

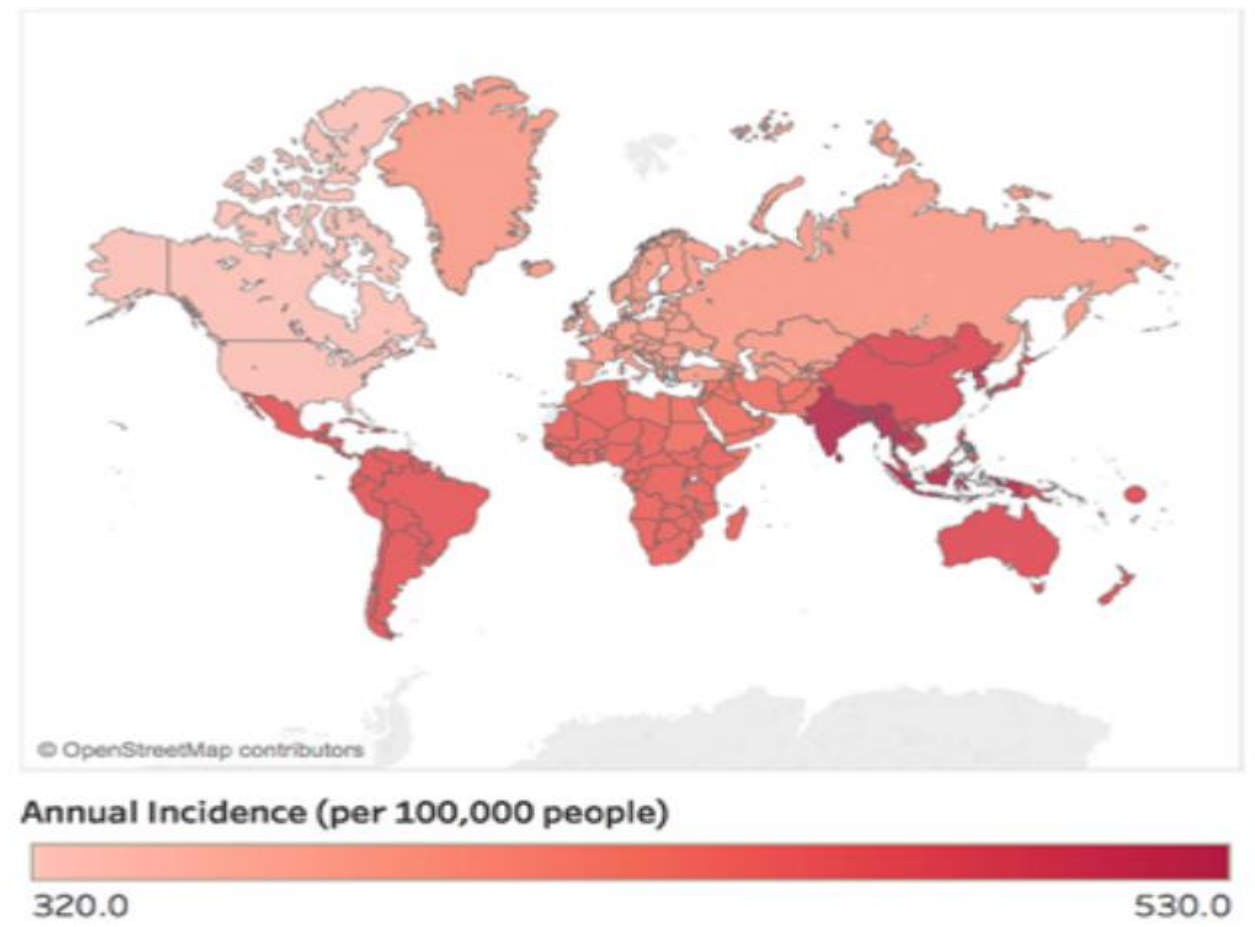
An Epidemiological and Clinical Study of Traumatic Brain Injury in Papua New Guinea Managed by General Surgeons in Two Provincial Hospitals

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Introduction

- ❑ Three times more cases amongst LMICs compared to HICs (Dewan et al 2018).
- ❑ TBI is highest in the Western Pacific Region (Dewan et al 2018).
- ❑ PNG prevalence of TBI is 168 per 100,000 population.
- ❑ This study aims to investigate potential factors of mortality amongst patients with moderate and severe head injury in two provincial hospitals in PNG.



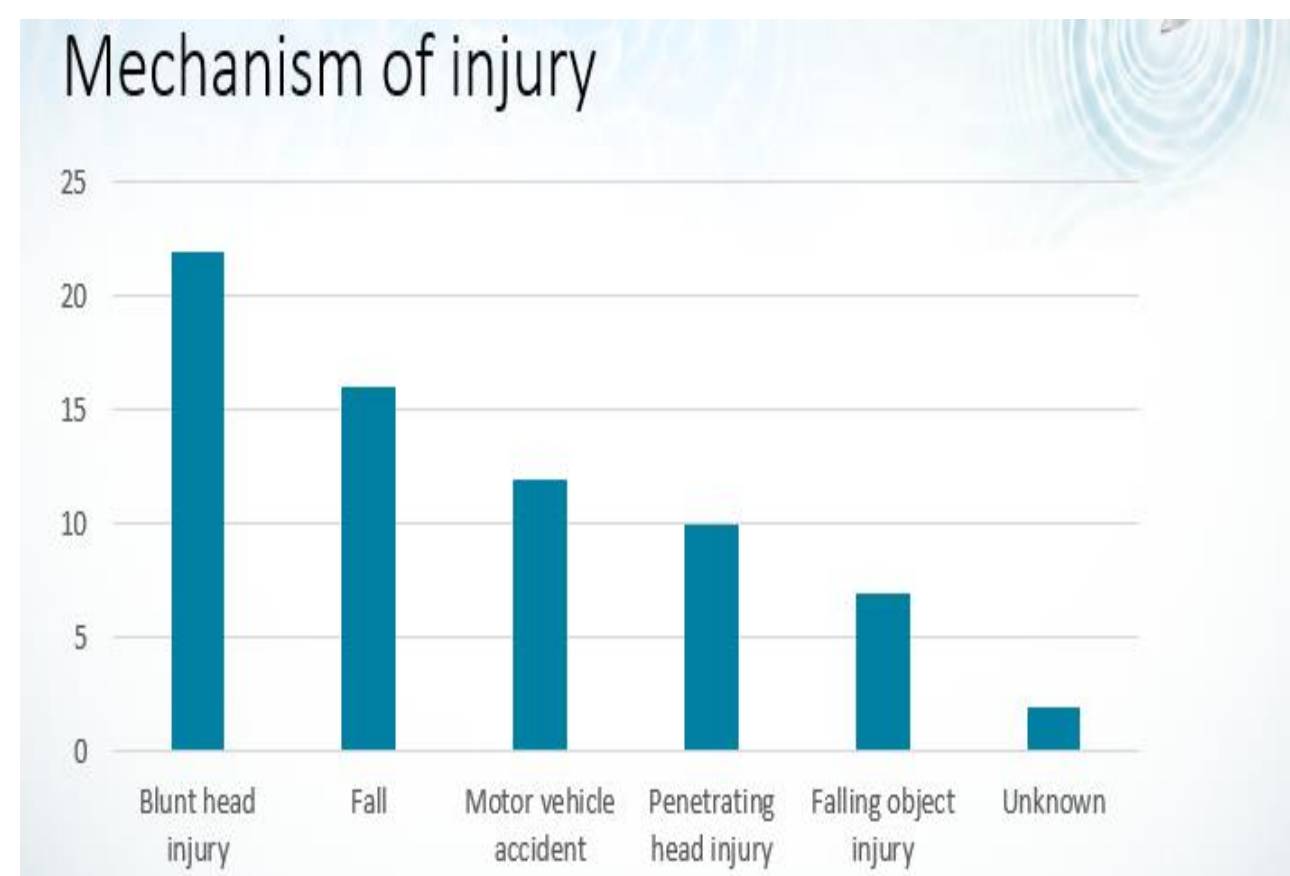
Material and Methods

- ❑ Retrospective case series analysis.
- ❑ 2018 to 2022
- ❑ Conducted in:
 - ❑ Alotau Provincial Hospital
 - ❑ Kimbe Provincial Hospital

- ❑ n=69
- ❑ Mean age: 22 years
- ❑ Females 82.6%
- ❑ Mean GCS 11/15
- ❑ Severe Head Injury 59.4%

Results

- ❑ There was a significant odds of reduced mortality in patients with vomiting and headache, reactive, a higher GCS and length of hospital stay.
- ❑ In contrast mortality was increased with use of mannitol, hypoxia, presence of complications and admission to KPH compared with APH.



Conclusion

- ❑ This study highlights potential factors associated with traumatic brain injury mortality in rural Papua New Guinea.
- ❑ The findings can help direct policy makers, assist in public health awareness and improve access to surgical research, care and management for patients with traumatic brain injury in rural Papua New Guinea.

- ❑ High dependency unit care 66.7%
- ❑ 51% required ventilation; mean ventilation time 5 days
- ❑ Mean length of hospital stay 9 days
- ❑ Mortality rate of 17.4%