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## Background

Despite being a common complication of hospitalisation,<sup>1-3</sup> current evidence indicates a lack of consistency in the use of medications for delirium and poor staff knowledge in this area.<sup>4-6</sup>

## Aim/Objectives

To determine the impact of pharmacist-led interventions on nursing and prescriber knowledge regarding best practice use of medications in agitated delirium.

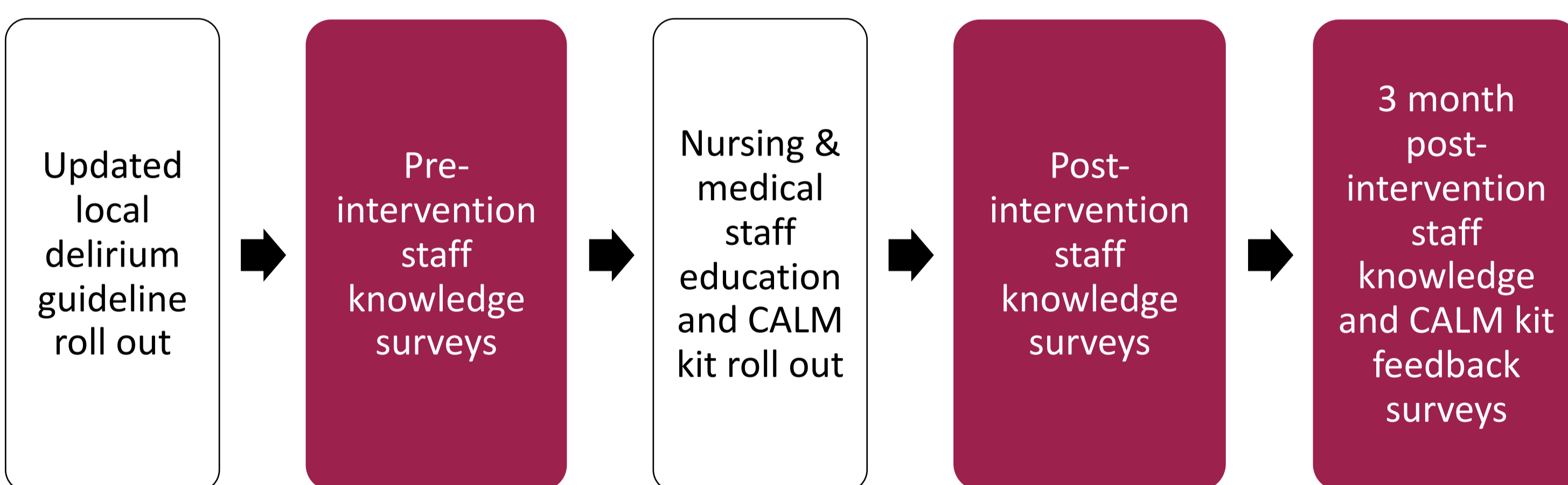
## Methods

A three-component pharmacist-led intervention package was implemented across three General Medicine wards at a regional tertiary hospital.

The intervention involved:

1. Update of local delirium medication protocol based on the Australian Delirium Clinical Care Standards<sup>7</sup>
2. Delirium education to General Medicine nurses and doctors
3. Implementation of 'mediCation for Agitated deLiriumM' (CALM) kits in ward imprest areas

Staff completed knowledge surveys comprised of ten multiple choice questions immediately before, after and again 3 months after intervention rollout. Answers between survey time points were compared.



## Nursing and prescriber delirium education

Education consisted a 20 minute face-to-face oral presentation delivered by a senior General Medicine pharmacist, followed by group discussion. Multiple sessions were provided to nursing and medical staff over two weeks.

Education focused on:

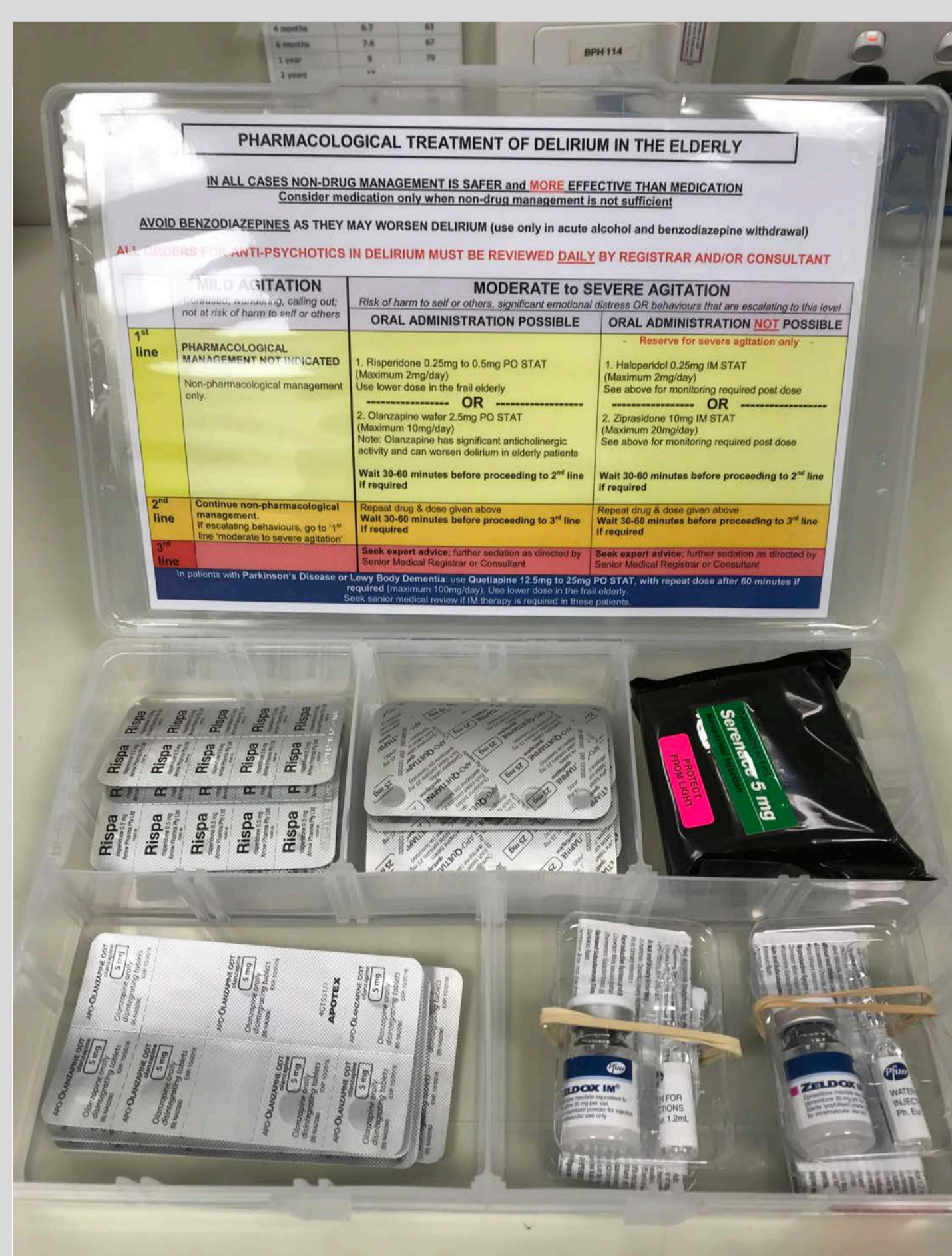
- Evidence for medications in delirium management
- The role of non-pharmacological strategies in managing delirium
- Local recommendations for drug choices and doses
- Requirements for monitoring, documentation and review post-administration of medications for agitated delirium

## 'CALM' kits

Each CALM kit consisted of a compartmentalised box containing:

- A quick reference copy of local delirium protocol
- Non-drug delirium management intervention checklist
- Small quantities of protocol-specified medications.

Kits were designed to be an easy access resource regarding appropriate pharmacological and non-pharmacological delirium management.



## Results:

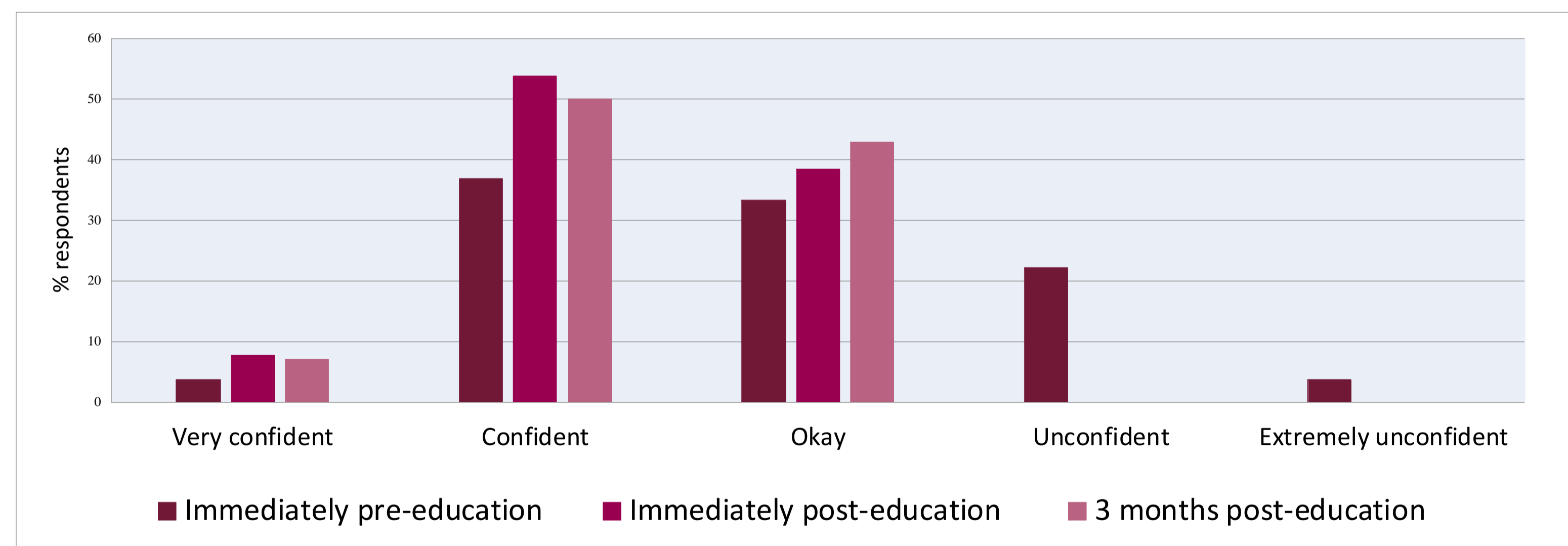
In total, 41 nurses and 26 doctors attended the education sessions. The intervention significantly improved overall knowledge scores for both prescribers and nurses. Knowledge was maintained at three months post education.

## Impact of pharmacist-led intervention on medical and nursing staff knowledge scores

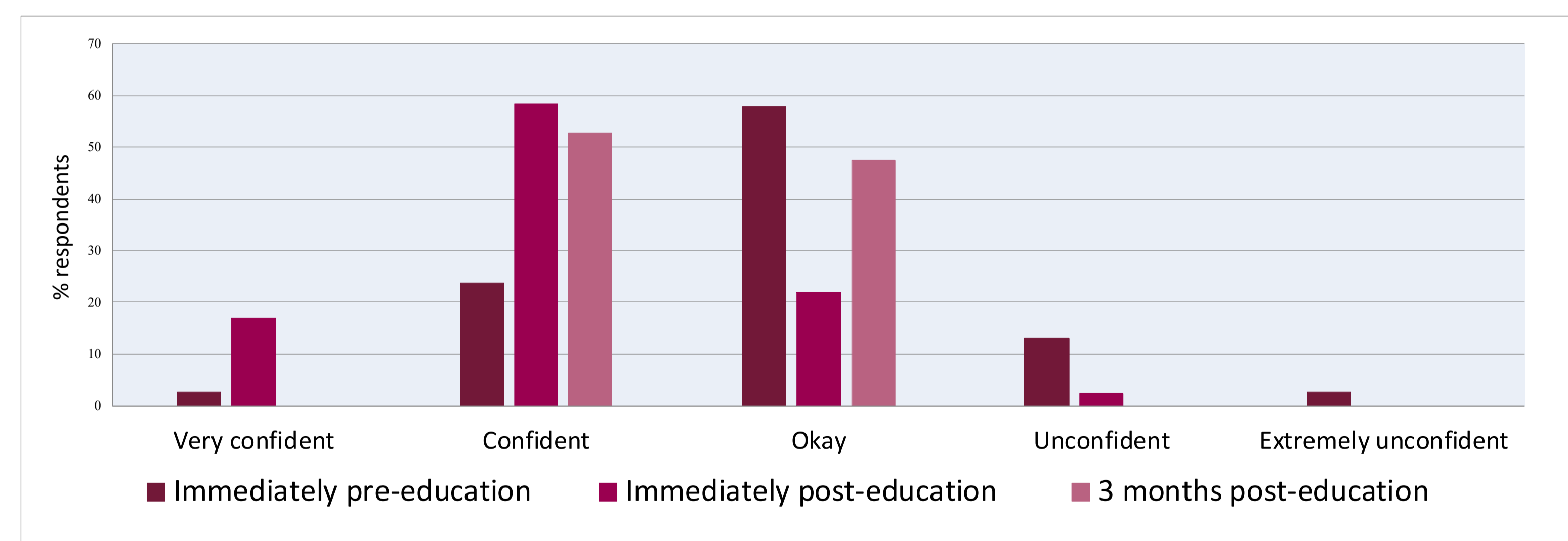
	Pre-intervention (n=27)	Post-intervention (n=26)	p-value*	3 months post-intervention (n=14)	p-value^
Medical staff score, median (IQR)	5/7 (4-6)	6/7 (5-7)	<0.001	7/7 (6-7)	<0.001
	Pre-intervention (n=38)	Post-intervention (n=41)	p-value*	3 months post-intervention (n=19)	p-value^
Nursing staff score, median (IQR)	3/7 (3-4)	6/7 (4.5-6)	<0.001	7/7 (5-7)	<0.001

Improved confidence in managing agitated patients with delirium was reported immediately post-education by both clinician groups [prescribers p=0.03; nurses p<0.001]; this was partially maintained at three months post-intervention [prescribers p=0.116; nurses p=0.001].

## Medical staff self-perceived confidence before and after intervention



## Nursing staff self-perceived confidence before and after intervention



Three months after CALM kit roll out, surveyed nurses felt that the kit was 'easy to use' [87.5% (7/8)], had subjectively 'improved consistency of care' [62.5% (5/8)] and 'improved patient safety' [50% (4/8)]. No respondent believed that the kit had adversely affected their practice.

## Conclusion

A pharmacist-led intervention package resulted in improved nursing and medical staff knowledge regarding medication use in delirium, which was maintained at 3-months post-intervention. Positive staff feedback suggests that CALM kits are a useful resource to support staff caring for patients with agitated delirium. Consideration is now being given to expanding this initiative to all acute inpatient wards.

## References

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