Results

Age

Table 1 : Age distribution

Age distribution		
	Frequency	Percent
31 - 40 yrs	4	3.1
41 - 50 yrs	11	8.6
51 - 60 yrs	34	26.6
61 - 70 yrs	36	28.1
71 - 80 yrs	29	22.7
Above 80 yrs	14	10.9
Total	128	100.0

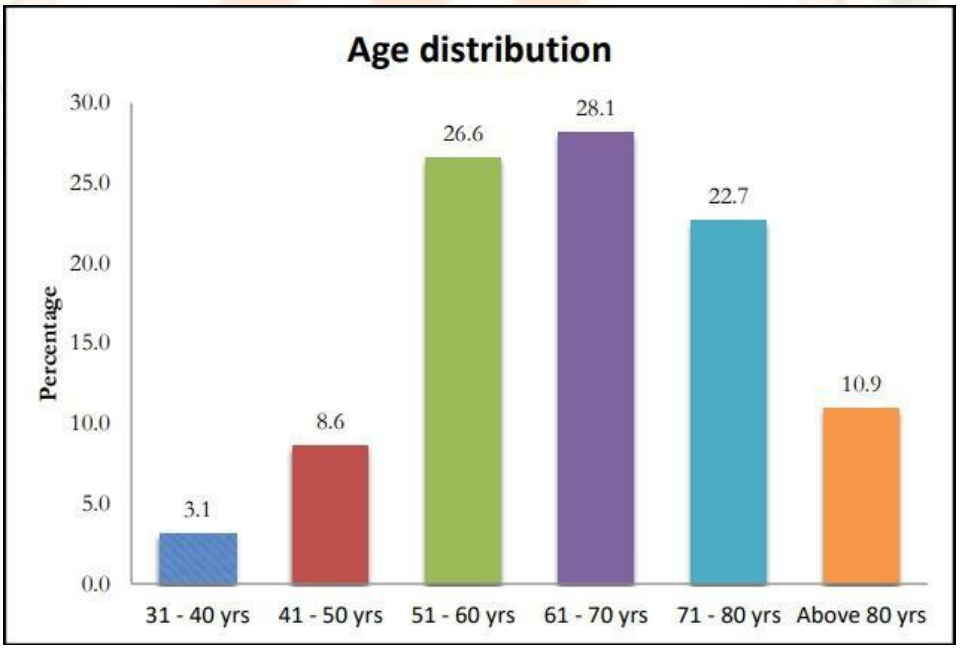

Figure 12 : Age distribution

The data represented above shows “Age distribution were 31-40 years is 3.1%, 41-50 years is 8.6%, 51-60 years is 26.6%, 61-70 years is 28.1%, 71-80 years is 22.7%, >80 years is 10.9%”

Gender

Table 2 : Gender distribution

Gender distribution		
	Frequency	Percent
Male	82	64.1
Female	46	35.9
Total	128	100.0

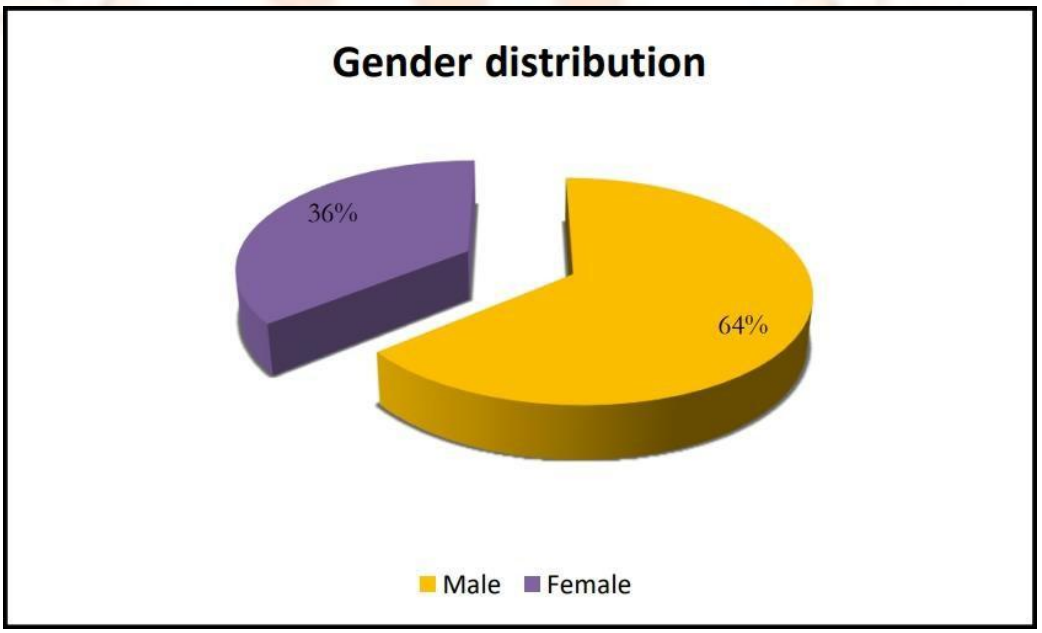

Figure 13 : Gender distribution

The data represented above reveals gender distribution: Male is 64.1%, Female is 35.9%.

Mortality rate

Table 3 : Mortality rate

Mortality rate			
		Frequency	Percent
7th day	Dead	11	8.6
	Alive	117	91.4
30th day	Dead	14	10.9
	Alive	114	89.1

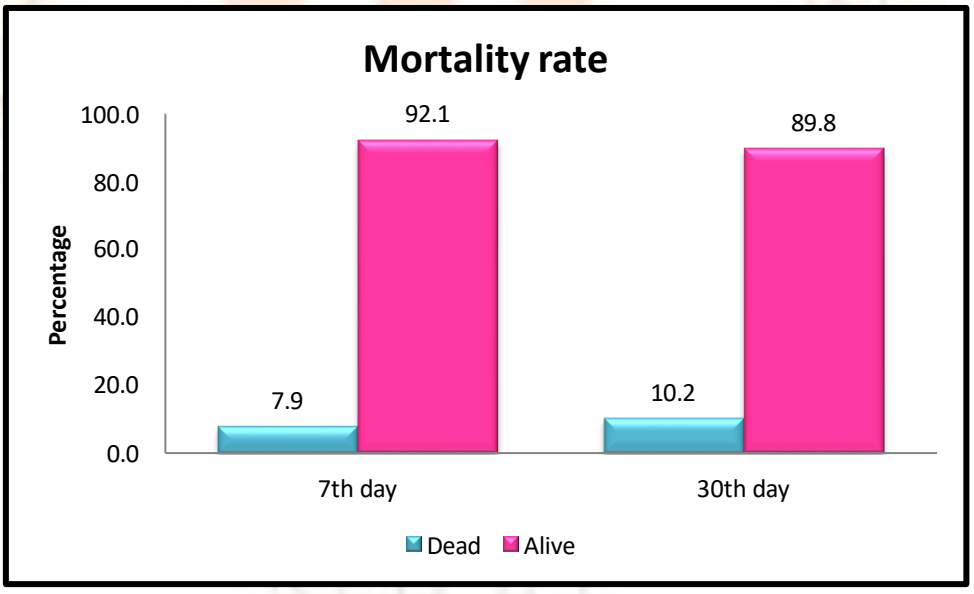

Figure 14 : Mortality rate

As per our statistical analysis mortality rates were as follows: 7th day - 8.6% and 30th day - 10.9%.

Age and mortality

Table 4 : Age and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Age	31 - 40 yrs	Count	0	4	4	3.459	0.630 #
		%	0.0%	3.5%	3.1%		
	41 - 50 yrs	Count	0	11	11		
		%	0.0%	9.6%	8.6%		
	51 - 60 yrs	Count	4	30	34		
		%	28.6%	26.3%	26.6%		
	61 - 70 yrs	Count	4	32	36		
		%	28.6%	28.1%	28.1%		
	71 - 80 yrs	Count	3	26	29		
		%	21.4%	22.8%	22.7%		
	Above 80 yrs	Count	3	11	14		
		%	21.4%	9.6%	10.9%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
# No Statistical Significance at p > 0.05 level							

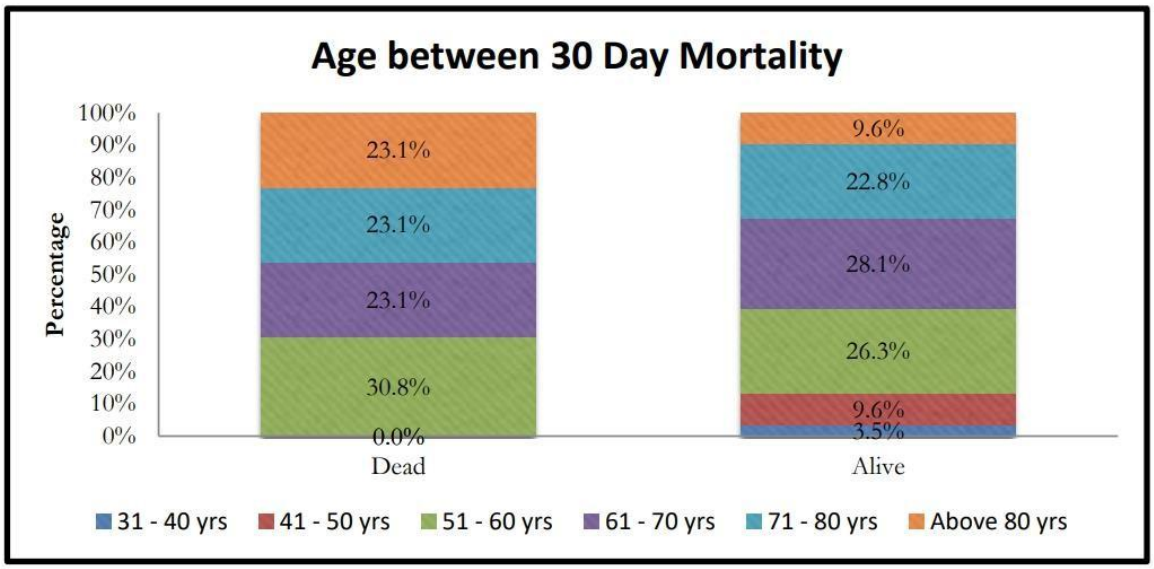

Figure 15 : Age and mortality

In our analyzed data it was found that the "association of age with 30 Day Mortality by Pearson's Chi-Square test were $\chi 2=3.459$, $p=0.630>0.05$ which shows no statistically significant association between Age and 30 Day Mortality".

Gender and mortality

Table 5 : Gender and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Gender	Male	Count	6	76	82	3.07	0.080 #
		%	42.9%	66.7%	64.1%		
	Female	Count	8	38	46		
		%	57.1%	33.3%	35.9%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
# No Statistical Significance at p > 0.05 level							

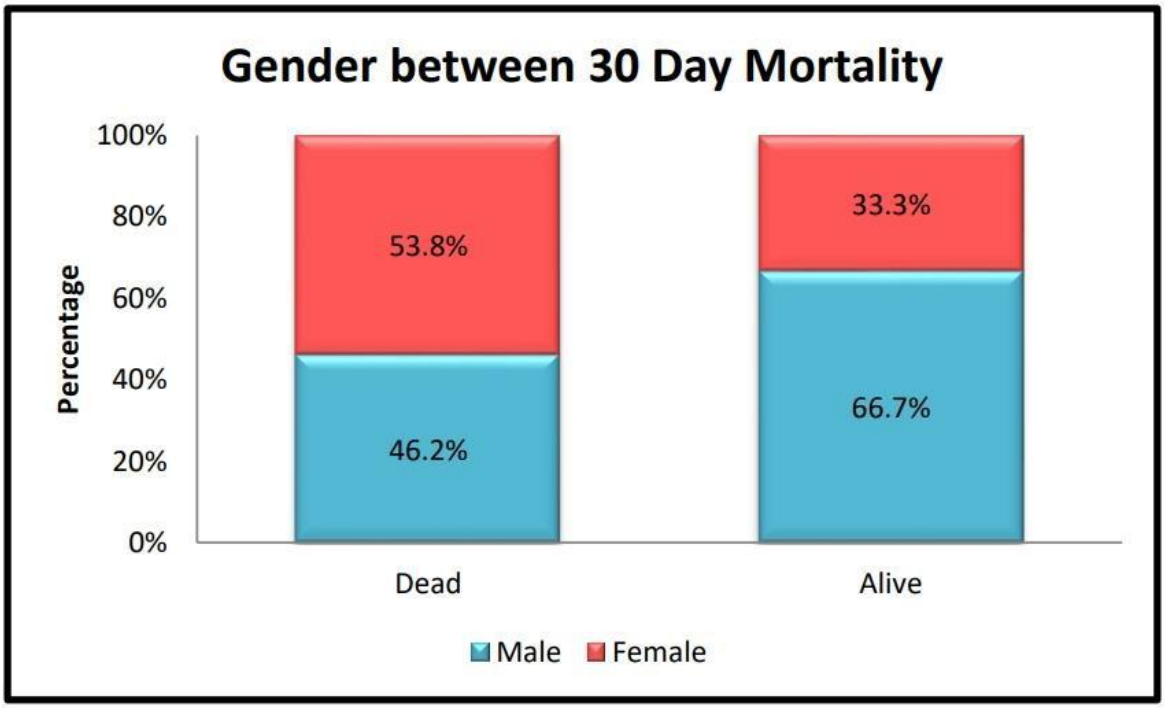

Figure 16 : Gender and Mortality

In the data represented above “comparison of Gender with 30 Day Mortality by Pearson’s Chi-Square test were χ2=3.070, p=0.080>0.05 which shows no statistical significance between Gender and 30 Day Mortality”.

Positive Troponin value and mortality

Table 6 : Positive Troponin value and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Positive Troponin Value	Yes	Count	12	74	86	2.447	0.142 #
		%	85.7%	64.9%	67.2%		
	No	Count	2	40	42		
		%	14.3%	35.1%	32.8%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
# No Statistical Significance at p > 0.05 level							

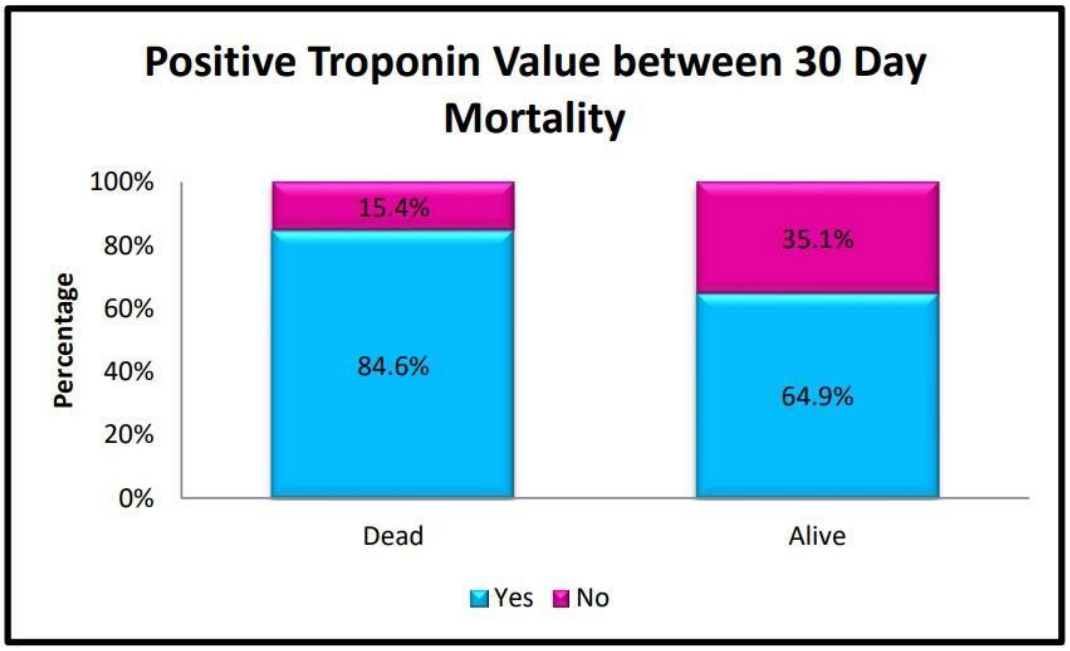

Figure 17 : Positive troponin value and mortality

The statistical analysis represented shows “comparison of Positive Troponin Value with 30 Day Mortality by Fisher’s exact test were $\chi 2=2.447$, $p=0.142>0.05$ which shows no statistically significant association between Positive Troponin Value and 30 Day Mortality”.

NYHA Class IV at admission and mortality

Table 7 : NYHA Class IV and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
NYHA Class 4 at admission	Yes	Count	10	39	49	7.31	0.009 **
		%	71.4%	34.2%	38.3%		
	No	Count	4	75	79		
		%	28.6%	65.8%	61.7%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
** Highly Statistical Significance at p < 0.01 level							

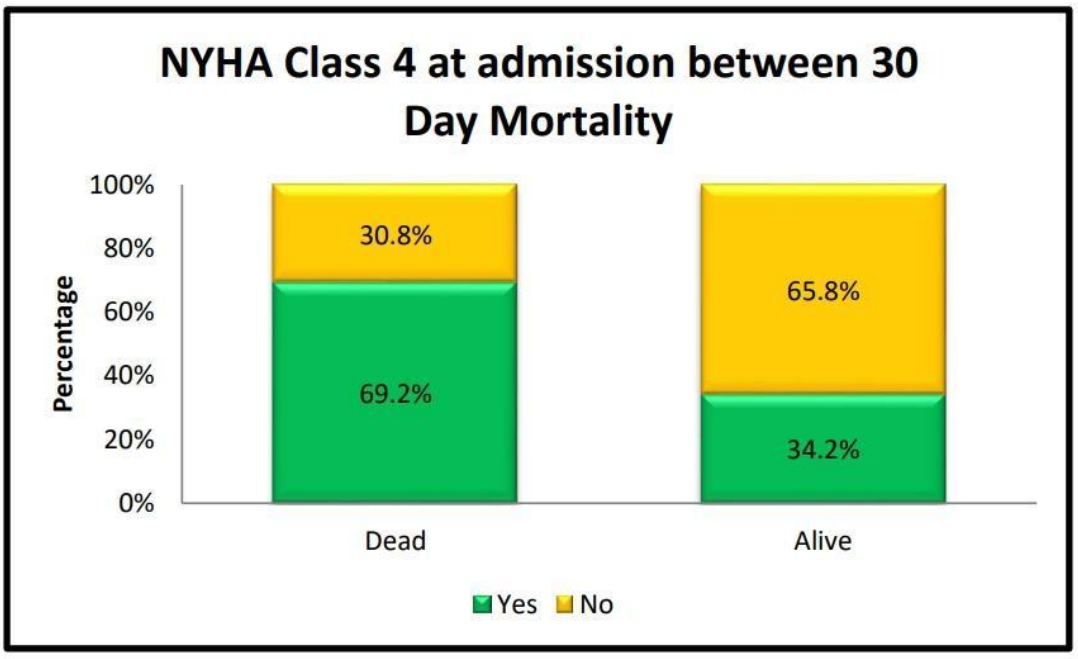

Figure 18 : NYHA Class IV and mortality

Our research found "comparison of NYHA Class 4 at admission with 30 Day Mortality by Fisher's exact test were $\chi 2=7.310$, $p=0.009<0.01$ which shows a highly statistically significant association between NYHA Class 4 at admission and 30 Day Mortality".

Low out symptoms and mortality

Table 8 : Low output symptoms and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Low Output Symptoms	Yes	Count	4	15	19	2.344	0.223 #
		%	28.6%	13.2%	14.8%		
	No	Count	10	99	109		
		%	71.4%	86.8%	85.2%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
# No Statistical Significance at p > 0.05 level							

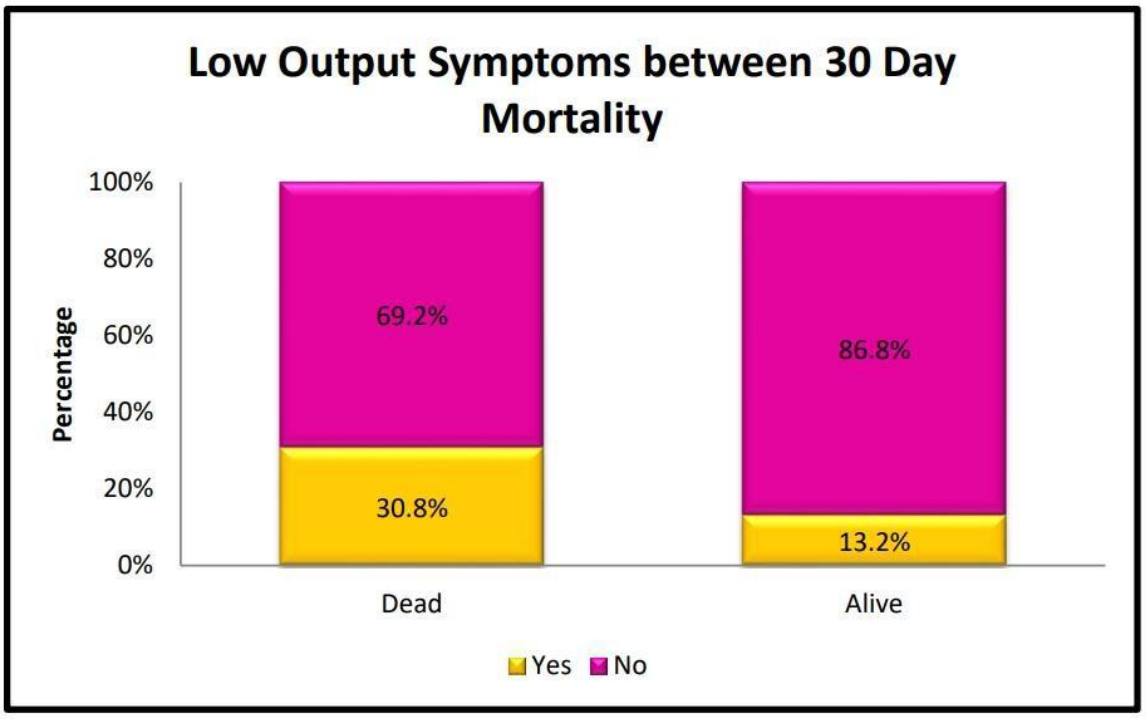

Figure 19 : Low output symptoms and mortality

Above given data reveals “comparison of Low Output Symptoms with 30 Day Mortality by Fisher’s exact test were χ2=2.344, p=0.223>0.05 which shows no statistically significant association of Low Output Symptoms and 30 Day Mortality”.

Episode associated with ACS and mortality:

Table 9 : Episode associated with ACS and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Episode associated with ACS	Yes	Count	8	24	32	8.662	0.007 **
		%	57.1%	21.1%	25.0%		
	No	Count	6	90	96		
		%	42.9%	78.9%	75.0%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
** Highly Statistical Significance at p < 0.01 level							

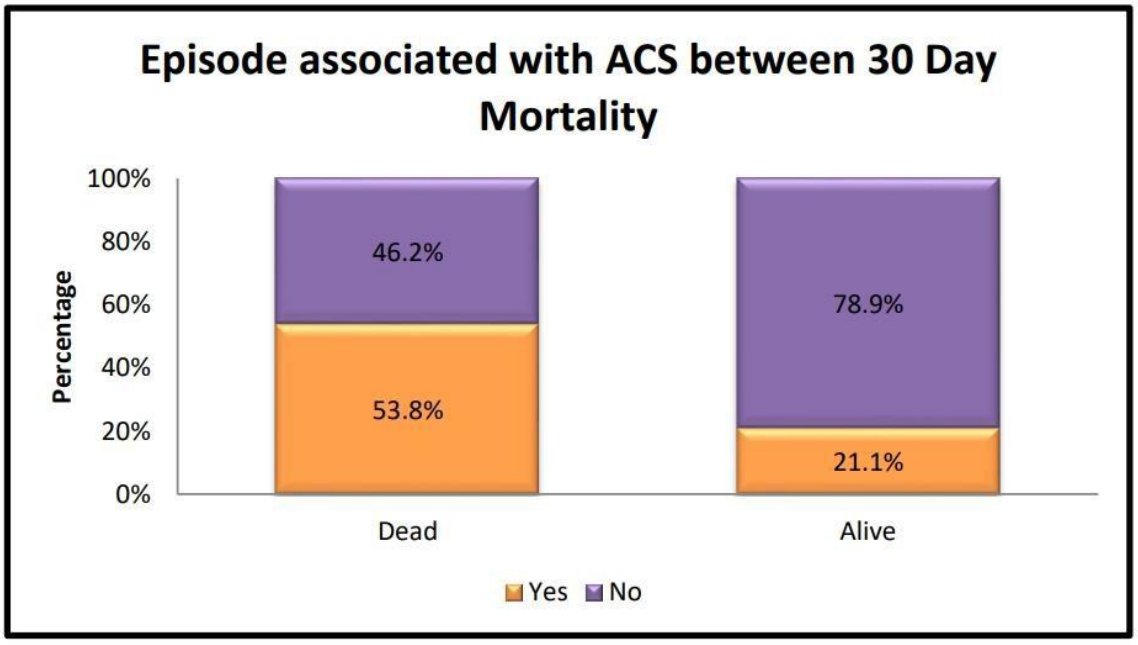

Figure 20 : Episode associated with ACS and mortality

Our research seems to indicate “comparison of Episode associated with ACS in 30 Day Mortality by Pearson’s Chi-Square test were $\chi 2=8.662$, $p=0.007<0.01$ which shows highly statistically significant association between Episode associated with ACS and 30-Day Mortality.”

Hypertrophy at ECG and mortality

Table 10 : Hypertrophy at ECG and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Hypertrophy at ECG	Yes	Count	3	34	37	0.428	0.756 #
		%	21.4%	29.8%	28.9%		
	No	Count	11	80	91		
		%	78.6%	70.2%	71.1%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
# No Statistical Significance at p > 0.05 level							

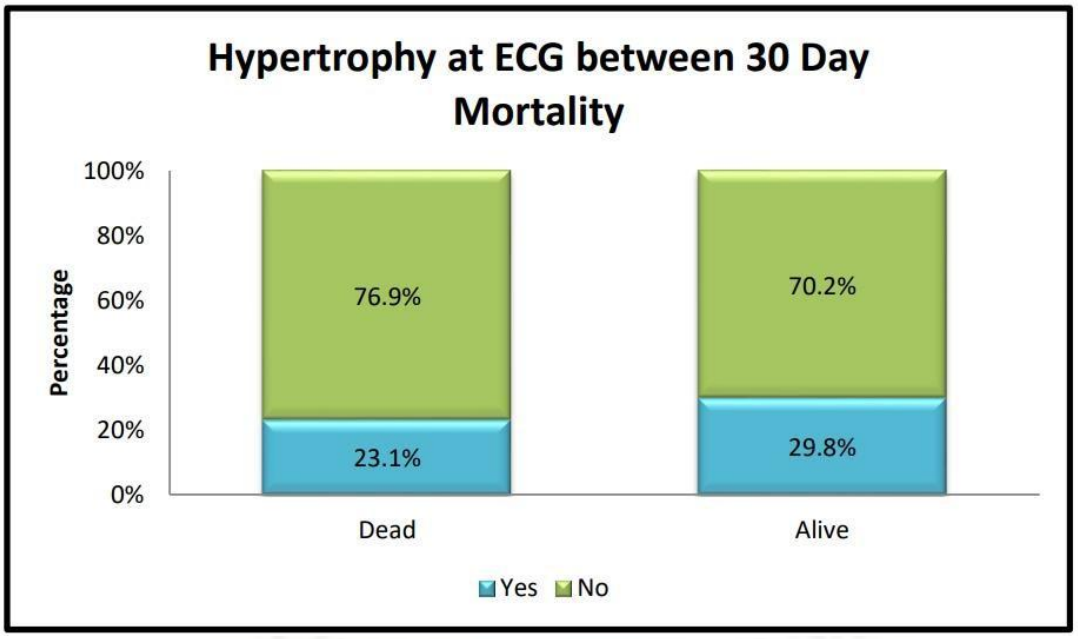

Figure 21 : Hypertrophy at ECG and mortality

In the data we analyzed it was discovered that “comparison of Hypertrophy at ECG with 30 Day Mortality by Fisher’s exact test were $\chi 2=0.428$, $p=0.756>0.05$ which shows no statistical significance in association between Hypertrophy at ECG and 30 Day Mortality”.

Transported by EMS and mortality

Table 11 : Transported by EMS and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
Transported by EMS ?	Yes	Count	11	49	60	6.342	0.020 *
		%	78.6%	43.0%	46.9%		
	No	Count	3	65	68		
		%	21.4%	57.0%	53.1%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
* Statistical Significance at p < 0.05 level							

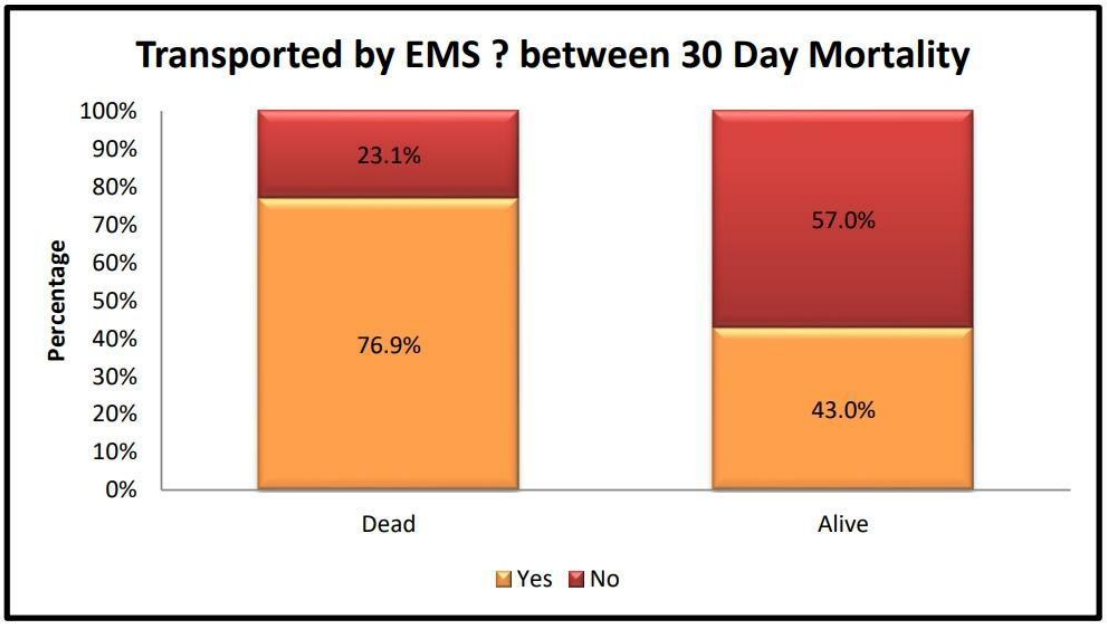

Figure 22 : Transported by EMS and mortality

The data analyzed and tabulated here shows “comparison of Transported by EMS? with 30 Day Mortality by Fisher’s exact test were $\chi 2=6.342$, $p=0.020<0.05$ which shows statistical significance in association between Transported by EMS? and 30-Day Mortality”

MEESSI-AHF Risk and mortality

Table 12 : MEESSI-AHF Risk and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
MEESSI-AHF risk	Very high risk	Count	6	4	10	33.004	0.0005 **
		%	42.9%	3.5%	7.8%		
	High risk	Count	2	9	11		
		%	14.3%	7.9%	8.6%		
	Intermediate risk	Count	6	40	46		
		%	42.9%	35.1%	35.9%		
	Low risk	Count	0	61	61		
		%	0.0%	53.5%	47.7%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
** Highly Statistical Significance at p < 0.01 level							

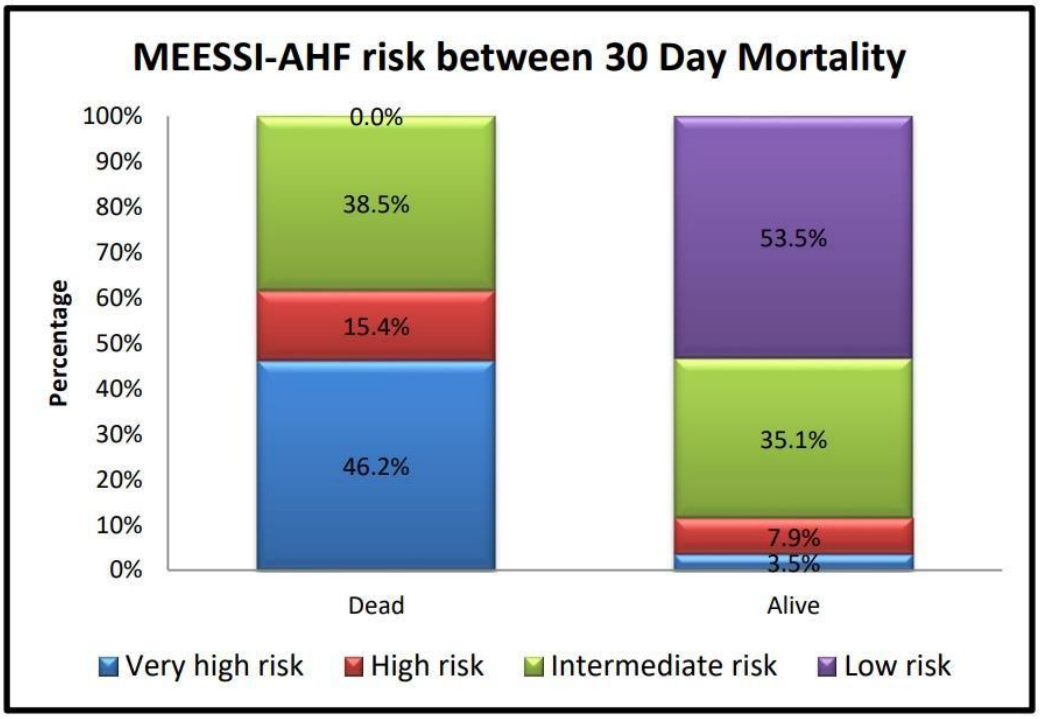

Figure 23 : MEESSI-AHF Risk and mortality

As per the data we obtained and analyzed the association of "MEESSI-AHF risk and 30 Day Mortality by Pearson's Chi-Square test were $\chi 2=33.004$, $p=0.0005<0.01$ which shows a highly statistically significant association between MEESSI-AHF risk and 30 Day Mortality."

EHMRG Risk and mortality

Table 13 : EHMRG Risk and mortality

			30 Day Mortality		Total	χ 2 - value	p-value
			Dead	Alive			
EHMRG Risk	High risk	Count	12	41	53	13.958	0.001 **
		%	85.7%	36.0%	41.4%		
	Intermediate risk	Count	2	21	23		
		%	14.3%	18.4%	18.0%		
	Low risk	Count	0	52	52		
		%	0.0%	45.6%	40.6%		
Total		Count	14	114	128		
		%	100.0%	100.0%	100.0%		
** Highly Statistical Significance at p < 0.01 level							

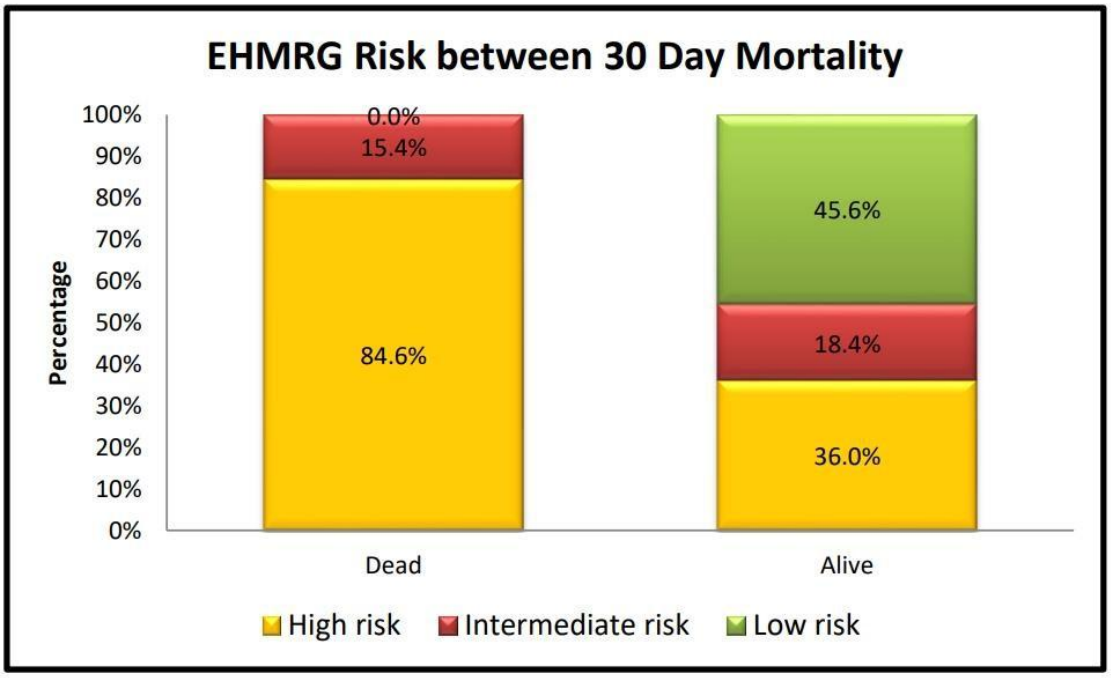

Figure 24 : EHMRG Risk and mortality

As per the data we obtained and analyzed the association of "EHMRG Risk and 30 Day Mortality by Pearson's Chi-Square test were $\chi 2=13.958$, $p=0.001<0.01$ which shows a highly statistically significant association between EHMRG Risk and 30 Day Mortality".

BI and mortality

Table 14 : BI and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
Barthels Index	Dead	14	67.1	27.4	1.951	0.053 #
	Alive	114	80.8	24.5		
# No Statistical Significance at p > 0.05 level						

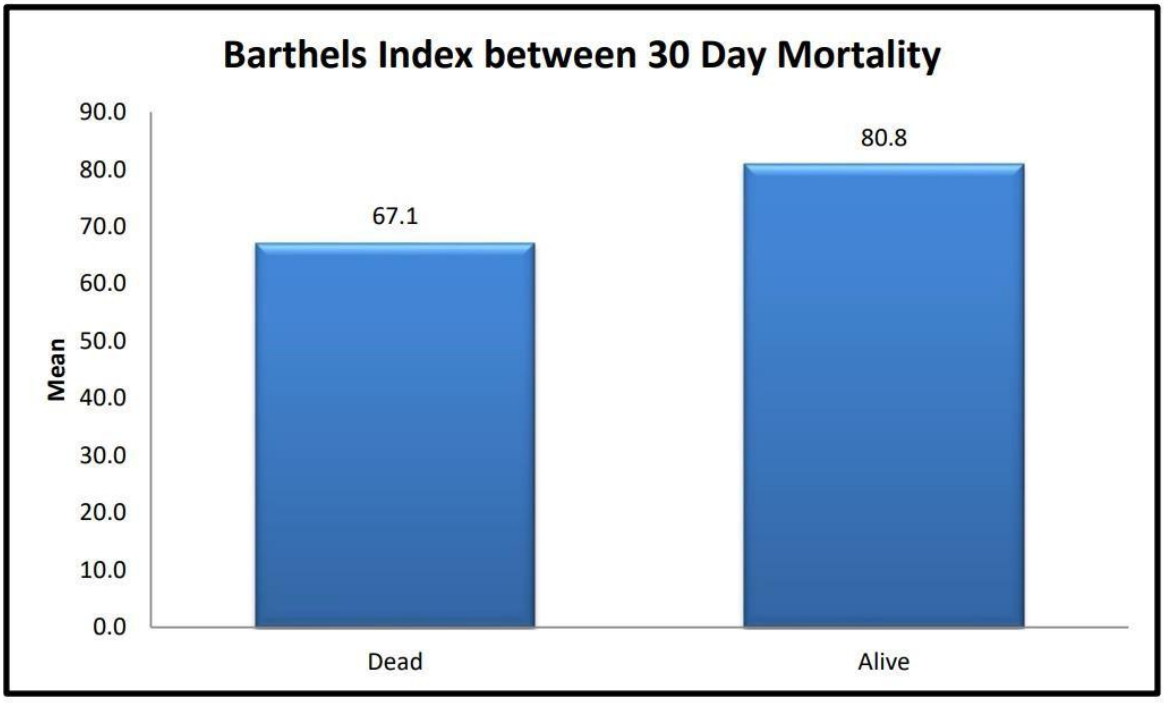

Figure 25 : BI and mortality

The data tabulated and analyzed above shows “association of Barthels Index with 30 Day Mortality by Independent sample t-test were t-value=1.951, p-value=0.053<0.05 which shows near statistical significance difference at p near 0.05 level”.

SBP and mortality

Table 15 : SBP and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
SBP	Dead	14	126.3	37.3	1.886	0.062 #
	Alive	114	143.9	32.5		
# No Statistical Significance at p > 0.05 level						

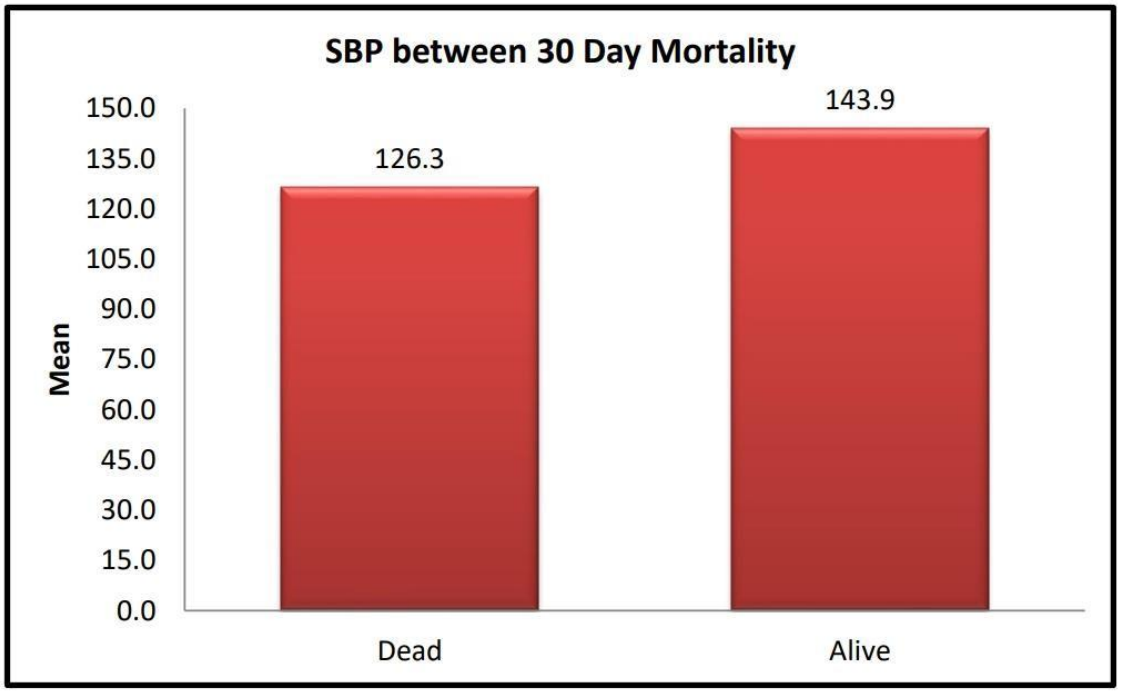

Figure 26 : SBP and mortality

Our data analyzed indicates “comparison of SBP with 30 Day Mortality by Independent sample t-test were t-value=1.886, p-value=0.062>0.05 which shows no statistical significance at p > 0.05 level”.

HR and mortality

Table 16 : HR and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
Heart rate	Dead	14	107.3	30.1	1.831	0.069 #
	Alive	114	94.7	23.6		
# No Statistical Significance at p > 0.05 level						

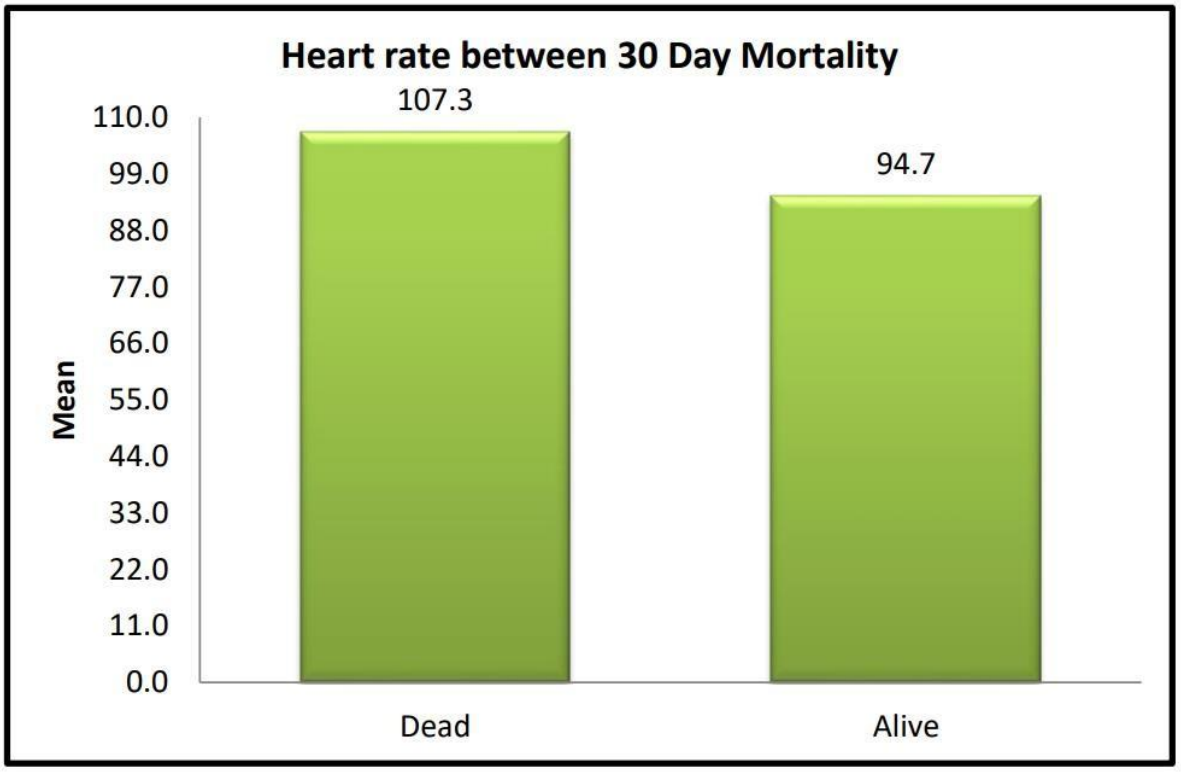

Figure 27 : HR and mortality

The data obtained in our study shows “comparison of Heart rate with 30 Day Mortality by Independent sample t-test were t-value=1.831, p-value=0.069>0.05 which shows no statistically significant difference at p > 0.05 level”.

RR and mortality

Table 17 : RR and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
RR	Dead	14	26.5	4.8	0.796	0.427 #
	Alive	114	24.1	11.1		
# No Statistical Significance at p > 0.05 level						

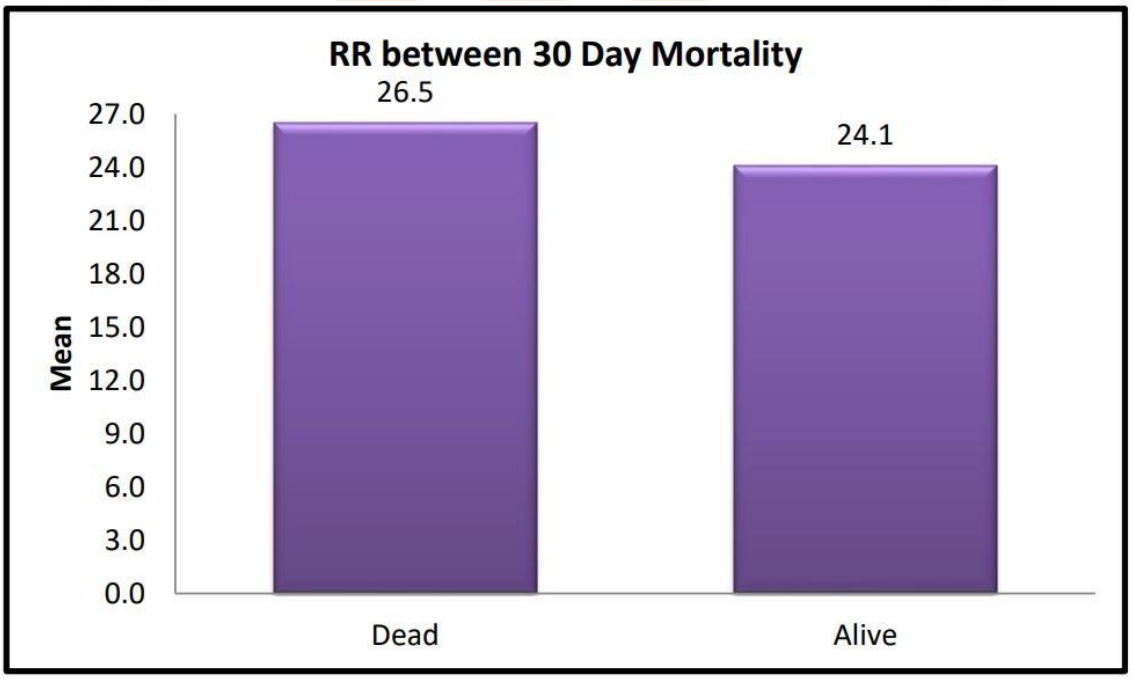

Figure 28 : RR and mortality

The data obtained in our study revealed “comparison of RR with 30 Day Mortality by Independent sample t-test were t-value=0.796, p-value=0.427>0.05 which showed no statistical significance at p > 0.05 level”.

Spo2 and mortality

Table 18 : Spo2 and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
SpO2	Dead	14	87.7	7.1	1.341	0.182 #
	Alive	114	92.1	12.1		
# No Statistical Significance at p > 0.05 level						

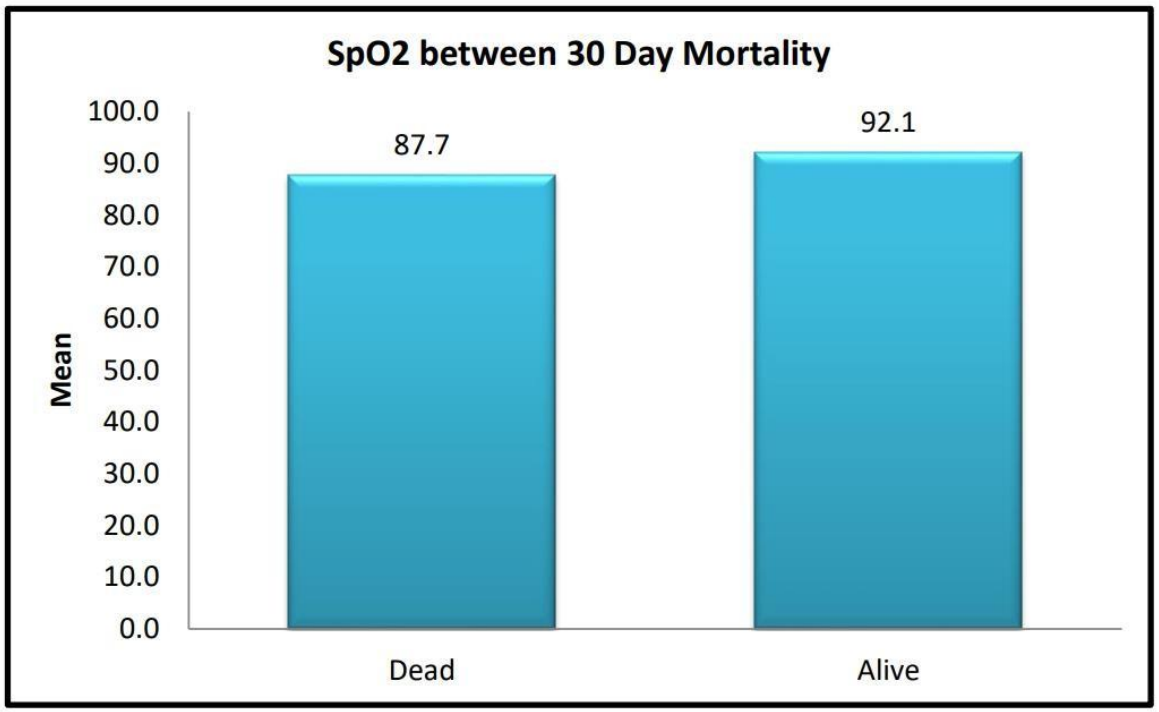

Figure 29 : Spo2 and mortality

The data obtained in our study revealed “association of SpO2 between 30 Day Mortality by Independent sample t-test were t-value=1.341, p-value=0.182>0.05 which shows no statistical significance at p > 0.05 level.”

NT-proBNP and mortality

Table 19 : NT-proBNP and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
NT-proBNP (pg/ml)	Dead	14	21316.0	14524.7	6.072	0.0005 **
	Alive	114	6597.5	7577.2		
** Highly Statistical Significance at p < 0.01 level						

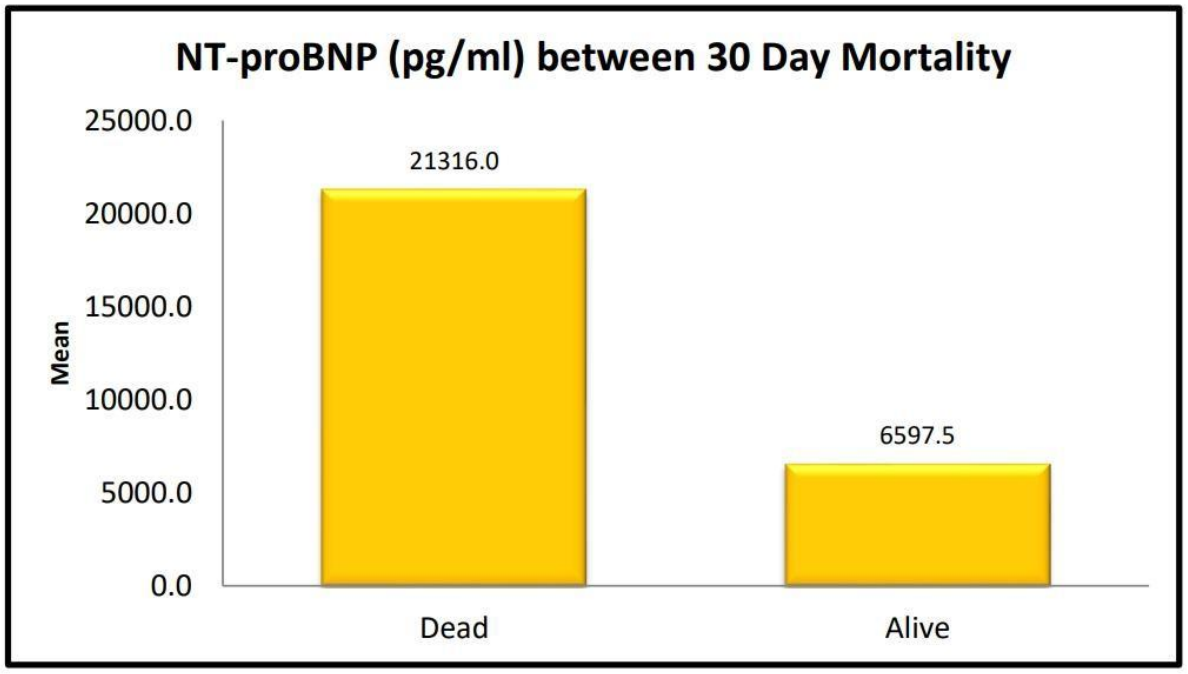

Figure 30 : NT-proBNP and mortality

The data given depicted above as obtained in our research reveals “association of NT-proBNP (pg/ml) with 30 Day Mortality by Independent sample t-test were t-value=6.072, p-value=0.0005<0.01, which shows highly statistically significant difference at p < 0.01 level”.

Serum Creatinine and mortality

Table 20 : Serum creatinine and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
Serum Creatinine (mg/dL)	Dead	14	1.98	0.71	3.240	0.002 **
	Alive	114	1.33	0.71		
** Highly Statistical Significance at p < 0.01 level						

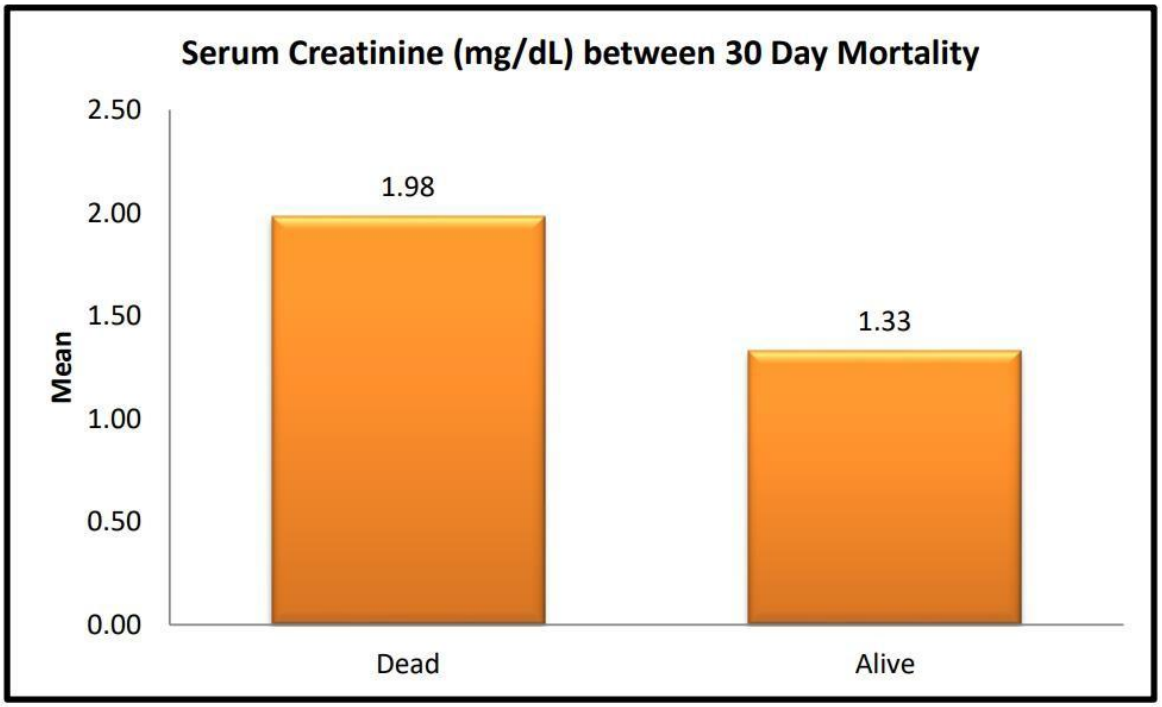

Figure 31 : Serum creatinine and mortality

The data given depicted above as obtained in our research reveals “association of Serum Creatinine (mg/dL) with 30 Day Mortality by Independent sample t-test were t-value=3.240, p-value=0.002<0.01 which shows highly statistically significant difference at p < 0.01 level”.

Serum Potassium and mortality

Table 21 : Serum potassium and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
Serum Potassium (mmol/L)	Dead	14	4.8	0.6	1.391	0.167 #
	Alive	114	4.5	0.8		
# No Statistical Significance at p > 0.05 level						

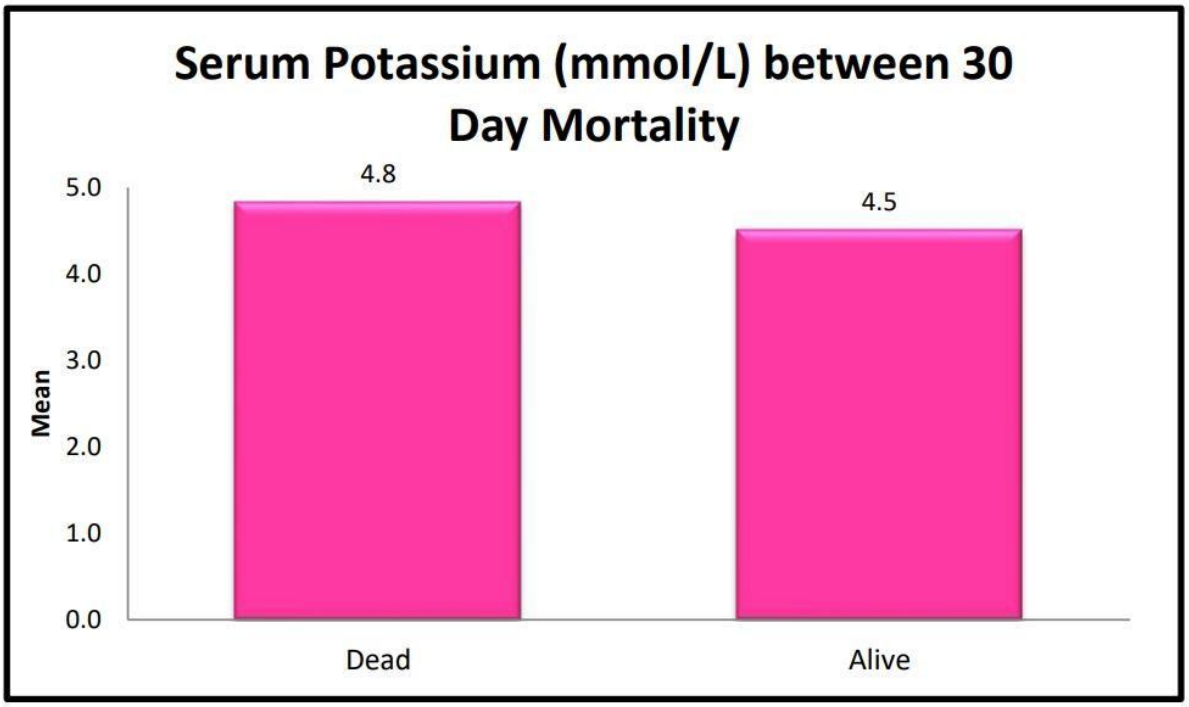

Figure 32 : Serum potassium and mortality

The data given depicted above as obtained in our research reveals “comparison of Serum Potassium (mmol/L) with 30 Day Mortality by Independent sample t-test were t-value=1.391, p-value=0.167>0.05 which shows no statistical significance at p > 0.05 level”.

MEESSI-AHF score and mortality

Table 22 : MEESSI-AHF Score and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
MEESSI-AHF score	Dead	14	23.3	15.0	4.041	0.001 **
	Alive	114	6.8	7.8		
** Highly Statistical Significance at p < 0.01 level						

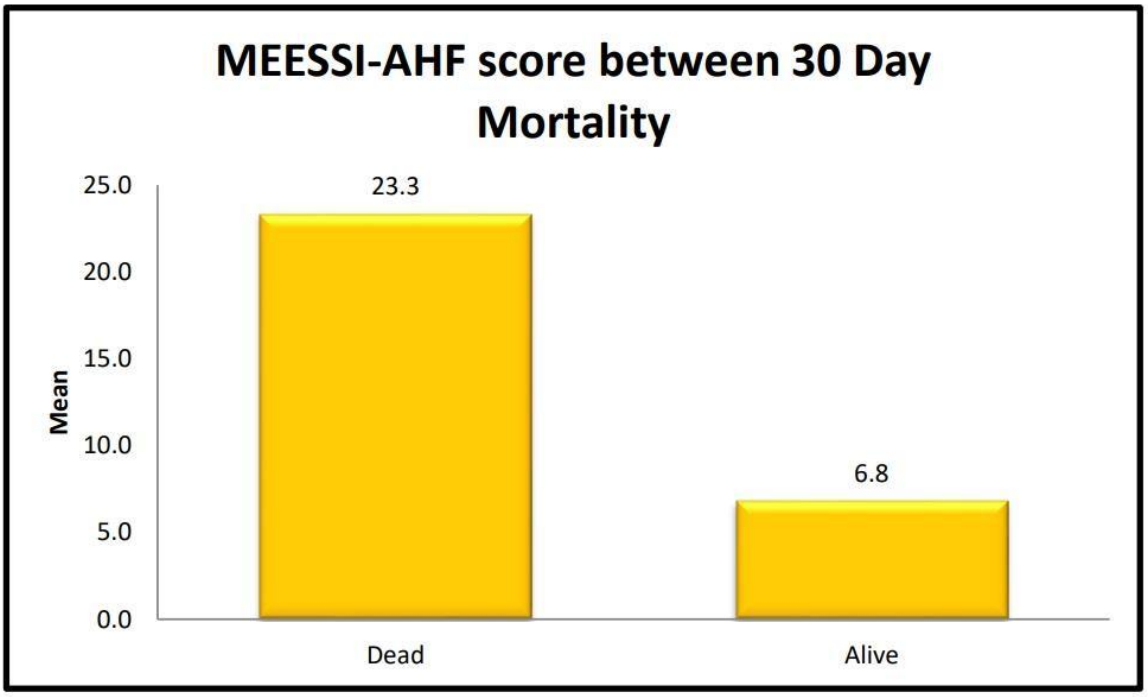

Figure 33 : MEESSI-AHF Score and mortality

Our research revealed “association of MEESSI-AHF score with 30 Day Mortality by Independent sample t-test were t-value=4.041, p-value=0.001<0.01 which shows highly statistically significant difference at p < 0.01 level”.

EHMRG Score and mortality

Table 23 : EHMRG Score and mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
EHMRG Score	Dead	14	122.9	54.5	5.439	0.0005 **
	Alive	114	25.8	64.0		
** Highly Statistical Significance at p < 0.01 level						

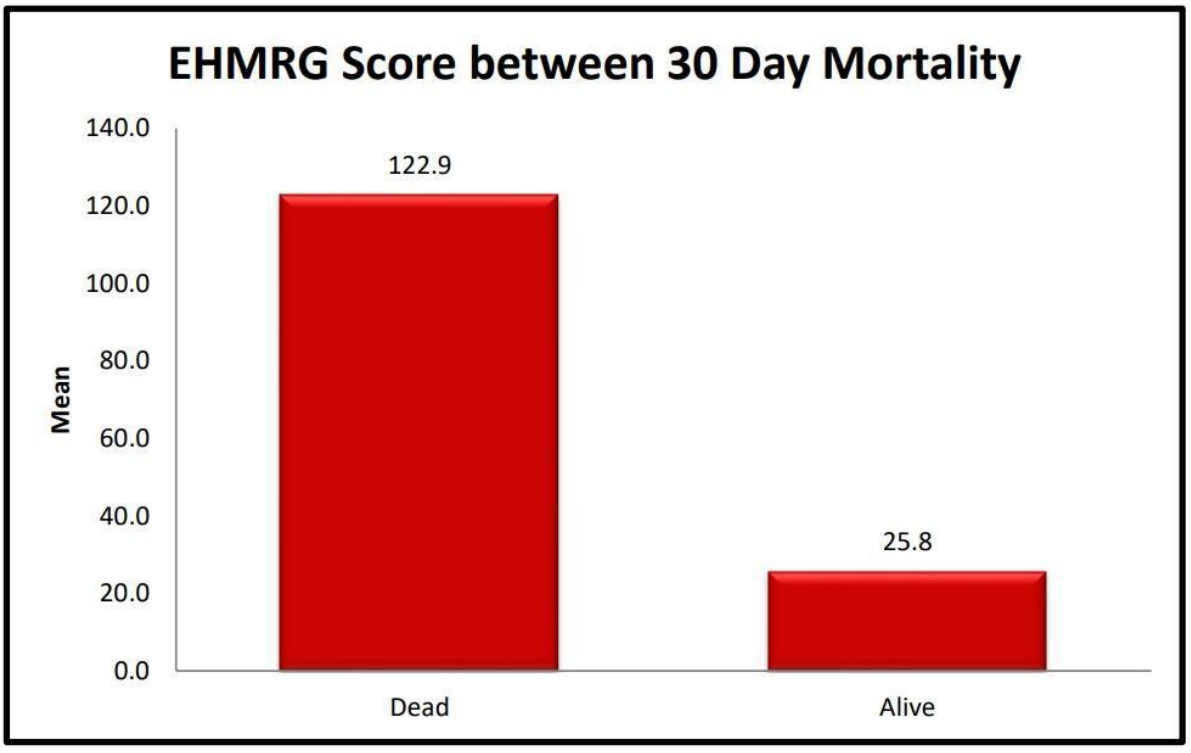

Figure 34 : EHMRG Score and mortality

Our research and analysis revealed “association of EHMRG Score with 30 Day Mortality by Independent sample t-test were t-value=5.439, p-value=0.0005<0.01 which shows highly statistical significance at p < 0.01 level”.

Emergency Heart Failure Mortality Risk with mortality

Table 24 : Emergency Heart Failure Mortality Risk (%) with mortality

Variable	30 Day Mortality	N	Mean	SD	t-value	p-value
Emergency Heart Failure Mortality Risk	Dead	14	6.6	2.6	5.177	0.0005 **
	Alive	114	2.6	2.8		
** Highly Statistical Significance at p < 0.01 level						

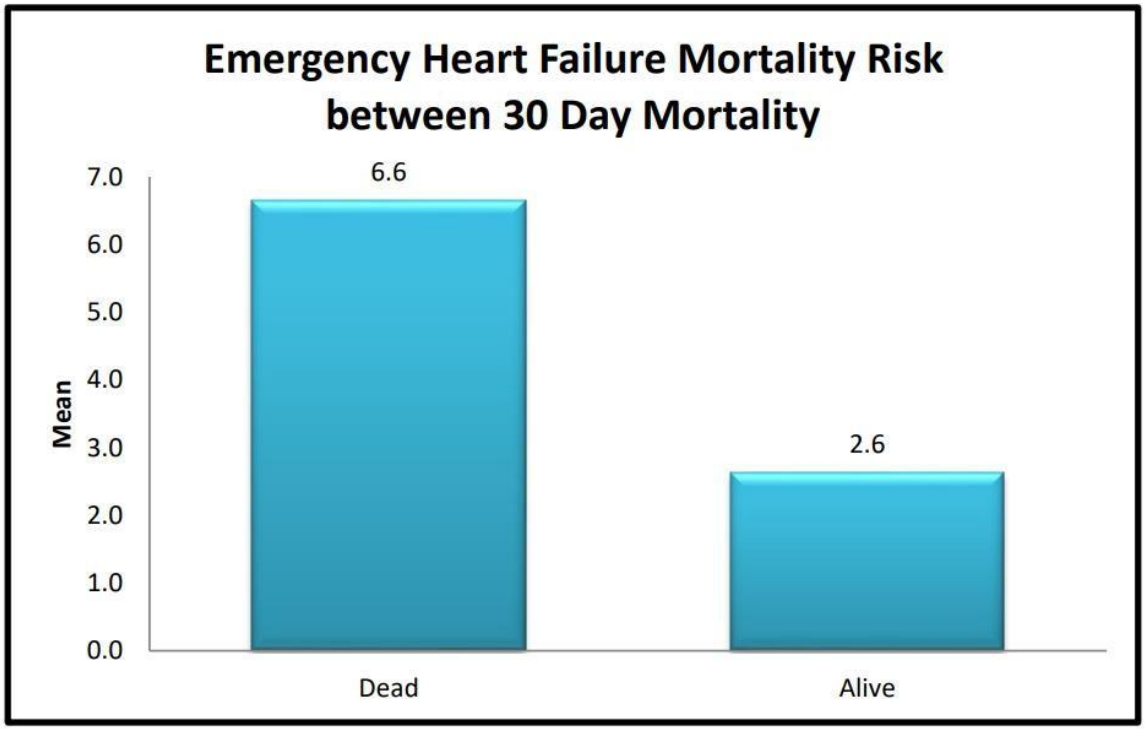

Figure 35 : Emergency Heart Failure Mortality Risk (%) with mortality

Our research and analysis revealed association of "Emergency Heart Failure Mortality Risk with 30 Day Mortality by Independent sample t-test were t-value=5.177, p-value=0.0005<0.01 which shows highly statistical significance at p < 0.01 level".

Efficacy of EHMRG Score to predict the 7th day mortality using RoC curve

Table 25 : AUC of efficacy of EHMRG Score to predict 7th day mortality

Area Under the Curve				
Area	Std. Error[a]	p-value	95% C.I	
			LB	UB
.821	.052	0.0005 **	.719	.922
** Highly Statistical Significant at p < 0.01 level				

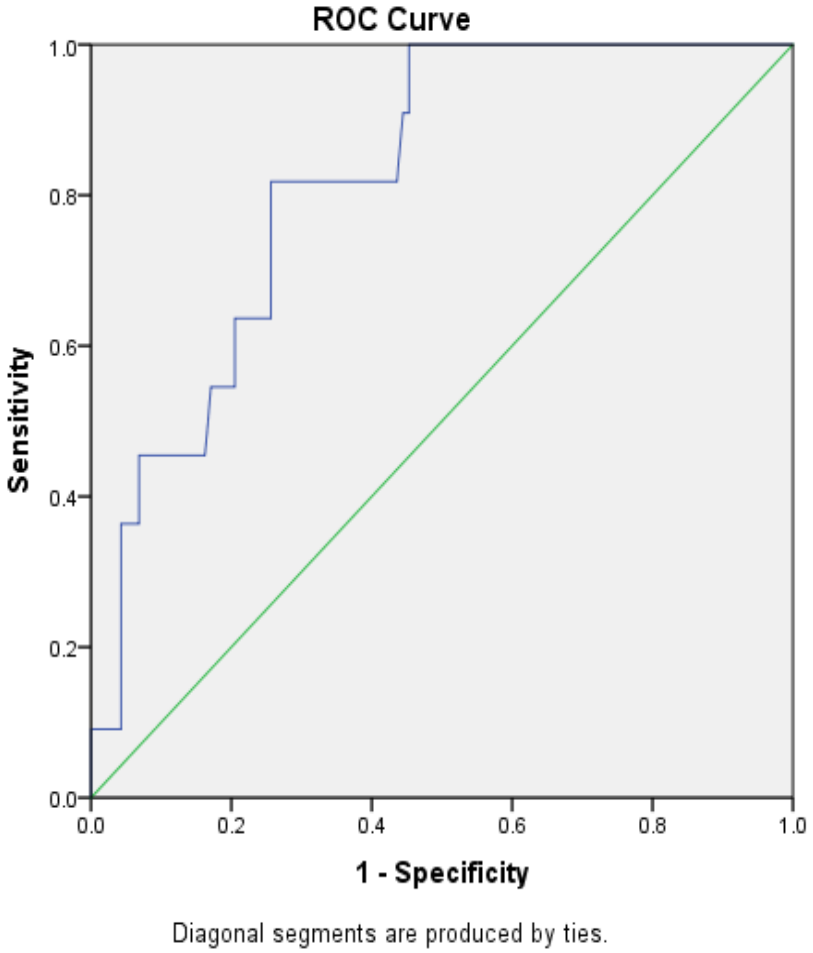

Figure 36 : Receiver Operating Characteristic curve for efficacy of EHMRG Score to predict 7th day mortality

The data tabulated and depicted above shows the “efficacy of EHMRG Score to predict the 7th day of mortality using Receiver Operating Characteristic curve (RoC), which shows the area of the curve is 0.821, p- value= 0.0005<0.01 with 95% C.I 0.719 to 0.922, which is highly statistically significant with the Cut off 74.1%, Sensitivity of 72.7%, Specificity of 74.4%.”

Comparison of efficacy of MEESSI-AHF score & EHMRG Score to predict the 30th day of mortality using RoC curve

Table 26 : AUC of comparison of efficacy of MEESSI-AHF and EHMRG score to predict 30th day mortality

Area Under the Curve				
Area	Std. Error[a]	p-value	95% C.I	
			LB	UB
.821	.052	0.0005 **	.719	.922
** Highly Statistical Significant at p < 0.01 level				

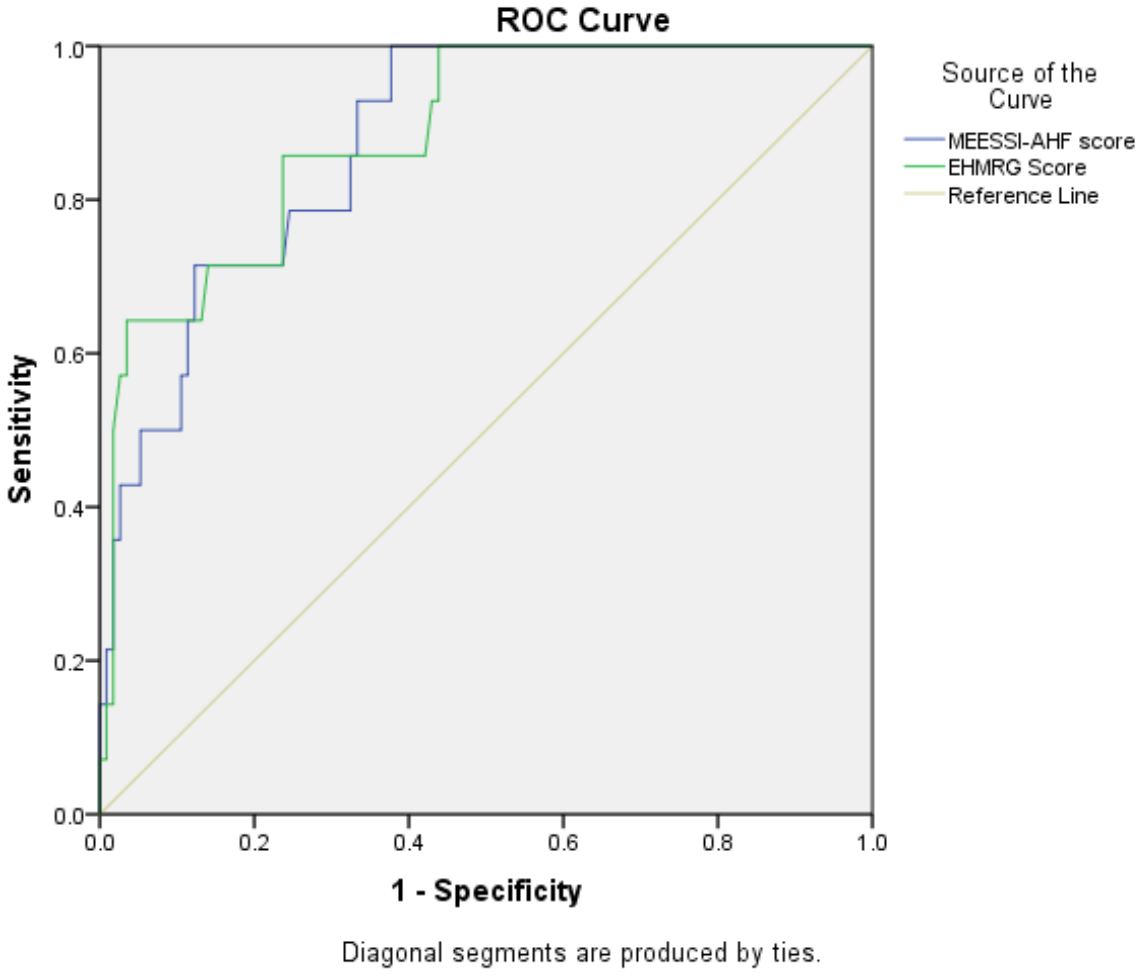

Figure 37 : ROC curve of comparison of efficacy of MEESSI-AHF and EHMRG score to predict 30th day mortality

The data tabulated and depicted above shows the “comparison of efficacy of MEESSI-AHF score & EHMRG Score to predict the 30th day of mortality using Receiver Operating Characteristic curve (RoC), MEESSI-AHF score shows the area of the curve is 0.876, p- value= 0.0005<0.01 with 95% C.I 0.797 to 0.954, which is highly statistically significant with the Cut off - 9.80%, Sensitivity of 78.6%, Specificity of 75.4% whereas in EHMRG score, shows the area of the curve is 0.884, p- value= 0.0005<0.01 with 95% C.I 0.798 to 0.069, which is highly statistical significant with the Cut off - 74.1%, Sensitivity of 78.6%, Specificity of 76.3%.”