

# The direct medical cost of trauma aetiologies and injuries in a resource limited setting of Papua New Guinea: A prospective cost of illness study

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## Introduction

- ❑ Injuries are a significant public health concern globally.
- ❑ Papua New Guinea has failed to achieve all eight health millennium development goals, and in doing so has not prioritized injuries in previous health policies.
- ❑ Understanding costs related to injuries can ultimately guide policies for surgical service delivery in achieving local, and universal health coverage objectives.
- ❑ The aim of this study was to estimate the direct medical costs of trauma at Alotau Provincial Hospital.

## Material and Methods

- ❑ A prospective cost of illness study was conducted at Alotau Provincial Hospital, which is the only major referral hospital in the Milne Bay Province of Papua New Guinea, from the 1st of June 2020 to the 21st of December 2020.
- ❑ A bottom up approach of micro costing was used to estimate the direct medical cost of trauma aetiologies, and injuries of patients admitted to the surgical ward at Alotau Provincial Hospital.

## Results

- ❑ The mean cost of managing traumatic injuries was K45, 363.17 (US\$13,155.32) per patient. The most common cause of injury was alcohol related injuries (n=31) with a total direct medical cost of K1, 417, 023.73 (US\$410,936.88).
- ❑ The most common injury was fractures (n=40) with a total direct medical cost of K1, 923, 531.88 (US\$48,088.30).
- ❑ The highest cost for trauma aetiologies were MVAs with a mean cost of K48, 687.40 (US\$14, 119.35) per patient.
- ❑ The highest cost for injuries was Abdominal trauma with a mean cost K55, 929.69(US\$16,219.61) per patient.

## Conclusion

- ❑ Poor regulation of alcohol and road safety is associated with high surgical costs.
- ❑ In an era of financial instability, reducing injuries is economical in order to address health care objectives that rely heavily on adequate funding, and financing.

