Introduction:

Emergency Department is a dynamic environment. The treatment and evaluation usually went hand in hand. People used to be very anxious about their patients. To prognosticate about the patient and continue care at the same time is very difficult.

There are numerous scores available for prognostication but few scores are there for emergency departments e.g. REMS, RAPS, APACHE, etc some of them are disease-specific (GCS)[1,2.]

Sowe designed a score that included vitals, biochemical and subject oriented severity of disease or trauma to predict outcome in ED.

Objective:

To validate the DISS in patients presented to the emergency department.

Design:

Prospective observational study.

Setting:

It is done in tertiary level multidisciplinary hospital located in suburban area in north east India.

Materials and Method:

The DISS score is given below:

Parameters	Score 3	1	0	1	3
Sensorium (S)	Not Responding	Drowsy but responding	Normal	Restless	Combative
Systolic Blood Pressure (SBP)	< 90 mmHg	90-100 mmHg	101-160 mmhg	161-180 mmhg	>180 mmhg
Pulse (P)	<50/min	50-60/min	61-100/min	101-120/min	>120/min

Respiratory Rate(RR)	<8/min	8-10/min	11-20/min	21-30/min	>30/min
Temperature (T)	<96F	96-97F	97.1-100F	100.1-101F	>101F
Base Excess	>-9	-4 to -8	Upto -3		
Lactate	>4	2-4	<2		
Pre existing disease		Presence of any one or more pre existing disease			
Trauma		Head,chest,abdomen,spine,long bone, crush injury limb			
Age		>65	<65		

Any obvious life threatening conditions the score will be always >4 Pre existing diseases are DM, HTN, COPD,CKD,CAD,CLD,CCF,Stoke, ILD

Inclusion Criteria:

It includes all adult patients with age >18 yrs presentingto ED.

Exclusion Criteria:

Age <18 yrs, Obstetric cases, burns and psychiatricpatient.The following is the data collection proforma and DISS. (ABG is taken only when there is clinical indication)

Results:

Total Score	Number of cases
0-4	359
5-10	109
11-15	25
16-20	4
20+	3
Total	500

Table 1: Breakdown of number of patient in each total score group.

Total Score 0-4	Whether Admitted to ICU or not	Not Admitted	169
		Admitted	190
	Whether died in ICU	Left Alive	180
		ICU Mortality	10
	Ward Mortality	Discharged Alive	344
		Ward Mortality	5

Table 2: Breakdown of score 0-4

Total Score 5-10	Whether Admitted to ICU or not	Not Admitted	17
		Admitted	92
	Whether died in ICU	Left Alive	65
		ICU Mortality	27
	Ward Mortality	Discharged Alive	75
		Ward Mortality	7

Table 3: Breakdown of score 5 – 10

Total Score 11-15	Whether Admitted to ICU or not	Not Admitted	5
		Admitted	20
	Whether died in ICU	Left Alive	9
		ICU Mortality	11
	Ward Mortality	Discharged Alive	10
		Ward Mortality	4

Table 4: Breakdown of Score 11-15

Total Score 16-20	Whether Admitted to ICU or not	Not Admitted	2
		Admitted	2
	Whether died in ICU	Left Alive	0
		ICU Mortality	2
	Ward Mortality	Discharged Alive	0
		Ward Mortality	0

Table 5: Breakdown of score 16-20

Total Score 20+	Whether Admitted to ICU or not	Not Admitted	1
		Admitted	2
	Whether died in ICU	Left Alive	0
		ICU Mortality	2
	Ward Mortality	Discharged Alive	0
		Ward Mortality	0

Table 6: Breakdown of score > 20

The analysis of data revealed increasing score has strong correlation with mortality. In 0-4 category out of 359 patient 169 got discharged from ED itself and mortality 4.17%.In 5-10 category out of 109 patient only 17 got discharged with a mortality of 31.2%.In 11-15 category out of 25 patient only 5 got discharge with a mortality rate of 60%.In 16-20 category out of 4 patient 2 got discharged and mortality rate of 100%.Also in category of 20 and above the mortality rate is again 100%.All the cases who didn't get admitted in the last two categories went leave against medical advice.

Conclusion:

We found strong correlation between increasing score and mortality as evident in the above tables. The cut off score of 4 is taken as mortality above any score above 4 has significant mortality(4.17% Vs 31.2%, 60%, 100%).The limitation of this validation study as it is a single centre study, further multi-centre study involving larger population is required to validate it further.

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