TABLE (1) A DESCRIPTIVE STUDY OF 50 CHILDREN ADMITTED TO PICU

age in years	numb. of cases	sex		residence		clinical diagnosis			
		male	female	Cairo	out	Burn > 18 %	cardio pulmonary	major operations	others
8	4	2	2	2	2	--	2	2	--
9	6	4	2	6	--	1	2	1	2
10	6	3	3	3	3	1	5	--	--
11	9	6	3	5	4	1	5	3	--
12	12	6	6	7	5	--	7	4	1
13	9	5	4	3	6	--	5	3	1
14	4	3	1	4	--	--	1	2	1
Total	50	29	21	30	20	3	27	15	5

This Table shows the different characters of PICU gp as regard age, sex, residence and clinical diagnosis of organic illness .

Table (1) shows the characters of the group admitted to PICU , the number were 50 patients , age range between (8-14y) with mean (ll.3) . 30 patients were from Cairo . they were admitted for different types of illness :

Fifeteen patients (30%) admitted for major operations as open heart operations (7) , multiple Trauma (4), removal of malignant abdominal Tumours (2) , Splenectomy and shunt operations (2)

Twenty seven patients (54%) admitted for cardio pulmonary diseases as severe heart failure (17) , severe respiratory distress (8) , pulmonary embolus (2) .

- three patients (3%) were admitted for treatment of burn the degree varied from

- (18 % up to 40%)

- five cases (10%) admitted for different causes as impending renal failure (2) , diabetic Ketoacidosis (3).

TABLE (2) ADESCRIPTIVE STUDY OF 50 CHILDREN ADMITTED TO HOSPITAL WARD AS CONTROL

age in years	numb.of cases	sex		Residence		clinical diagnosis			
		male	female	Cairo	out	Burn 3%-18%	cardio pulmonary	minor operations	others
8	6	3	3	4	2	-	4	2	-
9	5	4	1	4	1	-	2	3	-
10	9	8	1	4	5	1	2	2	4
11	6	2	4	4	2	1	1	4	-
12	6	6	-	4	2	1	2	2	1
13	9	7	2	8	1	1	3	3	2
14	9	8	1	5	4	1	2	2	4
Total	50	34	16	33	17	5	16	18	11

this table shows the different characters of control gp as regard age , sex , residence , and clinical diagnosis of organic illness .

Table (2) shows the charaters of another group admitted to hospital ward , the number were 50 patients , age range betwee.n (8 -14) with mean (11. 7). (34) were boys , (33) were from Cairo , they were admitted for different types of illness :-

- Eighteen patients (36%) were admitted for herneatomy , (4) for plastic surgry .

-Sixteen patients (32%) were admitted for cardio–pulmonary diseases , (10) for pneumonia ,

(4) for mild to moderate heart failure , (2) for acute exacerbation of bronchiacTasis•

- five patients (10%) were admitted for treatment of burn the degree varied from 3% up to18% .

- Eleven patients were admitted for different causes as (8) gastroenteritis with moderate dehydration , (1) febrile convulsions, (1) Rheumatoid arthritis and (1) systemic lupus Eryth .

TABLE (3) DEMOGRAPHIC COMPARISON OF SUBJECTS IN PICU AND CONTROL.

Characteristic	PICU		control		• P
	number	%	number	%	
• No. of patients	50		50		
• No. of boys	29	58	34	68	NS
• Residence in Cairo	30	60	33	66	NS
• Age gps in y					
8y	4	8	6	12	NS
9y	6	12	5	10	NS
10y	6	12	9	18	NS
11y	9	18	6	12	NS
12y	12	24	6	12	<0.05
13y	9	18	9	18	NS
14y	4	8	9	18	<0.05
• Clinical diagnosis					
operations	(major) 15	30	(minor) 18	36	
cardio-pulmonary	(sever) 27	54	(mild) 16	32	
Burn	(>18%) 3	6	(3%-18%)5	10	
others	(sever) 5	10	(mild) 11	22	
• Previous psychiatric disorder	--	0	--	0	

TABLE (4) STATISTICAL COMPARISON OF VARIABLES IN PICU AND CONTROL.

Variable	PICU		Control		• P
	mean	SD	mean	SD	
• Age in years	11.3	3.3	11.7	3.8	NS
• level of intelligence-	34	9.4	38	10.7	NS
	37	8.4	39	9.3	NS
	27	11	21.6	8.6	NS
• parental attendance per day, h	2.1	1.1	15.7	8.1	< 0.001
• Hospital stay during present admission , d	16.6	10.1	8.9	6.8	<0.001
• NO. of previous admissions	1.7	1.9	2.7	4.9	NS
• Sleep per day , h	7.8	1.8	6.7	1.7	NS

• P = NS no significant = >0.05

• p < 0.001 = very highly significant

Tables (3-4) show some items collected from the medical report and by history from psychiatric sheet to compare between variables .

By statistical comparison the two groups were comparable as regard age , level of intelligence, number of previous admissions and hours of sleep per day, where (P = > 0.0 5) non significant

Subjects different as regard to hospital stay , with the ICU Subjects remained longer duration with mean (16.6) ± SD (10.1) days,while control gp mean (8.9) ± SD (6.8) days (p<0.001) very highly significant .

Also as regard time of parental attendance per day in hours the control gp, their parents remain very long time with them as compared to parents of PICU where mean of control gp (15.7) ± SD (8.1) hours per day while PICU mean (2.1) ±(1.1) hours per day (p < 0.001) very highly significant .

TABLE (5) INTELLIGENCE TEST

Comparison between PICU Control

Level of intelligence	PICU		Control		• P
	N	%	N	%	
• below average < 90	5	10	6	12	NS
• average 90 - 110	33	66	31	62	NS
• above average > 110	12	24	13	26	NS

• P = (NS) non significant > 0.05

Table (5) shows results of intelligence test by Ahmed Z. Saleh (1988) done on all cases of both gps individualy and tabulated, where divided to three levels of intelligence for simplicity.

• Score below 90

Five patients from PICU (10%) six from control where P>0.05 non significant.

• Score between 90 - 110

Thirty three patients from PICU (66%) and thirty one from control (62%) where P>0.05 non significant.

• Score above 110

Twelve patients (24%) from PICU and thirteen patients (26%) control where P>0.05 non significant.

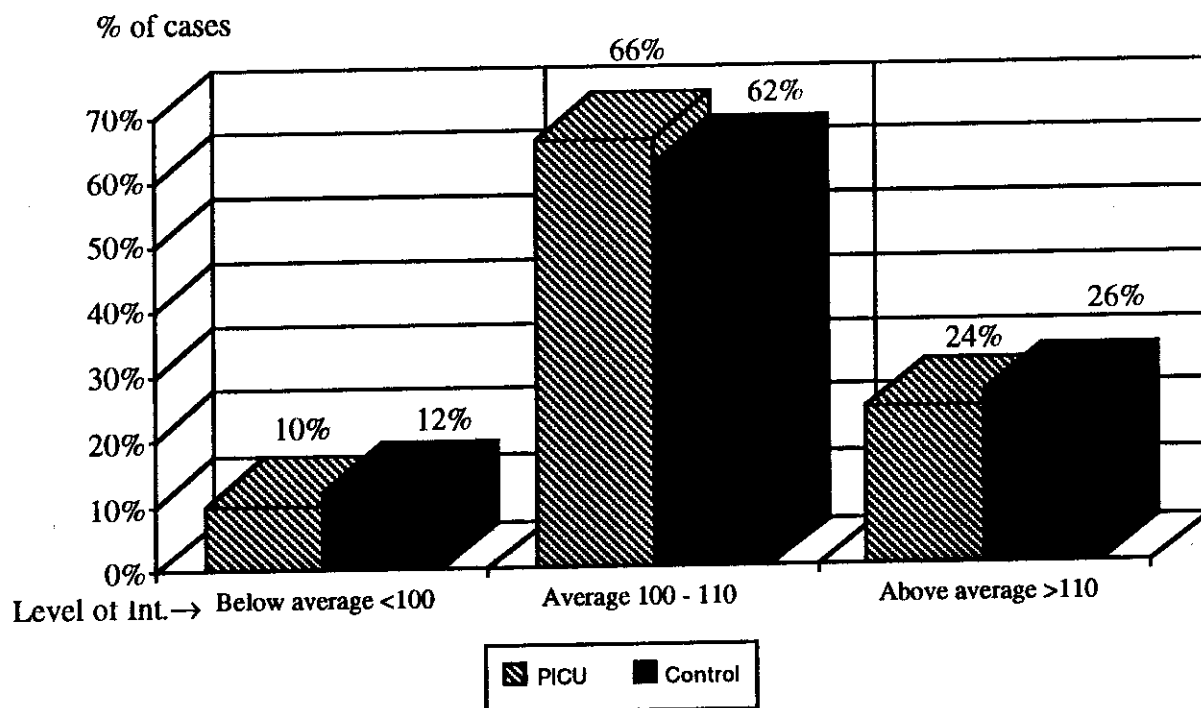## Diagramatic comparison between
PICU & Control cases for Intelligence

% of cases

	Below average <100	Average 100 - 110	Above average >110
PICU	10%	66%	24%
Control	12%	62%	26%

Level of Int.→

PICU ▨   Control ■

TABLE (6) CHILD DEPRESSION INVENTORY TEST OF PICU

Age in years	Numb of cases	level of depression			
		No 13 >	mild 13-27	moderate 28-35	severe 36-54
8	4	1	1	2	-
9	6	-	2	3	1
10	6	-	3	2	1
11	9	3	3	3	-
12	10	4	3	3	-
13	9	5	1	3	-
14	4	2	2	-	-
Total	50	15	15	16	2

Table (6) by applying child depression inventory test, to fifty patients admitted to PICU, we found that there were increase level of depression in thirty three patients (68.75 %).

The thirty three are divided into three categories :

- The first class were mildly depressed fifteen patients (31.25%).

- The second were moderately depressed sixteen patients (33.33%).

- The third were severely depressed two patients (4.16%)

TABLE (7) CHILD DEPRESSION INVENTORY TEST

COMPARISON BETWEEN PICU AND CONTROL

Level of depression	PICU		control		• P
	nu	%	nu	%	
No	15	31.25 %	39	81.25 %	
mild	15	31.25 %	6	13.04 %	
moderate	16	33.33 %	2	4.16 %	
severe	2	4.16 %	1	2.08 %	
sum of depressed children	33	68.75 %	9	18.75 %	< 0.001

• P < 0.001 = very highly significant

Table (7) by applying the same test to control cases we found that there were increase

level of depression in nine patients (18.75%) while in PICU level of depression

increased in thirty three patients (68.75%) and the difference was found to be very

highly significant (P<0.001).

By doing comparison between levels of depression of both groups of depressed

patients in PICU and control :-

We found●in PICU fifteen patients (31.25%) were mildly depressed while in control

six cases (13.04%).

● In PICU sixteen cases (33.33%) were moderately depressed while in control two cases

(4.16%).

● In PICU two cases (4.16%) were severely depressed while in control cases one patient

only (2.08%).

TABLE (8) ANXIETY SCALE "A" FOR PICU

Age in years	Number of cases	Level of anxiety			
		NO 9 >	low level 9-59	high level 60-80	severe 80 <
8		-	-	-	-
9		-	-	-	-
10		-	-	-	-
11	9	1	4	3	1
12	12	2	6	4	-
13	9	1	5	3	-
14	3	1	-	1	1
total	33	5	15	11	2

Table (8) by applying Anxiety scale to thirty three patients admitted to PICU we found that:-

There were increase level of anxiety in twenty eight patients (84.8%).

The anxious twenty eight patients were divided into three levels :-

- The first is low level of anxiety with number of patients fifteen (45.5%).

- The second is high level with number is eleven (33.3%).

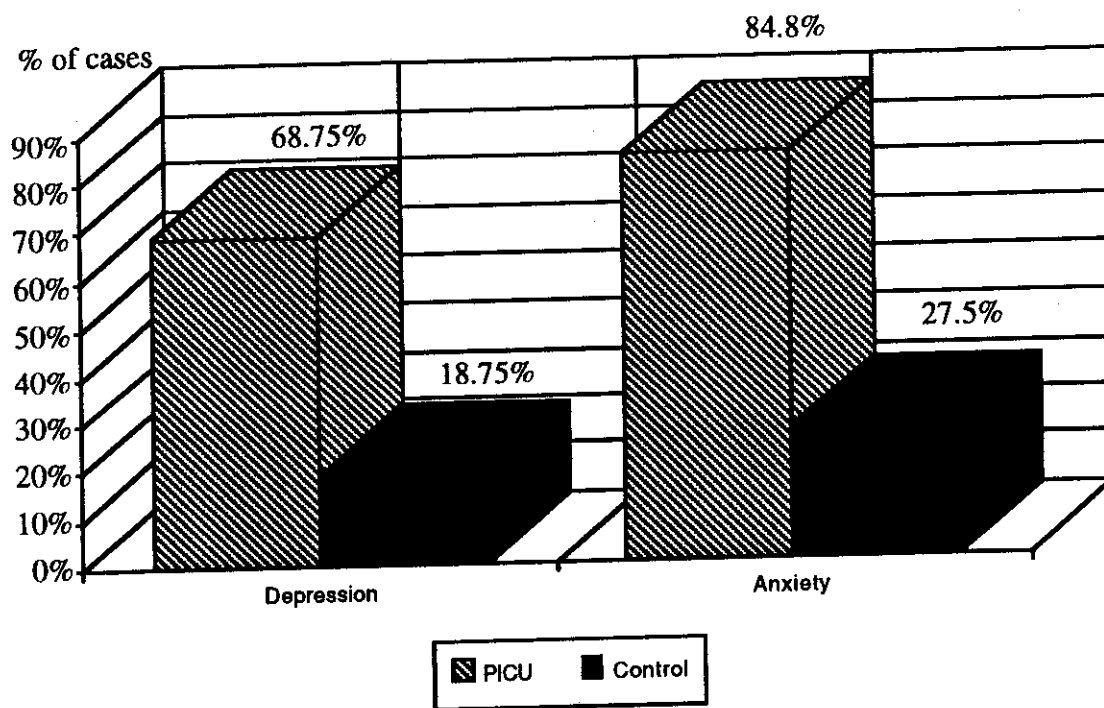- The third is severe form with number of two patients (6%).

TABLE (9) ANXIETY SCALE "A"

COMPARISON BETWEEN PICU AND CONTROL

level of Anxiety	PICU		control		• P
	number	%	number	%	
No	5	15.2 %	29	72.5 %	
low level	15	45.5 %	9	22.5 %	
high level	11	33.3 %	1	2.5 %	
severe	2	6 %	1	2.5 %	
sum of anxious children	28	84.8 %	11	27.5 %	<0.001

• p < 0.001 = very highly significant

Diagramatic Comparison Between PICU & Control
as regard Depression & Anxiety

% of cases

84.8%

68.75%

27.5%

18.75%

90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

Depression   **Anxiety**

| PICU | Control |

From the diagram there were significant difference in levels of both anxiety and depression between groups of PICU and control, also there were correlation between anxiety and depression in each group.

Table (9) by applying the same test to fourty control cases we found that there were increase level of anxiety in eleven cases (27.5%) while in PICU number of tested cases were thirty three with twenty eight anxious patients (84.8%) and the difference was found to be very highly sig (p<0.001) by doing comparison between levels of anxiety of boths groups of anxious patients in PICU and control we found in PICU fifteen cases (45.5%) had low level of anxiety, while in control nine (22.5%) only, in PICU eleven cases (33.3%) had high level of anxiety, while in control one case only (2.5%), in PICU two cases (6%) had severe from of anxiety, while in control one case only (2.5%).

TABLE (10) EYSENCK PERSONALITY QUESTIONNAIRE FOR

MOTHERS

behaviour	mothers of PICU		mothers of control		• P
	mean	SD	mean	SD	
• Psychoticism	2.14	2.06	2.24	2.24	NS
• Interoversion	10.12	5.17	13.01	2.06	<0.01
• lie	7.73	4.18	6.82	4.14	NS
• Neuroticism	12.34	5.30	15.23	4.99	<0.001
Numb of mothers	38		45		

• (P < 0.001)   = very highly significant

(P < 0.01)   = highly significant

(P > 0.05) NS   = not significant

Table (10) shows results of Eysenck personality questionnaire of mothers of both PICU and control, test was done on thirty eight mothers of PICU and fourty five of control .

Interoversion was found to be more prevailling among mothers of PICU group with mean (10.12) ± SD (5.17) while mothers of control group with mean (13.01) ± SD (2.6),the difference was found to be highly significant (P<0.01) .

Neuroticism also found to be more prevailling among mothers of PICU group with mean (12.34) ± SD (5.30) while mothers of control group with mean (15.23) ± SD (4.99), the difference was found to be very highly significant (P<0.001) .

On the other hand no statistically significant difference was found between both mothers of PICU and control groups as regards psychoticism and lie scale, (P > 0.05)

TABLE (11) SHAEFFER'S PARENT-CHILD ATTITUDE

QUESTIONNAIRE TOWARDS MOTHERS

Attitude	PICU		control		• P
	mean	SD	mean	SD	
1- acceptance	37.2	8.50	35.72	7.63	NS
2- indulgence in child	20.2	3.90	18.62	4.68	NS
3- possessive attitude	15.80	2.90	16.63	3.80	NS
4- rejection	27.9	7.88	29.3	8.21	NS
5- control over son	18.30	3.14	16.25	3.46	NS
6- constraining attitude	14.1	3.33	13.90	2.9	NS
7- positive involvement	34.2	5.4	35.90	5.60	NS
8- parasitic behaviour	14.56	3.90	16.39	4.30	NS
9- control through provoking guilt	14.53	2.3	13.80	1.90	NS
10- hostile control	22.5	5.3	26.75	4.5	NS
11- non conformity	13.30	2.10	14.35	2.90	NS
12- non constraining attitude	18.32	4.30	15.35	3.90	NS
13- acceptance of individuation	30.2	8.2	27.56	7.1	NS
14- permissive attitude	15.5	3.40	17.10	3.50	NS
15- implantion of anxiety	17.30	3.49	13.7	2.50	NS
16- hostile detachment	11.50	2.12	12.30	2.33	NS
17- detachment	30.7	4.99	32.18	5.20	NS
18- extreme independence	17.2	3.35	18.20	3.90	NS

• P (NS) non significant > 0.05

Table (11) shows the results of Shaeffer's parent-child attitude questionnaire , the test was done on thirty five children of PICU and fourty children of control group, some obstacles were found as incoopration, of the child to continue the very long questions, also absence of the father or mother si nce long time (divorced or died), another obstacle is incomplete understanding of all items of questionnaire,

The questionnaire, investigates 18 attitudes of parents towards their sons, from the child's aspect of view.

The results show no statistically significant difference between both groups as regard their point of view about feeling of attitudes of their parents toward them.

TABLE (12) SHAEFFER'S PARENT-CHILD ATTITUDE QUESTIONNAIRE TOWARDS FATHERS

Attitude	PICU		control		• P
	mean	SD	mean	SD	
1- acceptance	39.76	7.59	37.3	8.63	NS
2- indulgence in child	17.64	3.41	16.75	3.23	NS
3- possessive attitude	16.35	2.40	18.13	3.94	NS
4- rejection	29.18	7.79	30.3	8.57	NS
5- control over son	15.92	3.77	16.23	3.10	NS
6- constraining attitude	14.6	3.33	12.72	2.46	NS
7- positive involvement	40.4	6.43	34.8	5.86	NS
8- parasitic behaviour	12.1	3.1	11.92	2.2	NS
9- control through provoking guilt	13.1	2.70	14.2	4.30	NS
10- hostile control	30.7	5.2	29.5	5.83	NS
11- non conformity	18.4	3.40	17.2	3.83	NS
12- non constraining attitude	18.8	3.81	17.9	3.43	NS
13- acceptance of individuation	17.68	3.56	15.06	2.90	NS
14- permissive attitude	36.4	6.06	34.5	7.39	NS
15- implantion of anxiety	12.24	3.22	12.94	2.96	NS
16- hostile detachment	11.50	2.12	10.96	1.90	NS
17- detachment	21.60	3.20	25.18	4.02	NS
18- extreme independence	18.2	3.25	16.25	3.75	NS

• P (NS) non significant > 0.05

Table (12) shows the results of the same questionnaire about their opinion toward their fathers , also there were no statistically difference between both groups as regard their point of view about feeling of attitudes of their fathers toward them .

TABLE (13) MUTLIPLE REGRESSION ANALYSIS

Variable	Anxiety		depression	
	*r	*r²	r	r²
1- child's age	0.15	0.02	0.29 #	0.08
2- mother's age	0.20	0.04	0.18	0.03
3- mother's anxiety	0.38 #	0.14	0.32 #	0.1
3- sex	0.27 #	0.07	0.26 #	0.06
4- residence in Cairo	0.18	0.03	0.12	0.017
5- intelligence level	0.17	0.02	0.14	0.019
6- parental attendance	0.39 #	0.15	0.36 #	0.12
7- Hospital stay	0.48 #	0.24	0.46 #	0.21
8- NO.of previous admis	0.26 #	0.06	0.25 #	0.06
9- sleep per day	0.16	0.02	?0.13	0.016
10- Severity of illness	0.47 #	0.22	0.42 #	0.17

r = 0.0 - 0.24 poor relation

0.25 - 0.49 fair relation

0.50 - 0.74 strong relation

0.75 - 1.0   very strong relation .

= fair relation (0.25 - 0.49)

* r^2 = r square

• r = correlation coefficient f .

Table (13) shows results of multiple regression analysis between different variables and their relation to anxiety and depression of children in PICU .

The predictor variables used in each analysis, in order of entry were age of child, mother's age , mother's anxiety , sex of child , residence in Cairo , level of intelligence, parental attendance in hours per day, hospital stay per days, no. of previous admissions, sleep in hours per day, severity of illness .

The results were as follow : young age female child had more depression also mother's anxiety had relation with level of depression of their child however we can't conclude if mother's anxiety lead to child's depression or the reverse .

Parental attendance had a fair relation with child depression as with decrease attendance time there were increase in level of depression .

Another relation were period of hospital stay as children of prolonged hospital stay suffer more from depression .

The last relation were the severity of organic illness which affect level of depression , as the severely ill child had high level of depression .

There were some variables had no effect on the psychiatric state of the child as mother's age, residence in Cairo, intelligence level, sleep hours per day .

The same variables were tested to find a relation with level of anxiety of children

The age of child had no relation to level of anxiety while female child whose her mother's anxiety were increased had more level of anxiety .

Also decrease parental attendance with prolonged hospital stay of children related to high score levels of anxiety .

As depression there were no relation between level of anxiety and mother's age , residence of child , level of intelligence , sleep hours per day .