

# Barriers in the refugee population in regional Australia in management of renal stones.

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## Introduction:

Urolithiasis is a common presenting urological complaint to the emergency department. Development of renal stones are influenced by a range of risk factors including dietary content, dehydration, anatomical, infection and genetics.<sup>1</sup> Prevalence globally varies <sup>1-2</sup> and recurrence is a common problem.<sup>2</sup> Stone belts, including the Afro-Asian stone belt, are areas of distinct high prevalence based on geography and population.<sup>2</sup>

Toowoomba, a regional city, is the third largest refugee settlement in Queensland - with 7.5% of its' overseas born population not proficient in English (n=1436).<sup>3-4</sup>

The urology service covers the Darling Downs Health and Hospital Service district with a population of 287 170 people. Approximately 1908 of this population are determined to be not proficient in English.<sup>3-4</sup>

The majority of refugees engaged in the Toowoomba hospital urology service are Kurdish Kurmanji speaking, originally from Syria, Iraq and Iran, with no written language skills.

## Objective:

- The audit focused on identifying the cases of refugees with a particular focus on the barriers to surgical management.

## Methods:

- A retrospective audit of stone-related procedures at Toowoomba Hospital from January 2019-December 2020.

## Discussion:

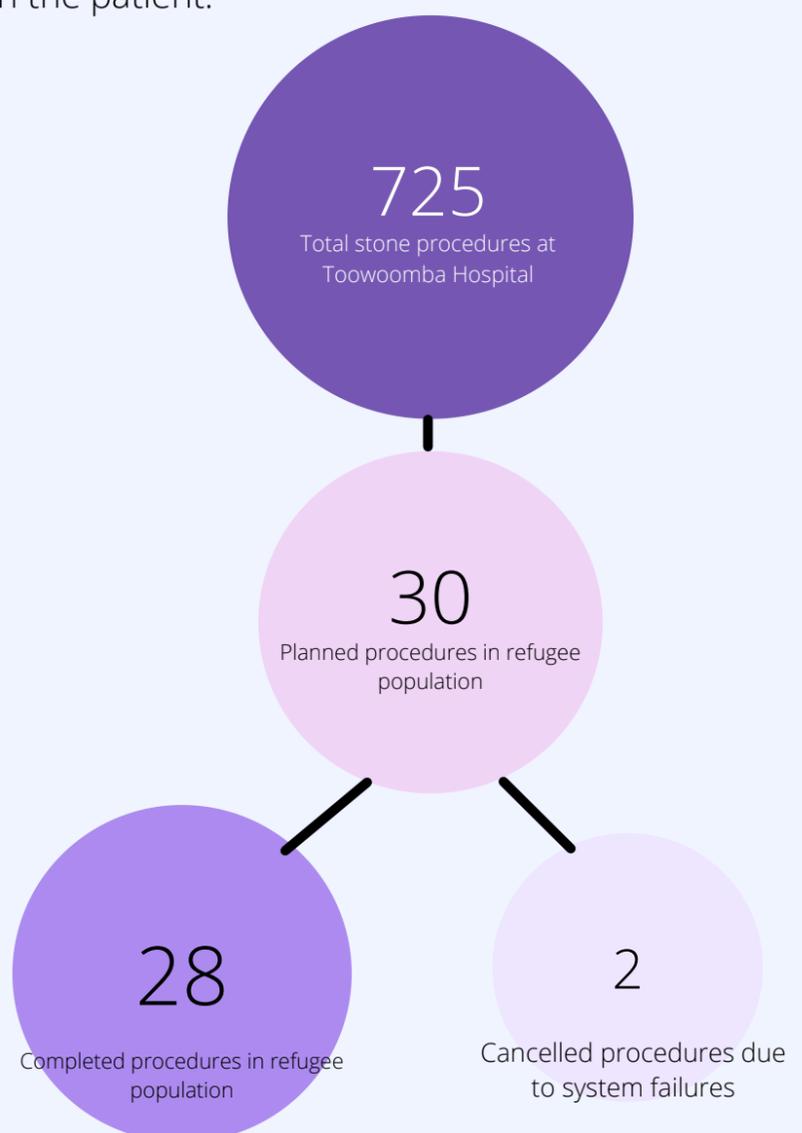
- The non-English speaking cohort is disproportionately larger than the general population
- Given the increased resources needed to provide care to this special population, this can impede the management of urolithiasis from a lack of resources (i.e. lack of translators).
- Communication at Toowoomba Hospital with non-English speaking cohorts is via written English language (physical or digital), and via in-person or telephone interpreters. This has unique challenges in delivering care.
- In the 2 identified delays to care, the normal practices of the health service were the cause of this failure. In both cases the patient was unable to be contacted in arranging the procedures leading to a failure of the patient to arrive or to complete necessary pre-operative tests prior to the procedure.
- Due to limited resources this failure further impacts the services ability to complete other patients' care in a timely manner.

## Conclusion:

- In the non-english speaking refugee population individual factors, diet and hydration influence the development of stones.
- Systemic factors significantly impede care through communication practices and lack of accessible interpreters.
- Recognition of systemic and individual factors is crucial to improving compliance in this vulnerable group.

## Results:

- 725 stone related procedures
- 28 stone related procedures in non-english speaking refugee population
- Stone analyses: Calcium oxalate (4), calcium phosphate (1), cysteine (1)
- During this time period, 2 cancelled procedures were identified. Both cases involved poor communication with the patient.



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