A quality improvement project to improve trainee confidence in managing fetal head impaction at caesarean section

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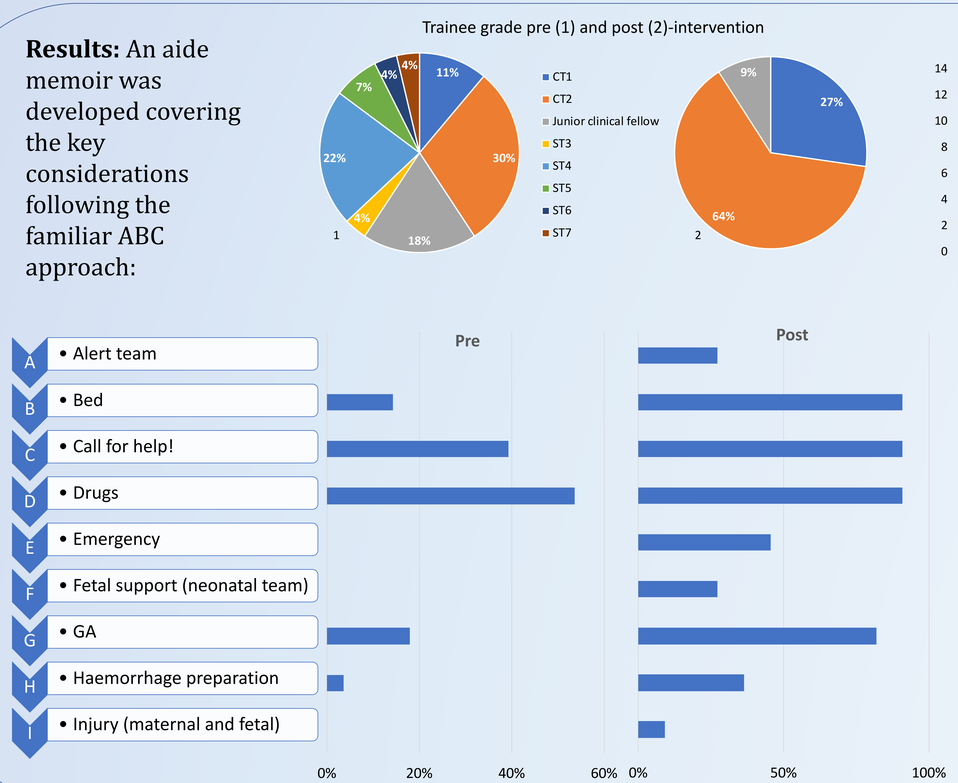
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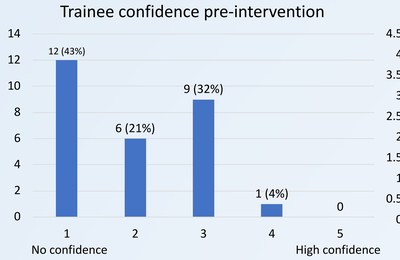
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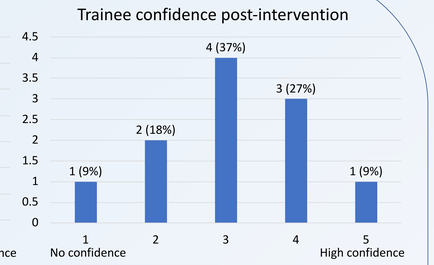
Introduction: Fetal head impaction (FHI) complicates around 18% of emergency caesarean deliveries[1] and is associated with significant morbidity to both mother and baby.[2] It has several implications for anaesthesia, both to facilitate delivery and to manage associated maternal complications. Despite this, there is often little formal training in this area, leaving many trainees lacking in confidence.[2] We aimed to implement a quality improvement initiative to address this deficit, in order to improve trainee confidence and ultimately facilitate improved patient outcomes.

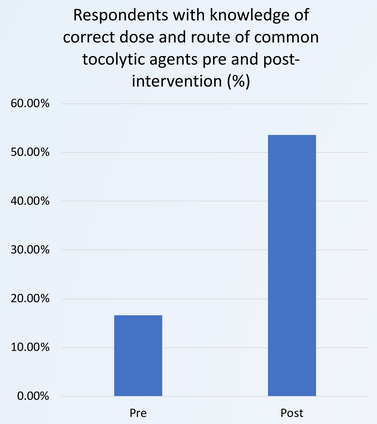
Methods: A focussed literature review was performed to distill the key anaesthetic interventions in the management of FHI. Formal didactic teaching followed by interactive discussion was provided to trainees both opportunistically on the labour ward and at a regional study day. A pre- and post-teaching survey was performed to assess impact on trainee confidence. Following this, a quick reference guide for display in labour ward anaesthetic rooms was developed to facilitate knowledge retention and prompt action in emergency management.

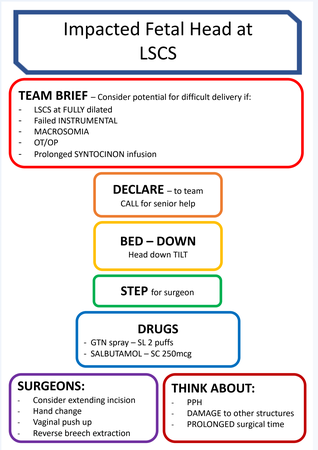
Results: An aide memoir was developed covering the key considerations following the familiar ABC approach:











Quick reference guide

Discussion: Our findings support the notion that trainees are sub-optimally prepared to manage FHI and are keen to develop skills. A simple educational session considerably improved confidence and basic knowledge of drug doses. While there is still much scope for improvement, it is hoped that the availability of a quick reference guide will further improve confidence and facilitate safe patient care in emergency situations. Future work will focus on developing a 'grab box' for emergency tocolytic drugs, mirroring those commonly available for managing other obstetric emergencies.

References

1. Rice A, Tydeman G, Briley A et al. The impacted foetal head at caesarean section: incidence and techniques used in a single UK institution. *J of Obstetrics and Gynaecology*. 2019; 39:7,948-951.
2. Cornthwaite K, Bahl R, Lenguerrand E et al. Impacted foetal head at caesarean section: a national survey of practice and training. *J of Obstetrics and Gynaecology*. 2021; 41:3, 360-366.