



## RESULTS

Results of current study are demonstrated in the following tables and figures.

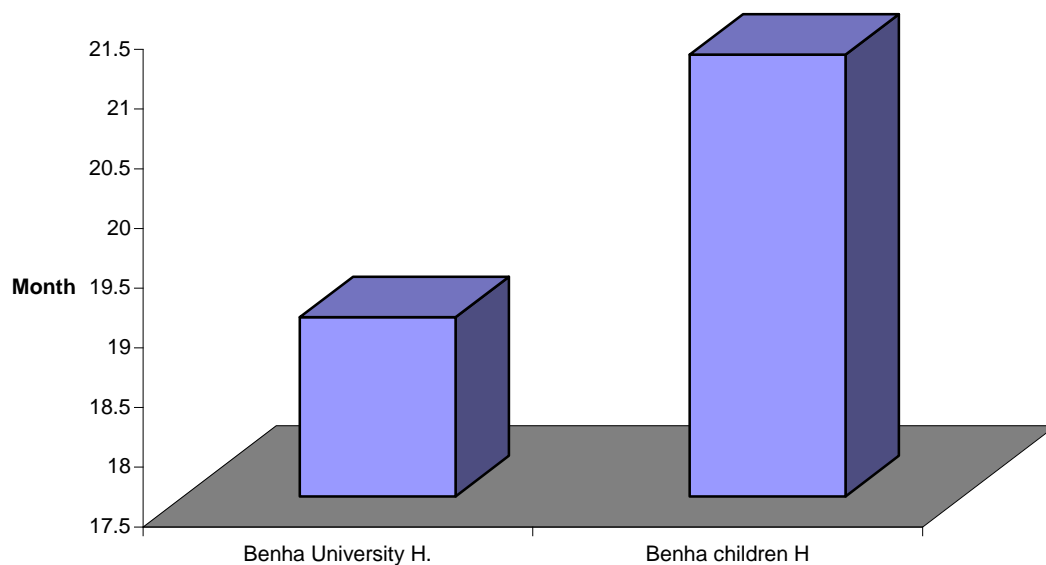
**Table (1) :** Means ( $\bar{X}$ )  $\pm$  Standard Deviations (SD) of ages (month) among the study groups:

Age(months)	$\bar{X} \pm SD$	Wilcoxon test	p
<b>PICU</b>			
-Benha University Hospital PICU (n= 100)	19.0 $\pm$ 35.3	19.7	< 0.001*
-Benha Children Hospital PICU (n= 100)	21.2 $\pm$ 31.8		

(n = number)

This table shows high significant difference between both study groups regarding the mean age.

**Figure (1) Means of ages among the study groups**



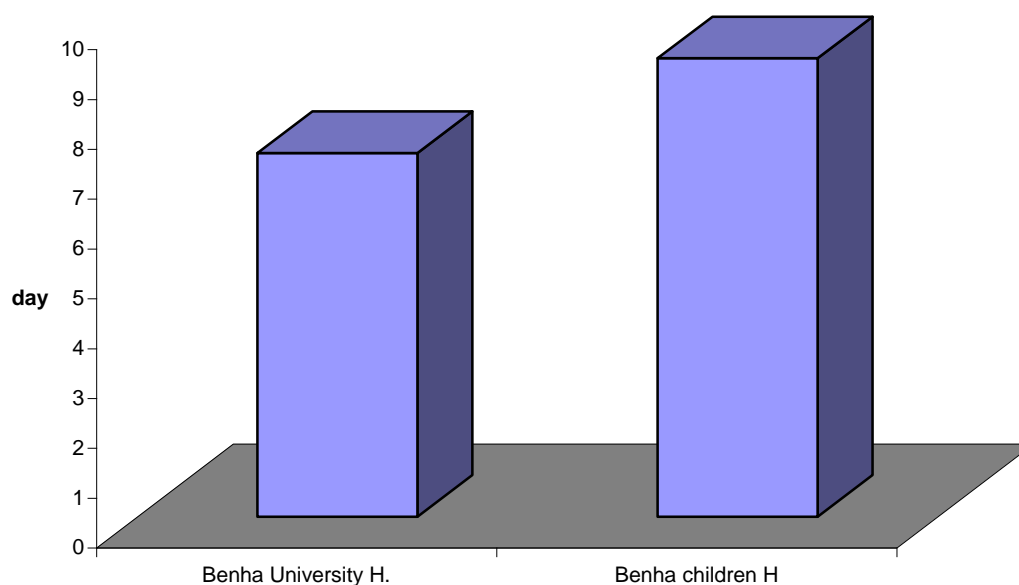


**Table (2) :** Means ( $\bar{X}$ )  $\pm$  Standard Deviations (SD) of length of stay (Days) among the study groups:

<b>PICU</b>	<b>Days</b>	<b><math>\bar{X} \pm SD</math></b>	<b>Wilcoxon test</b>	<b>p</b>
-Benha University Hospital PICU (n= 100)		7.3 $\pm$ 5.8	22.75	<0.001*
-Benha Children Hospital PICU (n= 100)		9.2 $\pm$ 7.5		

This table shows high significant difference between both study groups regarding the mean length of stay.

**Figure (2) Means of length of stay (days) among the study groups**



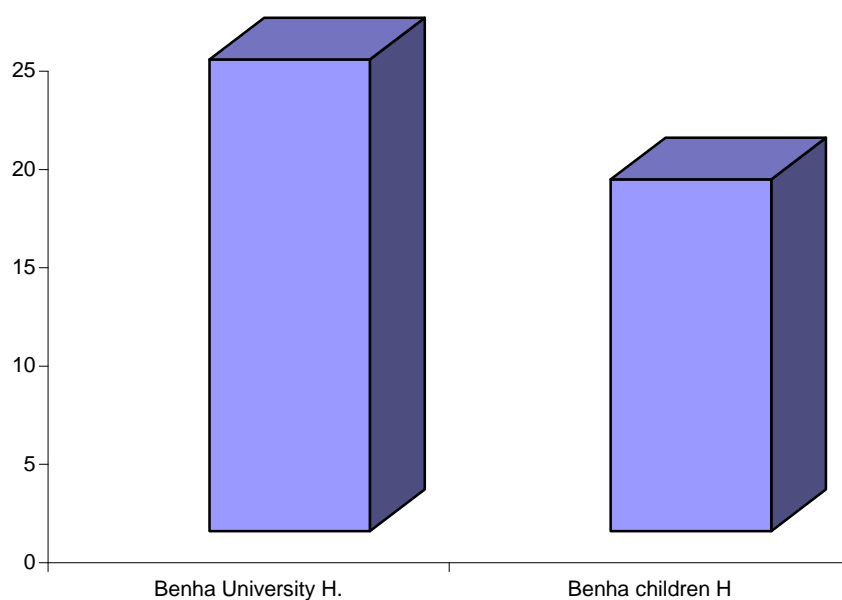


**Table (3) :** Means ( $\bar{X}$ )  $\pm$  Standard Deviations (SD) of PELOD score among the study groups:

<b>PICU</b>	<b>Score</b>	<b><math>\bar{X} \pm SD</math></b>	<b>Wilcoxon test</b>	<b>p</b>
-Benha University Hospital PICU (n= 100)		24.0 $\pm$ 33.9	19.05	< 0.001*
-Benha Children Hospital PICU (n= 100)		17.9 $\pm$ 12.1		

This table shows high significant difference regarding mean PELOD score between both study groups.

**Figure (3) Means of PELOD score among the study groups**



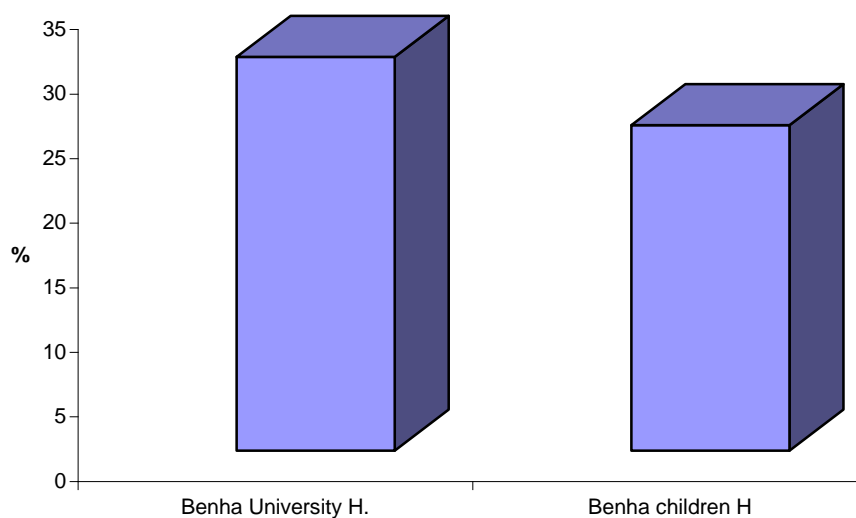


**Table (4):** Means ( $\bar{X}$ )  $\pm$  Standard Deviations (SD) of percentages of probability of deaths among the study groups:

<b>Probability of death</b>	<b><math>\bar{X} \pm SD</math></b>	<b>Wilcoxon test</b>	<b>p</b>
<b>PICU</b>			
-Benha University Hospital PICU (n= 100)	30.5 $\pm$ 35.3	16.87	< 0.001*
-Benha Children Hospital PICU (n= 100)	25.2 $\pm$ 35.1		

This table shows high significant difference regarding mean percentage of probability of death between both study groups.

**Figure (4) Means of percentages of probability of deaths among the study groups**





**Table (5):** Mean percentage of probability of death and mean PELOD score among the study groups.

Item	( $\bar{X} \pm SD$ ) PELOD score	( $\bar{X} \pm SD$ ) Probability of death
PICU		
Benha University Hospital PICU	24.0±33.9	30.5±35.3
Benha Children Hospital PICU	17.9±12.1	25.2±35.1
Wilcoxon test	19.05	16.87
P	< 0.001*	< 0.001*

This table shows higher percentage of probability of death for the higher PELOD score in Benha University Hospital PICU with high significant difference between both study groups.

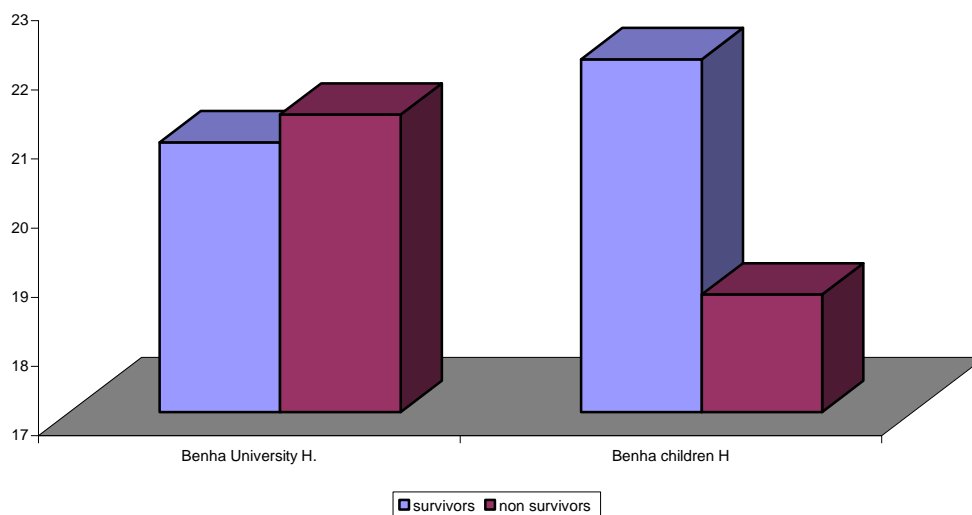


**Table (6):** Ages distribution (months) among the study groups, according to their outcome.

Age Out come	Benha University Hospital PICU		Benha Children Hospital PICU		Wilcox on test	p
	n	$\bar{X} \pm SD$	n	$\bar{X} \pm SD$		
Survivors	77	20.9 $\pm$ 37.4	74	22.1 $\pm$ 32.7	15.89	< 0.001*
Non survivors	23	21.3 $\pm$ 27.2	26	18.7 $\pm$ 29.4	3.52	< 0.001*

This table shows high significant difference between the mean ages of the studied groups and their outcome.

**Figure (5) Means of ages among the study groups according to outcome and PICU**





**Table (7):** Distribution of cases according to sex and outcome in Benha University Hospital PICU.

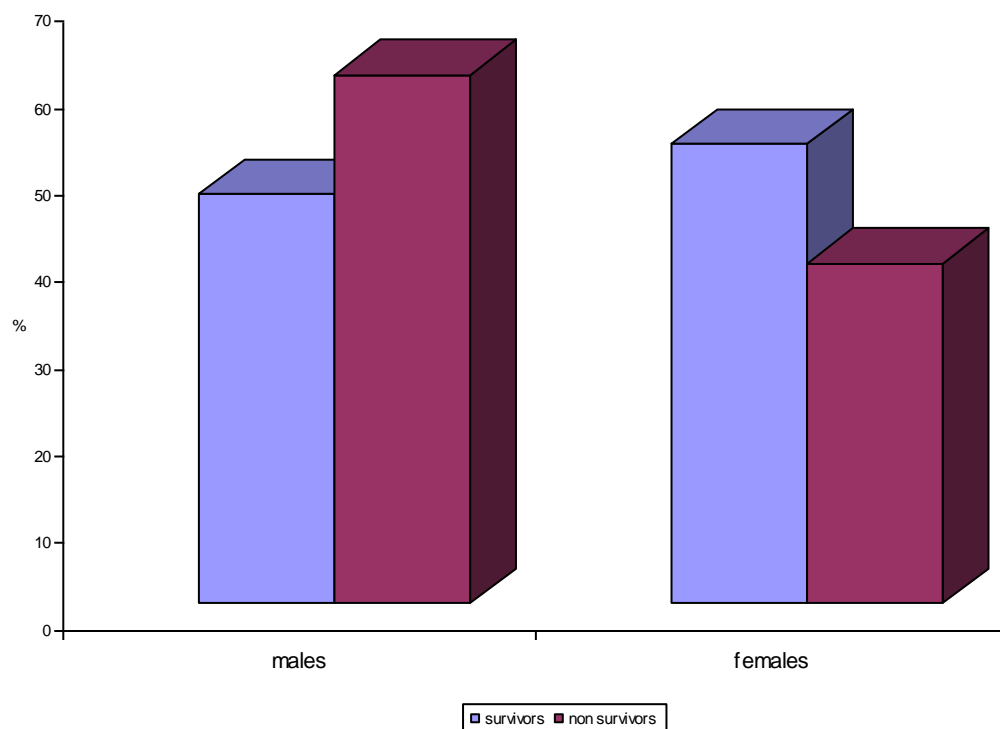
Outcome \ Sex	Males		Females		Total	
	n	%	n	%	n	%
Survivors	36	47.1	41	52.9	77	100.0
Non survivors	14	60.9	9	39.1	23	100.0
Total	50.0	50.0	50.0	50.0	100.0	100.0

$$X^2 = 0.47$$

$$p > 0.05$$

This table shows no significant difference regarding sex according to outcome in Benha university Hospital

Figure (6) Distribution of cases according to sex and outcome in Benha University H. PICU





**Table (8):**Distribution of cases according to sex and outcome in Benha Children Hospital PICU.

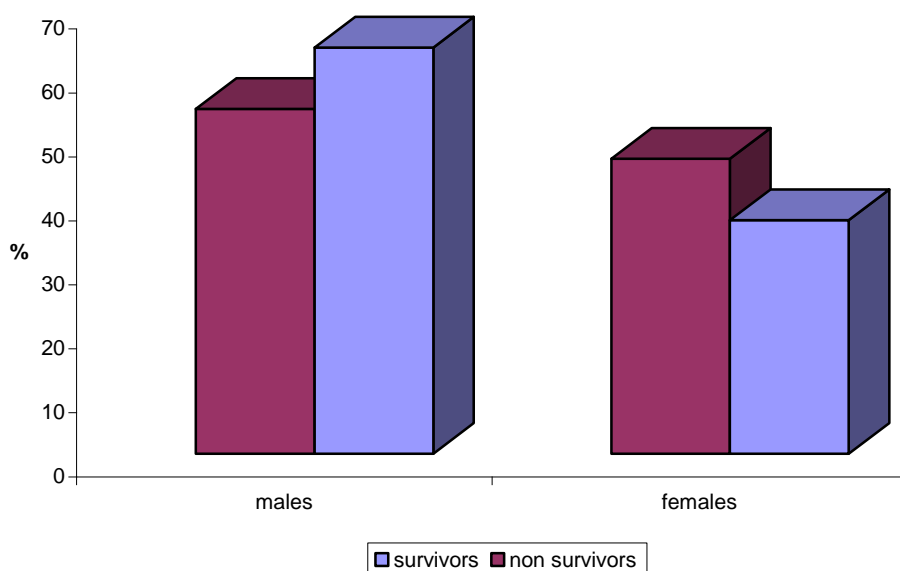
Outcome \ Sex	Males		Females		Total	
	n	%	n	%	n	%
Survivors	47	63.5	27	36.5	74	100.0
Non survivors	14	53.9	12	46.1	26	100.0
Total	61	61.0	39	39.0	100	100.0

$$X^2 = 0.76$$

$$p > 0.05$$

This table shows no significant difference regarding sex according to outcome in Benha Children Hospital.

**Figure (7) Distribution of cases according to sex and outcome in Benha Children H. PICU**





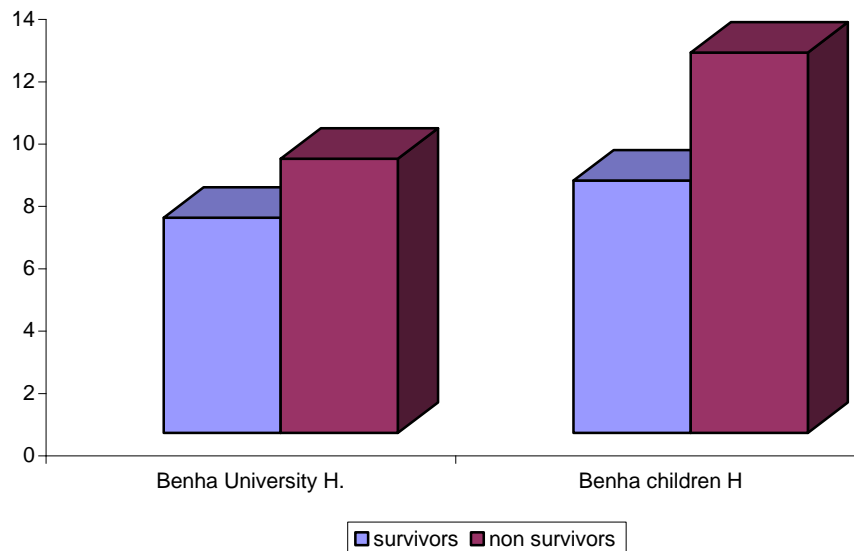


**Table (9):** Means of length of stay (days) among the study groups according to outcome and PICU.

Length of stay Out come	Benha University Hospital PICU		Benha Children Hospital PICU		Wilcoxon test	p
	n	$\bar{X} \pm SD$	n	$\bar{X} \pm SD$		
Survivors	77	$6.9 \pm 6.6$	74	$8.1 \pm 5.3$	19.9	$< 0.001^*$
Non survivors	23	$8.8 \pm 6.1$	26	$12.2 \pm 11.3$	6.85	$< 0.001^*$

This table shows high significant difference between both study groups regarding the mean length of stay according to outcome .

**Figure (8) Means of length of stay (days) among the study groups according to outcome and PICU**



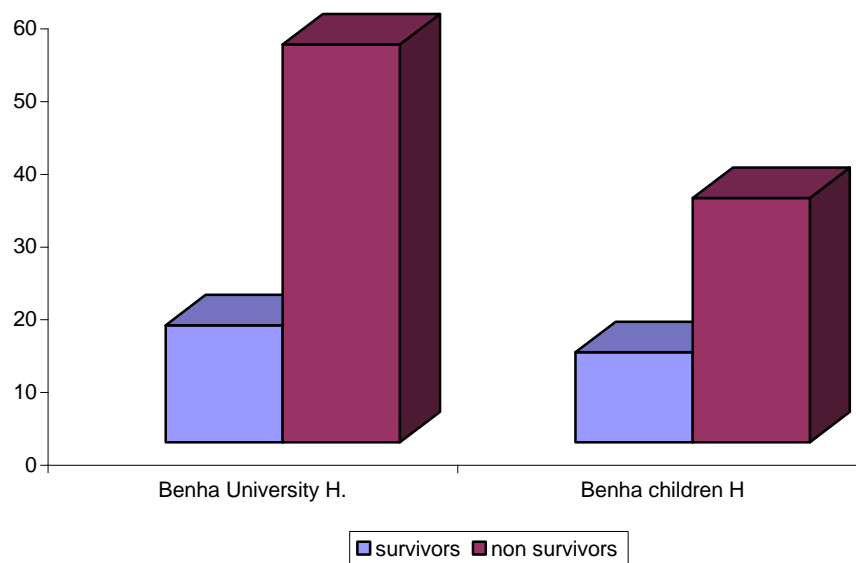


**Table (10):** Means of PELOD score among the study groups according to outcome and PICU.

PELOD score Out come	Benha University Hospital PICU		Benha Children Hospital PICU		Wilcoxon test	p
	n	$\bar{X} \pm SD$	n	$\bar{X} \pm SD$		
Survivors	77	16.1 ± 6.6	74	12.4 ± 7.3	16.8	< 0.001*
Non survivors	23	54.7 ± 6.9	26	33.6 ± 8.7	7.13	< 0.001*

This table shows high significant difference between both study groups regarding the mean PELOD score and their outcome among survivors and non survivors.

**Figure (9) Means of PELOD score among the study groups according to outcome and PICU**



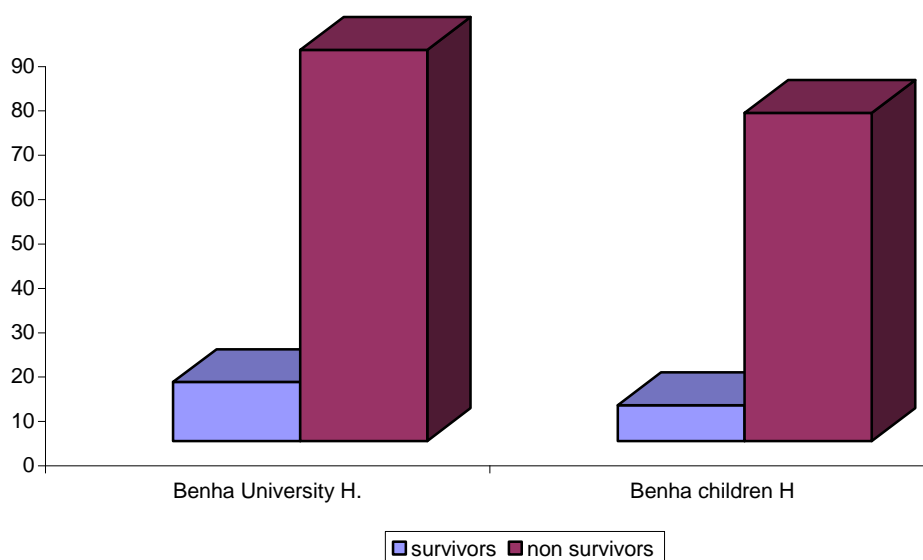


**Table (11 ):** Means of percentages of probability of death among the study groups according to outcome and PICU.

probability of death Out come	Benha University Hospital PICU		Benha Children Hospital PICU		Wilcoxon test	p
	n	$\bar{X} \pm SD$	n	$\bar{X} \pm SD$		
Survivors	77	$13.3 \pm 13.2$	74	$8.1 \pm 14$	17.28	$< 0.001^*$
Non survivors	23	$88.2 \pm 21.5$	26	$74 \pm 30.6$	27.33	$> 0.001^*$

This table shows high significant difference between both study groups regarding the mean probability of death according to outcome among survivors and non survivors.

**Figure (10) Means of percentages of probability of death among the study groups according to outcome and PICU**





**Table (12):** Distribution of predicted and observed non survivors in Benha University Hospital PICU according to probability of death

Probability of death	Predicted non survivors		Observed non survivors	
	n	%	n	%
< 1 %	0.15	0.7	0	0.0
1 % - < 15 %	0.13	1.3	0	0.0
15 % - < 30 %	7.42	19.1	2	5.1
> 30 %	23.4	80.7	21	72.4

**Table (13):** Distribution of predicted and observed non survivors in Benha Children Hospital PICU according to probability of death

Probability of death	Predicted non survivors		Observed non survivors	
	n	%	n	%
< 1 %	0.17	0.6	0	0.0
1 % - < 15 %	0.22	1.3	0	0.0
15 % - < 30 %	5.1	18.3	5	17.9
> 30 %	20.6	89.6	21	91.3

Table 12, 13 show direct proportion between percentages of non survivors and propability of death in both PICUS.



figure (11): Distribution of predicted and observed non survivors according to probability of death in Benha University H.

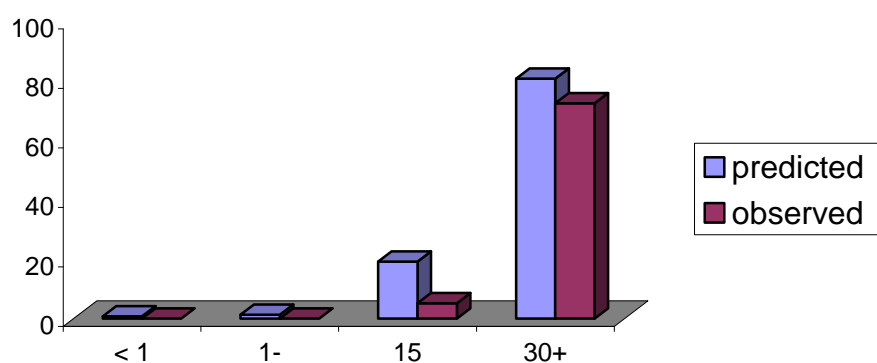
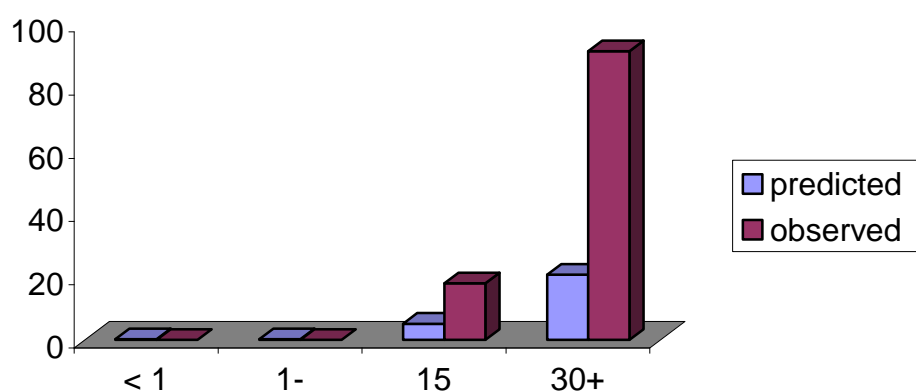


figure (12): Distribution of predicted and observed non survivors according to probability of death in Benha Children H.





**Table (14):** Distribution of predicted and observed survivors in Benha University Hospital PICU according to probability of death

Probability of death	Predicted survivors		Observed survivors	
	n	%	n	%
< 1 %	21.85	99.3	22	100.0
1 % - < 15 %	9.87	98.7	10	100.0
15 % - < 30 %	31.58	80.9	37	94.9
> 30 %	5.6	19.3	8	27.6

**Table (15):** Distribution of predicted and observed survivors in Benha Children Hospital PICU according to probability of death

Probability of death	Predicted survivors		Observed survivors	
	n	%	n	%
< 1 %	30.83	99.4	31	100.0
1 % - < 15 %	17.78	98.7	18	94.1
15 % - < 30 %	22.9	81.7	23	82.1
> 30 %	2.4	10.4	2	9.1

Table 14, 15 show inverse proportion between percentages of survivors and propability of death in both PICUS.



figure (13): Distribution of predicted and observed survivors according to probability of death in Benha University H.

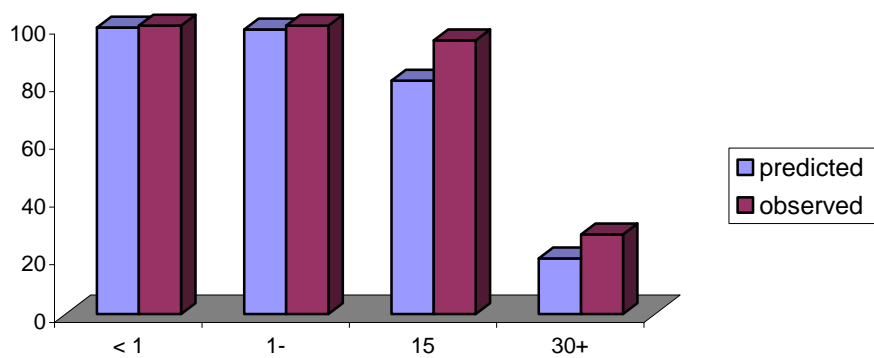
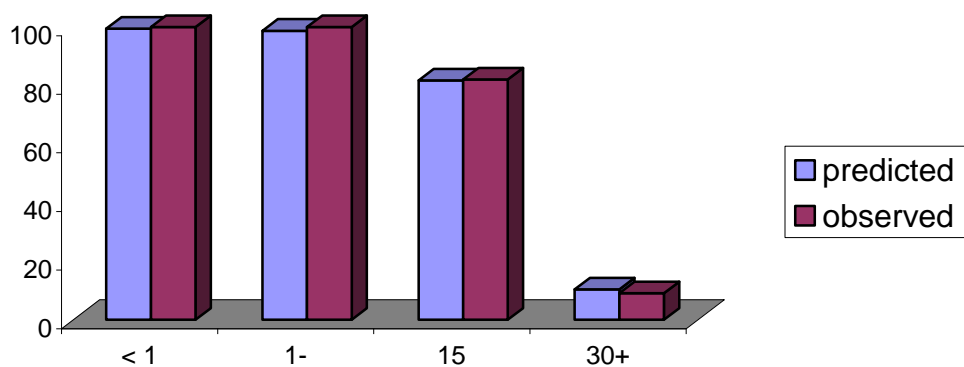


figure (14): Distribution of predicted and observed survivors according to probability of death in Benha Children H.



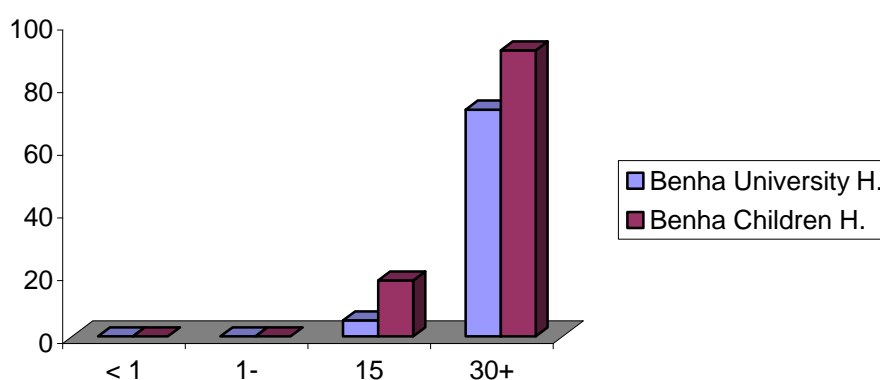


**Table (16):** Distribution of observed non survivors according to probability of death in both PICUS

Probability of death \ PICU	Benha University Hospital PICU		Benha Children Hospital PICU		Z	P
	n	Percentage of survivors	n	Percentage of survivors		
< 1 %	0	0.0	0	0.0	-	-
1 % - < 15 %	0	0.0	0	0.0	-	-
15 % - < 30 %	2	5.1	5	17.9	1.59	> 0.05
> 30 %	21	72.4	21	91.3	0.73	> 0.05

This table shows no significant difference between both study groups among non survivors according to probability of death.

**figure (15):** Distribution of observed non survivors according to probability of death





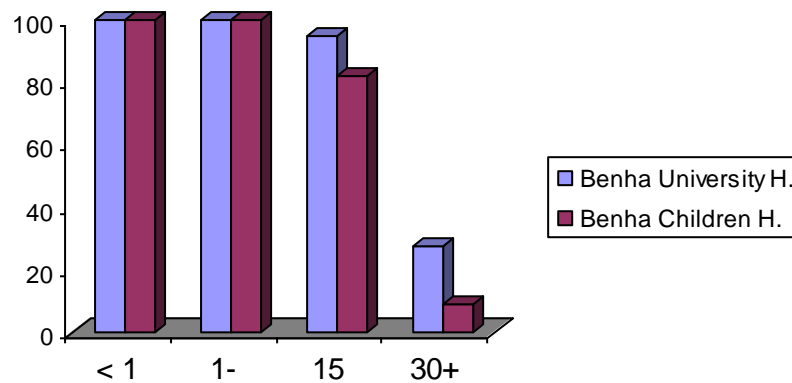


**Table (17):** Distribution of observed survivors according to probability of death in both PICUS

Probability of death	Benha University Hospital PICU		Benha Children Hospital PICU		Z	P
	n	Percentage of survivors	n	Percentage of survivors		
< 1 %	22	100.0	31	100.0	-	-
1 % - 15 %	10	100.0	18	100.0	-	-
15 % - 30 %	37	94.9	23	82.1	0.54	> 0.05
> 30 %	8	27.6	2	9.1	1.48	> 0.05

This table shows no significant difference between both study groups among survivors according to probability of death.

**figure (16):** Distribution of observed survivors according to probability of death



**Table (18):** Sensitivity and specificity of PELOD score in both PICUS

Sensitivity	83.7 %
Specificity	93.4 %
PPV	80.4 %
NPV	94.6 %

PPV = Positive Predictive value.

NPV = Negative Predictive value.

This table shows high sensitivity, specificity, PPV and NPV. Of PELOD score in both PICUS.

**Figure (17)** Sensitivity and specificity of PELOD score in both PICUS