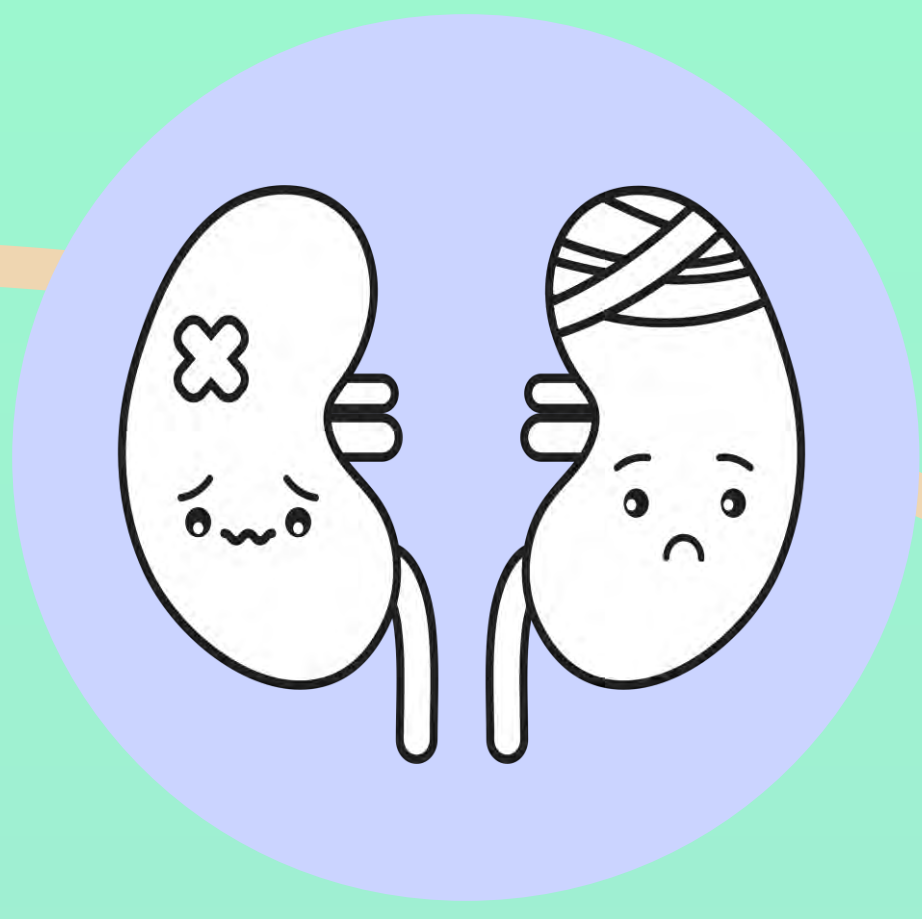


Background

Patients with kidney failure requiring dialysis are at increased risk of complications from **pneumococcal infections** [1]. Timely vaccination can substantially reduce all-cause mortality in this patient population [2]. As a result, the National Immunisation Program (NIP) recommends a 3-step schedule to maximise immune response for this patient cohort [3].



Aim

This study aimed to evaluate the **patterns & frequency** of pneumococcal vaccination in haemodialysis dependent patients and adherence with NIP recommendations [5].

Method

A six-year retrospective analysis of all patients attending the Box Hill Satellite Dialysis Unit of Eastern Health was undertaken. Patients were categorised according to number & sequence of vaccinations per NIP schedule:

- 13-valent initially, then
- 23-valent two to twelve months later, and then
- Another 23-valent after five years.

Results

A total of 60 patients were identified:

- Mean age (SD): 68.9 years (14.9)
- Of which, 49 had accessible vaccination records via My Health Record's (MHR) link to Australian Immunisation Register (AIR)
- 13 (26.5%) had received 1 vaccine & 5 (10.2%) had received 2.
- Only 5 (10.2%) [2 patients with 1 vaccine & 3 patients with 2 vaccines] were on track to meet NIP recommendations (**Figure 1**).

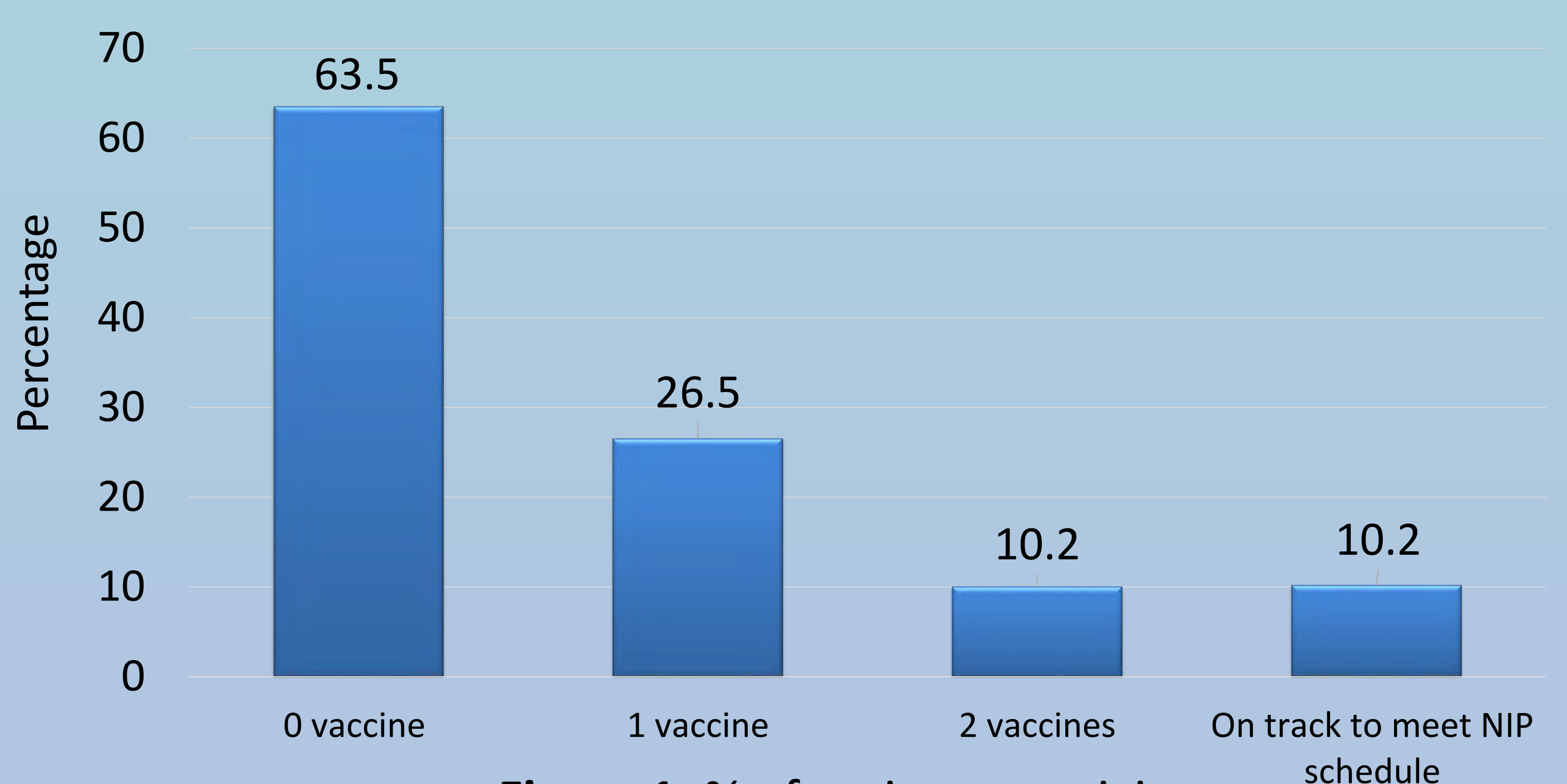


Figure 1: % of patients receiving pneumococcal vaccination(s)

Mind The Gap: Pneumococcal Vaccination in Haemodialysis Patients

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Discussion

- A large proportion of patients **did not** have a record of pneumococcal vaccination which followed the NIP schedule (either due to incomplete records or non-administration).
- For eleven patients MHR was either locked (n=4), absent (no MHR) (n=2) or had no linked AIR records (n=5), raising concerns for utility of MHR as a source for comprehensive patient information.
- This is an area with *'space to grow'* for pharmacists and other healthcare professionals to ensure both timely and correct administration, and documentation of vaccination for patients with chronic kidney disease.

References:

- [1] Sarnak MJ, Jaber BL. Pulmonary infectious mortality among patients with end-stage renal disease. *Chest*, 120(2001): 1883-1887
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