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Obstetrician opinion on the use of the C-snorkel and fetal pillow for the fully dilated caesarean section (FDCS)**Johns, KF; Yasin, N; Khoo, CL; Grivell, R^{1,2}**¹Obstetrics and Gynaecology, Flinders Medical Centre, Southern Adelaide Local Health Network (SALHN), Adelaide, Australia; ²College of Medicine and Public Health, Flinders University, Adelaide, Australia

Introduction The caesarean section (CS) rate in Australia has been steadily increasing, with the rate being reported at 33% in 2015. CS, especially when performed at full dilatation may be associated with maternal and neonatal morbidity.

Manoeuvres such as the reverse breech extraction and/or vaginal elevation of the fetal head, have been utilised with the intention of reducing morbidity.

Two adjunct devices were made available in Flinders Medical Centre, a tertiary hospital in Adelaide, Australia in 2015: the C-snorkel and the fetal pillow. The decision to use either device has been solely operator (obstetrician) dependent, however since their increasing popularity was noted through increased orders, a survey was designed to gauge the extent of awareness, use and impression of both devices.

Aim This study is designed to identify the awareness of operators (obstetricians) of adjunct devices and impression and perception of the devices efficacy in the FDCS.

Methods The survey was created electronically (SurveyMonkey® (SurveyMonkey, California, USA)) and distributed to all consultants, registrars and registered medical officers working within the Flinders Medical Centre Department of Obstetrics and Gynaecology from the time these devices were introduced in October 2015. Ethics approval was obtained for this study. Questions included whether operators were aware of the devices and whether they have used either or both devices, including the number of times. If they have used either or both devices, they were asked if they would use it again for FDCS.

Conclusion Currently, responses were received from 23 of the possible 40 eligible responders[1]. Of those that responded, 70% were aware of the existence of both devices, with the majority having actual experience using the fetal pillow. When responders were asked about their impression of the device, both devices were deemed to improve the operation.

Although this survey was assessing user impression and not objectively assessing clinical outcomes in our centre, a device that provides a surgeon with the impression of improvement is worth having available when facing a complex operation with the risk of significant morbidity outcomes.

[1] The survey is still open for responses and future data analysis for a further 3 weeks from this abstract submission date (23/10/2017)

GEP6876

Maternal mortality associated with caesarean section in low and middle-income countries: A systematic review of 12 million pregnancies
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Introduction Globally, caesarean section rates are on the rise, despite being a lifesaving procedure for the mother and baby, caesarean section is associated with maternal mortality and morbidity. We estimated the burden of maternal death, and risk factors for maternal and perinatal mortality in women undergoing caesarean section in low and middle-income countries (LMIC).

Methods Major electronic databases until July 2017, for studies reporting risks of maternal death from caesarean section in LMIC without language restrictions. Two independent reviewers undertook quality assessment and data extraction. We computed maternal deaths in women undergoing caesarean section as a proportion of all maternal deaths, and as a proportion of all caesarean sections. We did sub-group analysis and meta-regression by region and income group. Risk factors for complications associated with caesarean section such as such as type and grade of practitioner and type of procedure (first stage, second stage and elective/emergency) were reported as odds ratios (OR) with 95% confidence intervals (CI) and pooled the data using a random effects model.

Findings We included 192 studies from 67 countries. A quarter of all maternal deaths in LMIC occurred in women who had undergone a caesarean section (72 studies, >27 000 maternal deaths). The risk of death following a caesarean section was 8 per 1000 procedures (112 studies; >2.5 million caesarean sections) with the highest rates in sub-Saharan Africa. The rate of perinatal death was 85 per 1000 caesarean sections. The odds of maternal death were doubled with emergency section and increased 12-fold with second stage caesarean section and both were associated with significant morbidity. There was no significant difference in maternal mortality with cadres or seniority of staff performing the procedure.

Conclusion Although caesarean section is meant to be a life saving procedure for both mother and fetus, it contributes to a disproportionately large number of maternal deaths in women undergoing this procedure in low- and middle-income countries, especially in sub saharan africa. Caesarean section should be done only when medically indicated, more investment, training and resources is needed to improve surgery in LMIC so that caesarean sections are safer and more accessible.