

## Traumatic Brain Injury: The Impact of Dedicated Trauma ICU Management on Outcome

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#### Introduction

Traumatic brain injury (TBI) is a public health problem approaching epidemic proportion. (1) It accounts for a great percentage of ICU morbidity and mortality despite invasive and aggressive therapy and monitoring. (2), (3), (4) ICU management improves survival in severe TBI and is second only to initial haemorrhage control in its importance.(5) Most ICU in Nigeria operate a multispecialty system with mortality reported between 54% and 77.3%. (2,4,6) The aim of this study is to evaluate the impact of a dedicated trauma ICU on the outcome of TBI

### Methods

A retrospective review of patients admitted into the 8 bedded trauma ICU of National Trauma Centre Abuja from February 2015 to February 2016. Patients were categorise base on severity of injury using the Glasgow Coma Score (GCS) at admission. Outcome assessment was done using the Glasgow outcome Score and data collection was done using a designed profoma and analyzed with SPSS VERSION 21

### Conclusions

Discussion

This study afirms results from

developed and developing

countries.(8) It revealed a

reduction in mortality 47%

compared to the report by

and Anya 54%, (7) from

different part of Nigerian

where a multispeciality ICU

system is practiced. Minai et

Karachi reported 46.1% in a

dedicated trauma ICU. (8)

134 patients were admitted

into the trauma ICU. 88 of

them had TBI, of whom 74

moderate TBI. Median age 35

years. M:F 4.5:1. Significant

distribution btw sexes (Chi

p=0.038). Overall mortality is

severe TBI, in Males and ages

with trend = 0.060, p= 0.806,

41 with highest rate seen in

31 - 40 years, Chi square

No significant difference between males and females

for outcome.

square with trend: 4.309,

had severe and 12 had

years, peak age 20 - 40

difference in the age

(26.1%) and 8 (9%)

remained vegetative.

Results

al, in a retrospective review in

Good recovery was seen in 23

Desalu et al 77.3%, (2) Yusuf

et al 70% (5) and Onyekwulu

Acute TBI is responsible for majority of trauma ICU admissions. Severe TBI still remains the commonest cause of mortality even in dedicated trauma ICU. This study has shown that outcome of TBI care in a dedicated trauma ICU results in better outcome.

#### References

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FIGURE 1. OUTCOME DISTRIBUTION