	<0.001		<0.001		<0.001	
Vital signs						
Pre	1	3.2	3	15.8	4	8.0
Post	23	74.1	17	89.5	40	80.0
Z	7.59		4.5		8.47	
P	< 0.001		<0.001		<0.001	

Table (15) Revealed that there was a non significant relation between caregivers' knowledge regarding physical growth of preschooler and their level of education. While the table represented a highly statistical significant difference after the program (P < 0.001).

Fig (12): caregivers knowledge regarding normal growth of preschool children in relation to their educational level

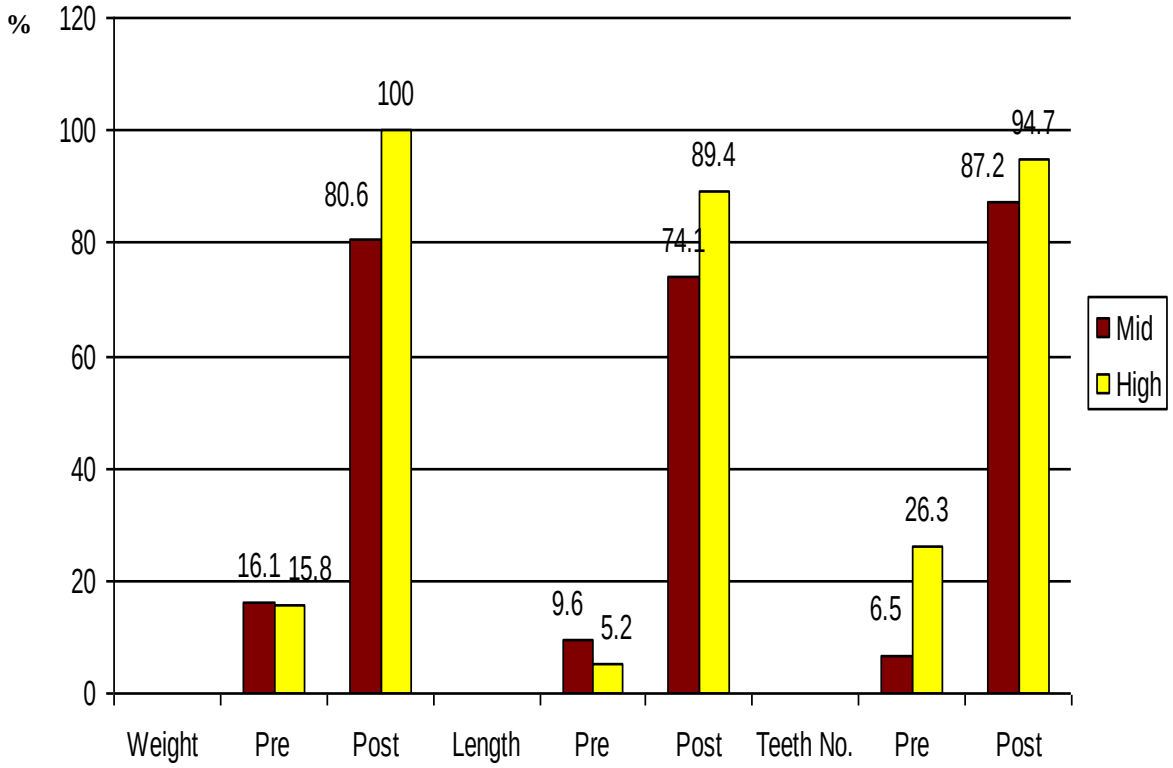
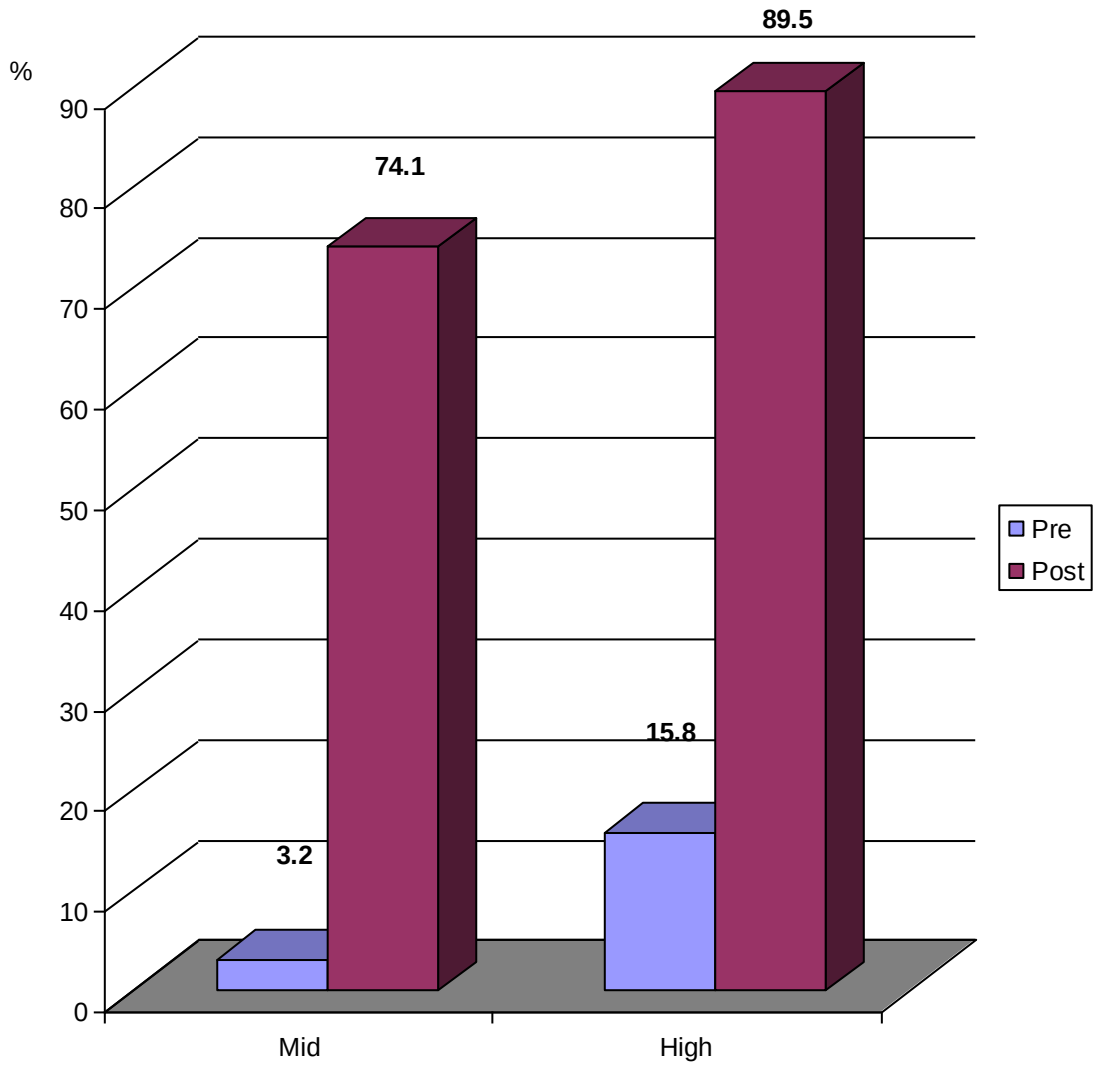


Fig (13): caregivers knowledge regarding vital signs and educational level



Table(16): Relation between caregivers knowledge regarding normal development of preschool children in relation to their educational level.

Educational level / Satisfactory knowledge	Middle N = 31		High education N =19		Total N=50	
	No	***%***	***No***	***%***	***No***	***%***
Motor deveolepment						
Pre	2	6.4	5	26.3	7	14.0
Post	23	74.1	19	100.0	42	84.0
Z	6.4		3.79		7.07	
P	< 0.001		< 0.001		< 0.001	
Emotional Development						
Pre	1	3.2	3	15.8	4	8.0
Post	25	80.6	19	100.0	44	88.0
Z	8.82		5.48		10	
P	< 0.001		< 0.001		< 0.001	
Social Development						
Pre	3	9.6	5	26.3	8	16.0
Post	25	80.6	19	100.0	44	88.0
Z	6.27		3.79		7.05	
P	< 0.001		< 0.001		< 0.001	
Cognitive Development						
Pre	1	3.2	3	15.8	4	8.0
Post	21	67.7	19	100.0	40	80.0
Z	6.64		5.48		8.47	
P	< 0.001		< 0.001		< 0.001	

Table (16) Revealed that there was a non significant relation between caregivers' knowledge regarding development of preschooler and their level of education. While the table represented a highly statistical significant difference after the program (P < 0.001). where the highly educated caregivers' had the more perecent.

Table(17): Relation between caregivers knowledge regarding health promotion of preschool children in relation to their educational level.

Educational level / Satisfactory knowledge	Middle N = 31		High education N =19		Total N=50	
	No	*%*	*No*	*%*	*No*	*%*
Hygienic care						
Pre	8	25.8	5	26.3	13	26.0
Post	28	90.2	19	100.0	47	94.0
Z	4.15		3.79		5.6	
P	< 0.001		< 0.001		< 0.001	
Toilet training						
Pre	3	9.6	2	10.5	5	10.0
Post	23	74.1	19	100.0	42	84.0
Z	5.54		7.08		8.35	
P	< 0.001		< 0.001		< 0.001	
Sleep						
Pre	4	12.9	3	15.8	7	14.0
Post	25	80.6	19	100.0	44	88.0
Z	5.46		5.48		7.61	
P	< 0.001		< 0.001		< 0.001	
Nutrition						
Pre	5	16.1	2	10.5	7	14.0
Post	26	83.7	19	100.0	45	90.0
Z	5.12		7.08		7.9	
P	< 0.001		< 0.001		< 0.001	
Play	4	12.9	3	15.8	7	14.0
Pre	25	80.6	19	100.0	44	88.0
Post						
Z	5.46		5.48		7.61	
P	< 0.001		< 0.001		< 0.001	
Safety measures						
Pre	3	9.6	2	10.5	5	10.0
Post	25	80.6	19	100.0	46	92.0
Z	6.27		7.08		9.84	
P	< 0.001		< 0.001		< 0.001	
Immunization						
Pre	4	12.9	3	15.8	7	14.0
Post	25	80.6	19	100.0	44	88.0
Z	5.46		5.48		7.61	
P	< 0.001		< 0.001		< 0.001	

Table (17) showed that there was an non significant relation between the caregivers knowledge regarding health promotion of preschooler and their level of endcation while there as a highly statisical difference after the program (P 0.001).

Fig (14): Caregivers knowledge regarding development of preschool children and their educational leve

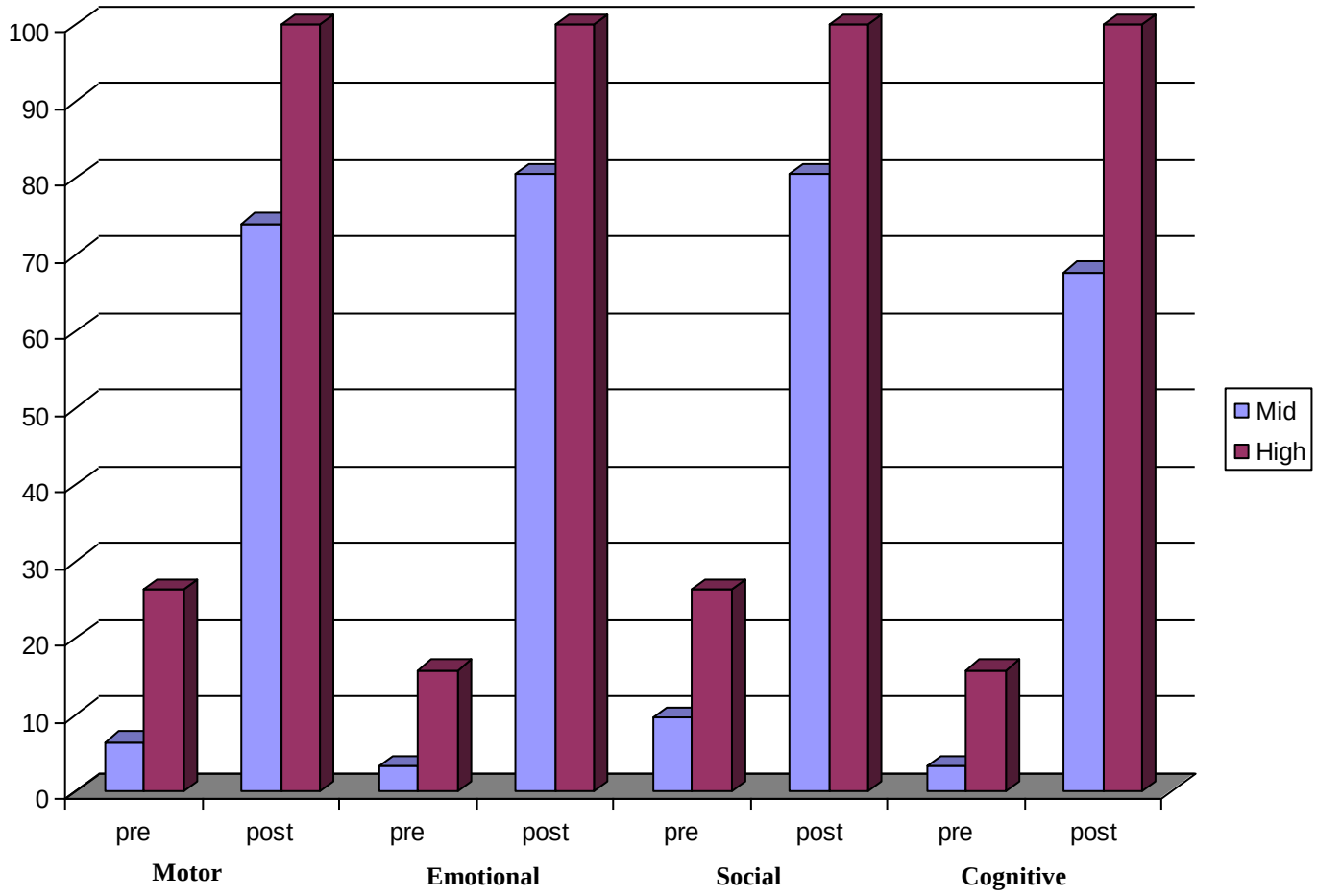


Table (18): Relation between caregivers knowledge regarding the normal physical growth of preschool children in relation to their marital status.

Satisfactory Knowledge / Items	Marital status								Total	
	Single (N=21)		Married (N=18)		Widowed (N=7)		Divorced (N=4)		N= 50	
	No	%	No	%	No	%	No	%		
Child weight :										
Pre	2	9.5	1	5.5	1	14.3	1	25.0	5	10.0
Post	17	81.0	17	94.4	6	85.7	4	100.0	44	88.0
Z	5.21		8.26		0.27		0.81		9.05	
P	<0.001		< 0.001		>0.005		>0.05		<0.001	
Length :										
Pre	0	0	1	5.5	1	14.3	2	50.0	4	8.0
Post	17	81.0	16	88.9	4	75.0	3	75.0	40	80.0
Z	9.46		5.33		0.52		0.46		8.47	
P	<0.001		<0.001		> 0.05		> 0.05		<0.001	
Teeth No:										
Pre	1	4.8	3	16.6	1	14.3	2	50.0	7	14.0
Post	20	95.2	18	100.0	4	75.0	3	75.0	45	90.0
Z	9.69		5.16		0.52		0.46		7.9	
P	<0.001		<0.001		> 0.05		> 0.05		<0.001	
Vital signs:										
Pre	0	0.0	1	5.5	1	14.3	2	50.0	4	8.0
Post	17	81.0	16	76.2	4	75.0	3	75.0	40	80.0
Z	9.46		5.33		0.52		0.46		8.47	
P	<0.001		< 0.001		> 0.05		> 0.05		<0.001	

Table (18) clarified that there was a highly significant relation between caregivers knowledge regarding normal physical growth of preshool children and their marital status after program implementation (P <0.001). where the widowed and divorced caregivers had a non satiafactory knowledge (P> 0.05).

Table (19): Relation between caregivers knowledge regarding normal development of preschool children in relation to their marital status.

Satisfactory Knowledge / Items	*Marital status*								*Total*	
	Single (N=21)		**Married (N=18)**		**Widowed (N=7)**		**Divorced (N=4)**		**N= 50**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
Motor deveolep.										
Pre	3	14.2	3	16.6	1	14.2	0	0.0	7	14.0
Post	16	76.1	18	100.0	5	71.4	1	25.0	42	84.0
Z	3.93		5.16		2.8		1.16		7.7	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Emotional										
Pre	1	4.7	2	11.1	0	0.0	1	25.0	4	8.0
Post	21	100.0	18	100.0	3	42.7	2	50.0	44	88.0
Z	11.72		6.66		2.28		1.16		10.0	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Social Develop.										
Pre	3	14.2	4	22.2	1	14.2	0	0.0	8	16.0
Post	20	95.2	18	100.0	5	71.4	1	25.0	44	88.0
Z	5.61		4.2		2.8		1.16		7.05	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Cognitive D.										
Pre	2	9.5	1	5.5	1	14.2	0	0.0	4	8.0
Post	19	90.4	18	100.0	2	28.5	1	25.0	40	80.0
Z	6.32		9.96		0.59		1.16		8.47	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	

Table (19) showed that there was a significant relation between caregivers knowledge regarding development of preschooler and their marital status after the program. Where the divorced ones had non satisfactory knowledge ($P > 0.05$).

Table (20): Relation between caregivers knowledge regarding health promotion of preschool children in relation to their marital status.

Satisfactory Knowledge / Items	*Marital status*								*Total*	
	Single (N=21)		**Married (N=18)**		**Widowed (N=7)**		**Divorced (N=4)**		**N= 50**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
Hygienic care										
Pre	6	28.5	4	22.2	2	28.5	1	25.0	13	26.0
Post	21	100.0	18	100.0	6	85.8	2	50.0	47	94.0
Z	3.73		4.2		1.68		0.6		5.6	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Toilet training										
Pre	2	9.5	2	11.1	0	0.0	1	25.0	5	10.0
Post	19	90.0	18	100.0	3	42.9	2	50.0	42	84.0
Z	1.78		6.66		2.29		0.6		8.35	
P	< 0.05		< 0.001		< 0.05		> 0.05		< 0.001	
Sleep										
Pre	2	9.5	3	16.6	1	14.2	1	25.0	7	14.0
Post	20	95.2	18	100.0	4	57.1	2	50.0	44	88.0
Z	7.3		5.16		1.56		0.6		7.61	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Nutrition										
Pre	2	9.5	3	16.6	1	14.2	1	25.0	7	14.0
Post	21	100.0	18	100.0	4	57.1	2	50.0	45	90.0
Z	7.89		5.16		1.56		0.6		7.9	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Play										
Pre	3	14.2	2	11.1	1	14.2	1	25.0	7	14.0
Post	21	100.0	18	100.0	3	42.9	2	50.0	44	88.0
Z	6.17		6.66		1.09		0.6		7.61	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	
Safety measures										
Pre	1	4.75	2	11.1	1	14.2	1	25.0	5	10.0
Post	21	100.0	18	100.0	5	71.3	2	50.0	46	92.0
Z	11.66		6.66		2.08		0.6		9.84	
P	< 0.001		< 0.001		< 0.05		> 0.05		< 0.001	
Immunization										
Pre	2	9.5	3	16.6	1	14.2	1	25.0	7	14.0
Post	19	90.4	18	100.0	4	57.1	2	50.0	44	88.0
Z	1.78		5.16		1.56		0.6		7.61	
P	< 0.01		< 0.001		< 0.05		> 0.05		< 0.001	

Table (20) showed that there was a significant relation between caregivers knowledge regarding health promotion of preschooler and their marital status after the program, where the divorced ones had non satisfactory knowledge ($P > 0.05$).

Table (21): Relation between caregivers knowledge regarding normal growth of preschool children in relation to their years of experiences after program implementation.

Satisfactory Knowledge / Items	Years of Experiences								Total	
	<3 (N=32)		3- (N=9)		7- (N=5)		11+ (N=4)		N= 50	
	No	%	No	%	No	%	No	%		
Weight										
Pre	0	0.0	1	11.1	2	40.0	2	50.0	5	10.0
Post	28	87.5	9	100.0	4	80.0	3	75.0	44	88.0
Z	14.97		4.71		1.04		0.46		9.05	
P	< 0.001		< 0.001		> 0.5		>0.05		<0.001	
Length										
Pre	0	0.0	1	11.1	2	40.0	1	25.0	4	8.0
Post	26	81.3	7	77.8	4	80.0	3	75.0	40	80.0
Z	11.8		3.01		1.64		1.16		8.47	
P	< 0.001		< 0.01		> 0.5		>0.05		<0.001	
Teeth No.										
Pre	4	12.5	1	11.1	1	20.0	1	25.0	7	14.0
Post	30	93.8	9	100.0	3	60.0	3	75.0	45	90.0
Z	7.25		4.71		1.12		1.16		7.9	
P	< 0.001		<0.001		> 0.05		> 0.05		<0.001	
Vital signs										
Pre	0	0.0	1	11.1	2	40.0	1	25.0	4	8.0
Post	26	81.3	7	77.8	4	80.0	3	75.0	40	8.47
Z	11.8		3.01		1.64		1.16		8.47	
P	< 0.001		<0.001		> 0.05		> 0.05		<0.001	

Table (21) Illustrated that there was a significant relation between caregivers knowledege regarding normal grawth of preschool children and their years of experiences after program implementation.Where caregivers of (7 -11 years) had a non satisfactory knowledge (P> 0.05).

Table (22): Relation between caregivers knowledge regarding normal development of preschool children in relation to their years of experiences.

Satisfactory Knowledge / Items	*Years of Experiences*								*Total*	
	<3 (N=32)		**3- (N=9)**		**7- (N=5)**		**11+ (N=4)**		**N= 50**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
Motor deveolep.										
Pre	2	6.3	1	11.1	2	40.0	2	50.0	7	14.0
Post	27	84.4	9	100.0	3	60.0	3	75.0	42	84.0
Z	8.11		4.71		0.46		0.46		7.7	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	
Emotional										
Pre	0	0.0	1	11.1	2	40.0	1	25.0	4	8.0
Post	29	90.6	9	100.0	3	60.0	3	75.0	44	88.0
Z	17.56		4.71		0.46		1.16		10	
P	< 0.001		<0.001		> 0.05		> 0.05		< 0.001	
Social Develop.										
Pre	1	3.1	3	33.3	2	40.0	2	50.0	8	16.0
Post	29	90.6	9	100.0	3	60.0	3	75.0	44	88.0
Z	11.96		2.21		0.46		0.46		7.05	
P	< 0.001		< 0.05		> 0.05		> 0.05		< 0.001	
Cognitive D.										
Pre	1	3.1	1	11.1	1	20.0	1	25.0	4	8.0
Post	25	78.1	9	100.0	3	60.0	3	75.0	40	80.0
Z	8.49		4.71		1.12		1.16		8.47	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	

Table (22) Illustrated that there was a significant relation between caregivers knowledege regarding development of preschool children and their years of experiences after program implementation.Where caregivers of (7 -11 years) had a non satisfactory knowledge (P> 0.05).

Table (23): Relation between caregivers knowledge regarding health promotion of preschool children in relation to their years of experiences.

Satisfactory Knowledge / Items	Years of Experiences								Total	
	<3 (N=32)		3- (N=9)		7- (N=5)		11+ (N=4)		N= 50	
	No	%	No	%	No	%	No	%		
Hygienic care										
Pre	7	21.9	2	22.2	2	40.0	2	50.0	13	26.0
Post	32	100.0	9	100.0	3	60.0	3	75.0	47	94.0
Z	5.7		2.97		0.46		0.46		5.6	
P	< 0.001		< 0.01		> 0.05		> 0.05		< 0.001	
Toilet training										
Pre	1	3.1	1	11.1	2	40.0	1	25.0	5	10.0
Post	29	90.6	9	100.0	3	60.0	2	50.0	42	84.0
Z	11.94		4.71		0.46		0.6		8.35	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	
Sleep										
Pre	3	9.4	1	11.1	2	40.0	1	25.0	7	14.0
Post	30	93.8	9	100.0	3	60.0	2	50.0	44	90.0
Z	8.45		4.71		0.46		0.6		7.61	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	
Nutrition										
Pre	3	9.4	1	11.1	2	40.0	1	25.0	7	14.0
Post	31	96.9	9	100.0	3	60.0	2	50.0	45	90.0
Z	9.08		4.71		0.46		0.6		7.9	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	
Play										
Pre	2	6.3	2	22.2	2	40.0	1	25.0	7	14.0
Post	30	93.8	9	100.0	3	60.0	2	50.0	44	88.0
Z	10.2		2.97		0.46		0.6		7.61	
P	< 0.001		< 0.01		> 0.05		> 0.05		< 0.001	
Safety measures										
Pre	0	0.0	2	22.2	2	40.0	1	25.0	5	10.0
Post	32	100.0	9	100.0	3	60.0	2	50.0	46	92.0
Z	-		2.97		0.46		0.6		9.84	
P			< 0.01		> 0.05		> 0.05		< 0.001	
Immunization										
Pre	3	9.4	1	11.1	2	40.0	1	25.0	7	14.0
Post	30	93.8	9	100.0	3	60.0	2	50.0	44	88.0
Z	8.45		4.71		0.46		0.6		7.61	
P	< 0.001		< 0.001		> 0.05		> 0.05		< 0.001	

Table (23) Illustrated that there was a significant relation between caregivers knowledege regarding health promotion of preschool children and their years of experiences after program implementation.Where caregivers of (7 -11 years) had a non satisfactory knowledge (P> 0.05).

Table (24): Means practice scores of caregivers about measuring vital signs of preschool children before and after the program implementation according to their socio-demographic characteristics.

vital signes / Sociodmo-Graphic Chacter.	No	Before $\overline{X}$ ± SD	After $\overline{X}$ ± SD	$\overline{X}$ ± SD of the difference	SE	Test of signific.	
						Paired t	P
1-Age group							
<20	15	1.6±0.87	6.32±0.71	4.7±1.2	0.17	27.65	<0.001
20-	10	1.45±0.61	6.59±0.89	5.14±1.4	0.14	36.71	<0.001
25-	16	1.13±0.73	6.89±0.91	5.76±0.9	0.15	38.4	<0.001
35+	9	1.05±0.53	7.52±0.81	6.47±1.1	0.13	49.77	<0.001
F P		1.49 > 0.05	1.83 > 0.05				
2-Education							
- Middle	31	1.13±0.76	6.14±0.91	5.01±1.4	0.16	31.3	<0.001
- High	19	1.49±0.32	7.52±0.51	6.03±1.2	0.14	43.07	<0.001
t. P		2.32 < 0.05	6.9 < 0.05				
3-marital status							
-Single	21	1.11±0.92	7.41±0.96	6.3±1.3	0.13	48.46	<0.001
-Married	18	1.07±0.83	6.99±1.1	5.92±1.5	0.14	42.3	<0.001
-Widowed	7	1.59±0.94	6.71±0.73	5.12±1.9	0.15	34.13	<0.001
-Divorced	4	1.47±0.75	6.21±0.82	5.74±1.8	0.18	31.89	<0.001
F P		1.98 > 0.05	1.83 > 0.05				
4-Experience							
<3	32	0.94±0.81	6.15±0.83	5.2±1.1	0.16	32.5	<0.001
3-	9	1.2±0.79	6.72±0.92	5.57±0.98	0.14	39.8	<0.001
7-	5	1.49±0.93	7.12±0.71	5.63±1.3	0.15	37.53	<0.001
11+	4	1.63±0.71	7.28±0.63	5.65±1.5	0.13	43.46	<0.001
F P		5.41 < 0.05	1.83 > 0.05				

Table (24) clarified that, there was a highly significant difference between means practice scores of caregivers about measuring vital signs of preschool children before and after the program implementation ($P < 0.001$). Accroding to caregivers' age, marital status and years of experiences there was a non significant differences ($P > 0.05$). while there was a significant differences between caregivers' level of education and the mean practice scores of measuring vital signs.

Table (25): Means practice scores of caregivers about first aids of preschool children before and after the program implementation according to their socio-demographic characteristics.

vital signes / Sociodmo gracphic charcter	No	Before $\overline{X}$ ± SD	After $\overline{X}$ ± SD	$\overline{X}$ ± SD of the difference	SE	Test of signific.	
						Paired t	P
1-Age group							
<20	15	1.38±0.45	5.9±0.93	4.52±1.3	0.15	30.13	<0.001
20-	10	1.12±0.63	6.7±0.79	5.58±0.9	0.13	42.92	<0.001
25-	16	0.98±0.49	6.9±0.83	5.92±0.71	0.14	42.29	<0.001
35+	9	0.97±0.51	7.7±0.91	6.73±0.8	0.16	42.06	<0.001
F P		1.35 > 0.05	4.49 < 0.05				
2-Education							
- Middle	31	1.23±0.71	6.4±0.83	5.17±0.8	0.13	39.77	<0.001
- High	19	1.07±0.92	7.2±0.71	6.13±0.58	0.12	51.08	<0.001
t. P		0.65 > 0.05	3.64 < 0.001				
3-Marital status							
-Single	21	1.17±0.32	7.1±0.81	5.93±0.49	0.14	42.36	<0.001
-Married	18	1.01±0.49	7.3±0.63	6.29±0.63	0.15	41.93	<0.001
-Widowed	7	1.20±0.71	6.7±0.72	5.5±0.73	0.13	42.3	<0.001
-Divorced	4	1.22±0.59	6.1±0.91	4.88±0.69	0.13	37.54	<0.001
F P		1.29 > 0.05	3.31 < 0.05				
4-Experience							
<3	32	1.23±0.91	6.19±0.9	4.96±0.91	0.16	31.0	<0.001
3-	9	1.21±0.73	6.8±0.73	5.59±0.83	0.14	39.93	<0.001
7-	5	1.13±0.63	7.01±0.51	5.88±0.71	0.13	45.23	<0.001
11+	4	1.03±0.54	7.2±0.54	5.17±0.73	0.14	36.93	<0.001
F P		1.2 > 0.05	3.15 < 0.05				

Table (25) clarified that, there was a highly significant difference between mean practice scores of caregivers about first aids of preschool children before and after the program implementation ($P<0.001$). Accroding to socio-demographic charcteristics the table showed a significant difference after the program due to the effect of the program. This table also clarified that the oldest caregivers, the highly educated one, single and married and caregivers who have more than 7-years of experiences were improved significantly after the program.