

The direct medical cost of acute appendicitis surgery in a resource limited setting of Papua New Guinea.

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Introduction

- ❑ In Papua New Guinea (PNG), Acute Appendicitis accounts for up to 60% of all surgical emergencies.
- ❑ One-third of patients who present with appendicitis are found to have complicated forms of appendicitis.
- ❑ 80% of the Papua New Guinea population live in rural areas and most present late to hospitals with complicated forms of appendicitis.
- ❑ This study aims to estimate the direct medical cost of acute appendicitis management in Alotau Provincial Hospital.

Material and Methods

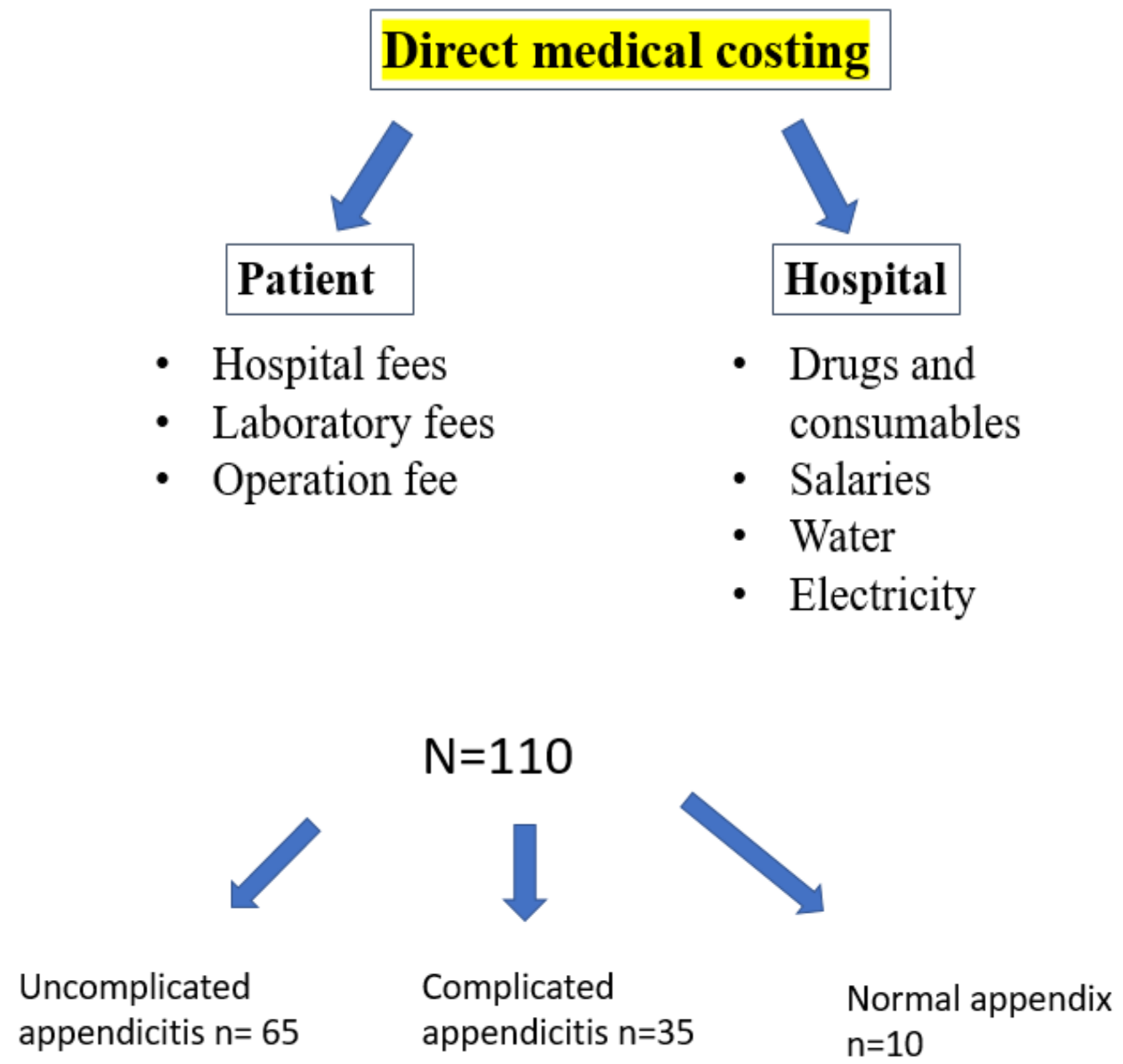
- ❑ A prospective cost of illness study was conducted at Alotau Provincial Hospital (APH) from October 14th, 2019, to June 1st, 2020.
- ❑ A bottom-up approach of microcosting was used to estimate the direct medical cost of consecutive patients with acute appendicitis undergoing surgery.

Results

- ❑ The mean cost of acute appendicitis surgery for each patient was K39,517.66 (US\$11,460.12) for uncomplicated appendicitis, K45,873.99 (US\$13,303.46) for complicated appendicitis and K38,838.80 (US\$11,263.25) for a normal appendix.
- ❑ In total, the direct medical cost for acute appendicitis in this study was K4,562,625.29 (US\$1,323,161.33) with the majority of expenditure incurred by surgical ward expenses.

Conclusion

- ❑ This study demonstrates that direct medical costs for uncomplicated appendicitis surgery in a resource limited hospital are less expensive.
- ❑ As the pathology progresses, the cost also exponentially increases.
- ❑ Policy makers and clinicians must establish appropriate curative surgical services at secondary (NOM of acute appendicitis and laparoscopic surgery) and primary health-care levels to address acute appendicitis surgery as this can reduce costs.



- Male: Female= 1:1.2
- Mean age: 27.2 years
- 48.2% of patient travel >2 hours to APH
- Appendectomy 78.2%, Exploratory laparotomies 21.8%
- Mean operative time: 1 hour and 26 minutes
- Mean length of hospital stay: 3 days

AVERAGE DIRECT MEDICAL COST PER PATIENT BY DIAGNOSIS

