## AUT PARAMEDICINE RESEARCH DAY 2025

# Emergency medical services' experiences with unplanned prehospital births in Aotearoa NZ



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#### INTRODUCTION

Emergency medical services (EMS) involvement in unplanned out-of-hospital births is infrequent.

However, these events can be complex and high-risk.

In general, little is known EMS personnel's experiences in attending out-of-hospital births to inform training and service reviews.



#### AIM

To explore EMS personnel's experiences of attending unplanned birth-related emergencies in NZ, with a focus on perceived challenges in these scenarios.

#### **ACKNOWLEDGEMENT**

We would like to acknowledge the staff who shared their experiences and provide exceptional intrapartum care during unpredictable prehospital birth events. We acknowledge Hato Hone St John for the support and resources provided during data collection and analysis.

#### METHOD

A convenience sample of **ambulance personnel** were recruited through the Hato Hone St John internal bulletin between October and November 2023.

Participants completed a **survey** including demographics and free-text questions about their **experiences**, **knowledge**, **and attitudes** in the context of out-of-hospital births, as well as **challenges** experienced, for example:

"Please describe your emotions and thoughts around attending childbirth emergencies"

Data was **analysed qualitatively** using the general inductive approach to thematic analysis.

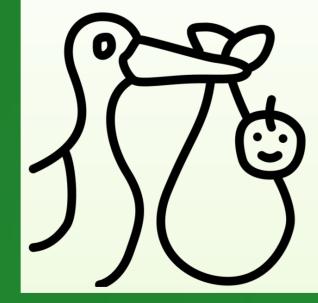
### CONCLUSIONS

This is the **first study** in NZ, and one of the few globally, to examine EMS experiences with unplanned prehospital births.

Participants described these events as **unpredictable** and **challenging** due to clinical, environmental, and social complexities.

Consistent with prior research, participants often felt **under-equipped** for **optimal care** and **monitoring** during birth and postnatally.

These experiences were common cross qualifications, age and experience level in our study



**Future research** may explore how these factors and may be mitigated through training, education, and resourcing for EMS services in NZ.

#### CONTACT INFORMATION AND REFERENCE

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#### Paper under review:

Withanarachchie V, Dicker B, Todd V, Maessen SE. Emergency medical services' experiences with prehospital births in Aotearoa New Zealand. Research square preprint: <a href="https://www.researchsquare.com/article/rs-4361997/v1">https://www.researchsquare.com/article/rs-4361997/v1</a>

#### RESULTS

Two themes were identified:

Theme one: Navigating complexity and uncertainty in unplanned births

Ambiguous clinical impressions

Subthemes:

"The patient... was not aware she was pregnant until I informed her that she was in

labour"

"The call was for nontraumatic back pain" "The parents came home during the birth, and she was too scared to tell them"

Caring for young mothers

Clinicians were frequently faced with a **lack of information** to inform decision making

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This was complicated by **complex social situations** or knowing that
there was **no help nearby.** 

"back up was often over an hour away" "The midwife was 45 mins away and we were 2 hours from a rural hospital and 3 hours from a major hospital"

Remote and deprived communities

Theme two: Practical challenges and unsuitable environments

Limited equipment

Subthemes:

"None of our equipment was suitable for the baby" "To keep the patient warm I used the Gladwrap in the ambulance.
The roll shredded. I ended up using the patient's wrap"

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Unsuitable environments

"It was 2 degrees outside, and the front door was open...with the neonate lying on the cold floor"

Participants described **improvising** due to limited or inappropriate equipment. They described **risks** to themselves and their patients as they navigated **poorly lit, cold** homes and **busy public** areas.