

Temperature (°F)	98.5 ± 1.4	98.5 ± 1.1	0.935
GCS Score	14.5 ± 1.9	14.6 ± 1.9	0.834
Pain Score	3.9 ± 2.4	3.9 ± 2.2	0.964
P-values are calculated on independent sample t test.			
* P-values are significant ≤ 0.05			

Table 4: Patient presenting complaint presented in emergency department.

Presenting Complaints	Eyeball (n=46)	CTAS (n=46)
Fever+Sore throat+Cough+Pain	4 (8.7)	4 (8.7)
Fever+Nausea+Vomiting+Pain	5 (10.9)	5 (10.9)
Loose motion+Decrease appetite	4 (8.7)	4 (8.7)
Abdominal pain+Nausea	6 (13.0)	6 (13.0)
Fever+Dyspnea+Cough	5 (10.9)	5 (10.9)
Pain+Pus in foot	2 (4.3)	2 (4.3)
Polyuria+Oliguria	3 (6.5)	3 (6.5)
Fever+Abdominal pain	7 (15.2)	7 (15.2)
Flu+Loss of taste & smell+Pain	2 (4.3)	2 (4.3)
Fever+Lose motion+Cough	3 (6.5)	3 (6.5)
Fever+Abdominal pain+Polyuria	2 (4.3)	2 (4.3)
Nausea+Vomiting+Pain	3 (6.5)	3 (6.5)
Total	46 (100.0)	46 (100.0)

Table 5: Triage of patient and management presented in emergency department.

Variables	Eyeball (n=46)	CTAS (n=46)	P-value
Triage Level			
II	28 (60.9)	22 (47.8)	0.401
III	14 (30.4)	17 (37.0)	
IV	4 (8.7)	7 (15.2)	
Time to Complete Triage (min)			
Mean ± SD	1.3 ± 0.5	2.4 ± 1.6	0.001*
≤ 1	32 (69.6)	17 (37.0)	0.002*
> 1	14 (30.4)	29 (63.0)	
Management			
Admission	20 (43.5)	18 (39.1)	0.569
Discharged	3 (6.5)	1 (2.2)	
Discharged+Medication	11 (23.9)	8 (17.4)	
Discharged+Medication+Follow-up Advice	11 (23.9)	17 (37.0)	
Leave against medical advice	1 (2.2)	1 (2.2)	
Referred	0 (0.0)	1 (2.2)	
Length of Stay (minutes)			

Mean ± SD	75.3 ± 53.5	98.4 ± 51.8	0.039*
≤ 1 Hour	31 (67.4)	22 (47.8)	0.058
> 1 Hour	15 (32.6)	24 (52.2)	

P-values are calculated on independent sample t test and Chi-square test.

* P-values are significant ≤ 0.05

DISCUSSION

In this study, two commonly used triage approaches were compared for finding out the best triage that can be implemented in emergency of our setting for decreasing time of assessment and length of patients stay in hospital emergency. Because appropriate triage selection can be helpful in decreasing the wastage of time in waiting area or in diagnosis that can immediately initiate the appropriate treatment, resulting in decline in morbidity and mortality.

First important aspect of this study was time that taken by nurse or physician to complete triage. In patients of eyeball triage group, triage was completed in 1.3 ± 0.5 (1-2) min, whereas in CTAS triage group, triage was completed in 2.4 ± 1.6 (1-5) min. There was significant difference in mean time of both triage groups (p-value=0.001*). In eyeball triage group, approximately 70% patient's triage was completed in a minute, whereas in CTAS triage group, only 37% patient's triage was completed in a minute with significant difference (p-value=0.002*).

Second important aspect of this study was categorization of patients by using either eyeball triage or CTAS triage. Patients of similar presenting complaints were evaluated in both triage group and non-significant difference was observed (p-value=0.401). In patients of eyeball triage group, majority of the patients were in level II 28 (60.9%) followed by level III 14 (30.4%) and level IV 4 (8.7%). Almost similar categorization was reported in patients of CTAS triage group, majority of the patients were in level II 22 (47.8%) followed by level III 17 (37.0%) and level IV 7 (15.2%).

Third important aspect of this study was management of patients by using either eyeball triage or CTAS triage. As we discussed earlier, patients of both groups have similar presenting complaints, so management was also similar with non-significant difference (p-value=0.569). In patients of eyeball triage group, majority of the patients were admitted 20 (43.5%) followed by discharged with medication 11 (23.9%) and discharged with medication and follow-up advice 11 (23.9%). Almost similar management was observed in CTAS group, where majority of the patients were also admitted 18 (39.1%) followed by discharged with medication and follow-up advice 17 (37.0%) and discharged with medication 8 (17.4%).

Fourth and last important aspect of this study was length of stay of patients of both group in emergency department. In patients of eyeball triage group, length of stay was 75.3 ± 53.5 min, whereas in CTAS triage group,

length of stay was 98.4 ± 51.8 min. There was significant difference in mean length of stay of both triage groups (p-value=0.039*). In eyeball triage group, approximately 67% patient's length of stay was less than an hour, whereas in CTAS triage group, approximately 48% patient's length of stay was less than with non-significant difference (p-value=0.058) [13-15].

CONCLUSION

Eyeball triage is more simple, effective, and rapid system of clinical assessment than CTAS that significantly decreased the time of patient's assessment and patient's stay in emergency. Eyeball and CTAS triage are equally effective in categorizing patients in different triage levels and their management, whereas eyeball is more effective in taking less time to complete and less length of stay in emergency of hospital.

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