

INTRODUCTION

As a result of the Ockenden review, there is a renewed drive to improve safety within obstetric anaesthesia. Within our trust, a need to further improve safe management of labour epidurals was identified as a key priority. To address this, an educational programme was designed and delivered to midwives which aimed to improve confidence in identifying and managing epidural complications.

METHODS

A training package was designed by a small group of anaesthetists with the following features:

- 90 minutes in length
- Focused on epidural safety including monitoring requirements, identifying and managing complications
- Designed for small groups of 8 to 10 learners
- Grounded in Kolb's learning theory (Figure 1)
- Multi-modal approach including presentation, case-based discussions and simulation
- Deliverable by midwife educators

The training has been integrated to midwives annual training, which runs every two weeks.

Participants were surveyed regarding their confidence in safe management of epidurals and associated emergencies prior to undertaking the training. A second round of data collection occurred after the training had been delivered.

EDUCATING MIDWIVES IN SAFE MANAGEMENT OF LABOUR EPIDURALS: DESIGN AND DELIVERY OF A MULTI-MODAL LEARNING SESSION

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Figure 1. Kolb's learning theory. In this learning session, midwives bring concrete experience from previous practice. Case-based discussions allow learners to reflect on this and integrate new or reinforced information on epidural safety taken from the presentation. This, along with the simulation, provide opportunity for conceptualisation of new learning and experimentation of how this can be taken forwards into future practice.¹



RESULTS

A total of 32 participants attended the first 3 sessions delivered. Overall, the training was associated with:

- Increased confidence in being able to assist an anaesthetist to place an epidural
- Increased confidence in understanding what monitoring is required for a patient with a labour epidural
- Increased confidence in identifying and managing the complications associated with labour epidurals

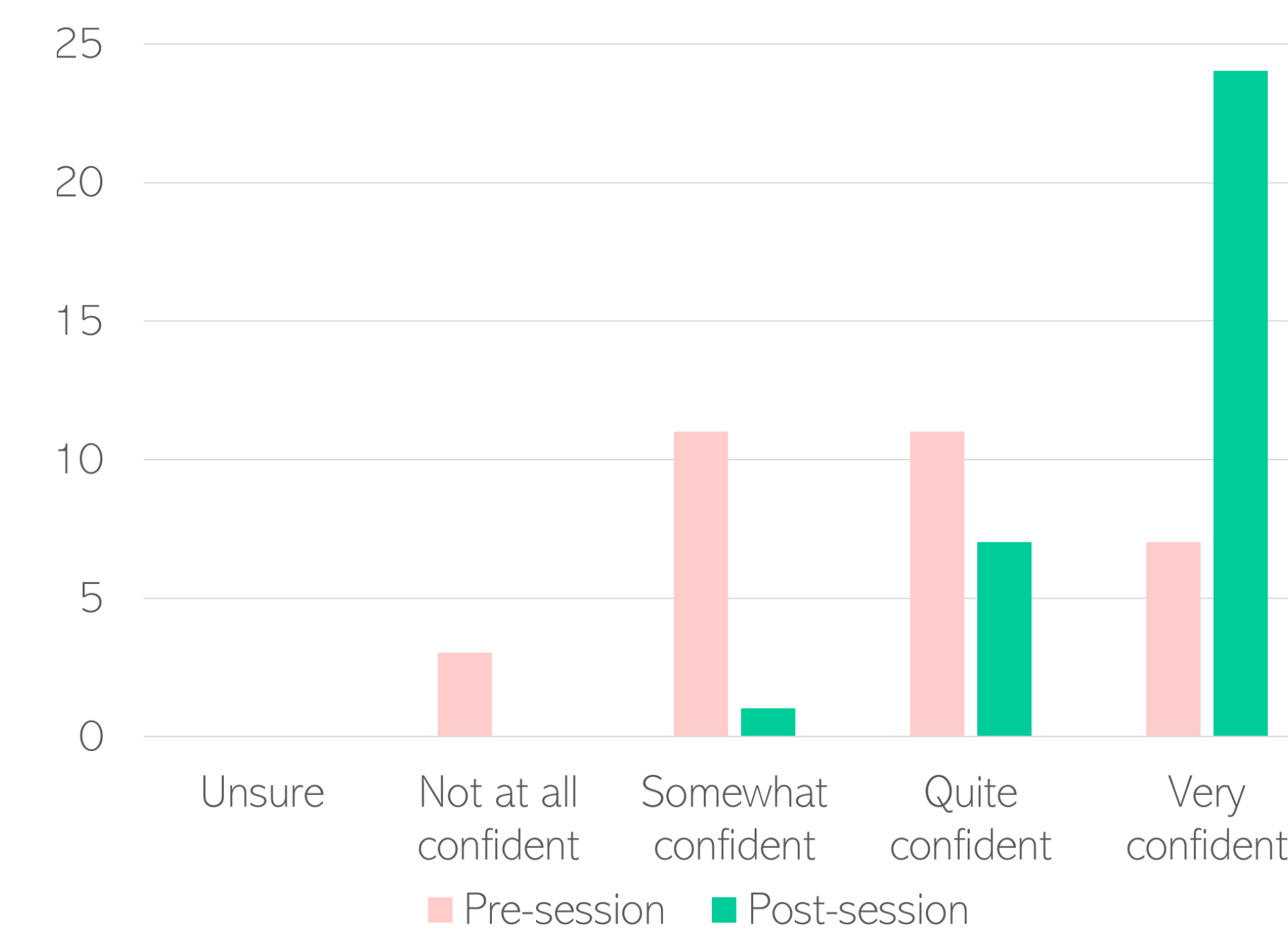


Figure 2. Greatest effect was seen in reported confidence of midwives in identifying and managing complications associated with labour epidurals before and after attending the training session.

DISCUSSION

Although midwives may not be able to influence the development of complications associated with an epidural, they have a key role in monitoring for early signs and taking initial management steps when serious complications do occur.

This learning session was able to greatly improve confidence of midwives in this area. In addition to improved confidence, participants identified key messages taken from training which were consistent with the desired learning points.

As a result, this training package will remain an integral part of the midwifery mandatory training and will be delivered by the midwife education team with the support of obstetric anaesthetists.

This project demonstrates that obstetric anaesthetists may be able to contribute to the development of the wider health care professions team in such a way that enables them to take ongoing responsibility for this learning. It has also addressed one of the key issues with anaesthetist-delivered training, which is that often the team are not able to commit sufficient time to deliver this type of training to a large team. It is not possible to identify from the data collected how this project has translated to patient outcomes, but further audit of documented safety incidents could elucidate this.

REFERENCES

1. Davitadze M, Ooi E, Ng CY, Zhou D, Thomas L, Hanania T, Blaggan P, Evans N, Chen W, Melson E, Arlt W, Kempegowda P. SIMBA: Using Kolb's learning theory in simulation-based learning to improve participants' confidence. *BMC Medical Education* 2022; 22: 116.