Doctors' & midwives' perception of routine vs selective approach to episiotomy in Singapore

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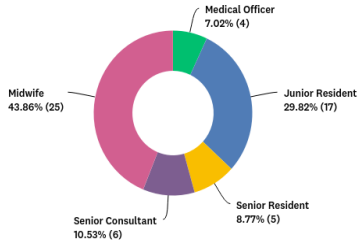
Objective
To identify the perceptions of doctors and midwives, at a large metropolitan hospital in Singapore, their educational preparation and practices used for approach to episiotomy during the second stage of labour.

Design
An anonymous optional questionnaire is distributed to all doctors and midwives attending births in a large metropolitan hospital in Singapore. The survey has various questions on characteristics of respondents, stance towards episiotomy, indication for episiotomy, episiotomy technique and perception of perineal trauma rates in workplace and across Singapore

Method
A structured questionnaire was developed on an online platform, drawing on key concepts from experts and peer-reviewed literature. This questionnaire is distributed by post, email and hardcopy. The respondents were then classified according to their approach towards episiotomy. Routine users – in all cases, liberal users– episiotomy rate>30%, restrictive users: to avoid at all cost unless absolutely necessary and never: to avoid at all cost.

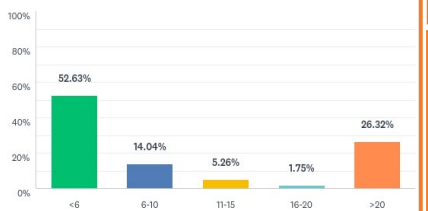
Findings
Surveys were returned by doctors and midwives of varying seniority and birth suite experience levels. Midwives and doctors agreed on the indication for episiotomy, though midwives adopted a more restrictive approach compared to doctors when it came to episiotomy. This may also due to the complexity of cases doctors have been called into assist with instrumental delivery. Also within the doctor group, number of years of birth suite experience does not affect the approach towards episiotomy. When presented with a series of specific obstetric and fetal indications for routine episiotomy majority of respondents indicated that they agreed or strongly agreed that an episiotomy should sometimes be performed. All the doctors had training in diagnosing severe perineal trauma involving anal sphincter injury noting that they felt very confident with this. By contrast, a smaller percentage of midwives reported that they were very confident in diagnosing episiotomy and anal sphincter tears. All doctors were trained in perineal repair, compared with smaller number of midwives. Doctors were more likely to indicate that they were very confident in perineal repair than the midwives. Most respondents were not familiar with the rates of perineal trauma either within their workplace or across Singapore.

Demographics of participants



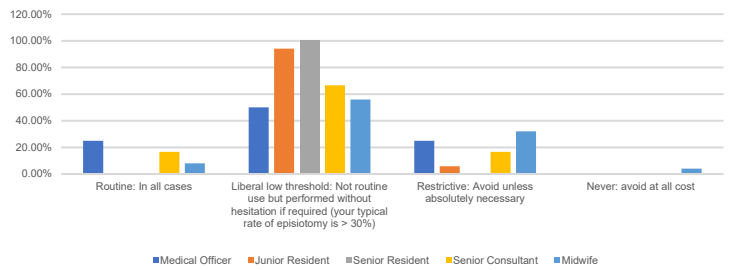
57 healthcare workers at Singapore General Hospital had completed this survey. Most of the participants - 80% were females while about 19% of them were males. About 98% of the participants have only practiced in the private sector. The respondents occupied various roles; majority of the participants - 44% of them being midwives. Junior residents contributed to the second most number of response – 30% followed by senior consultants contributing to 11%. Medical officers and senior residents contributed to the remaining 15%.

Number of years practicing Obstetrics/Birth Suite Experience

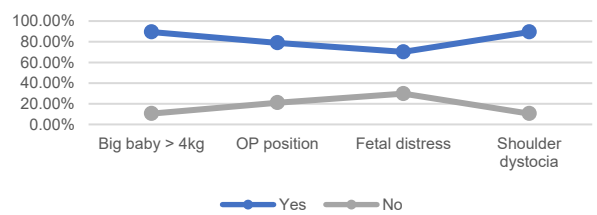


In terms of years of experience in the birth suite/labour ward, most of the participants either had less than 6 years of experience - 53% or more than 20 years of experience - 26%. The 3rd largest group, 14% of the participants had about 6-10 years of experience. The remaining 17% of the participants had experience level ranging from 11-20 years.

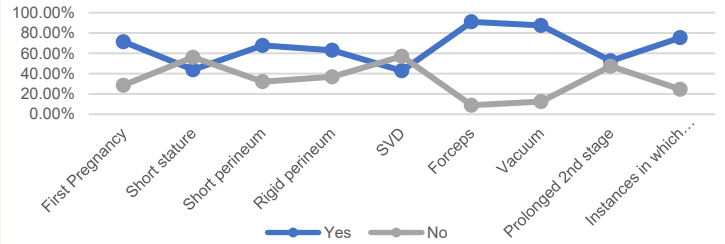
Stance towards Routine Episiotomy



Fetal Indications for Routine Episiotomy



Maternal Indications for Routine Episiotomy



In all fetal indications, most respondents agreed on adopting routine episiotomy approach. Both in case of a big baby > 4kg and shoulder dystocia, 89% of the participants agreed with routine episiotomy being performed. However in contrast, only 70% of the healthcare professionals agreed on a adopting a routine episiotomy approach in fetal distress.

98% of the participants are right hand dominant. Majority of the participants - 95% of them prefer to adopt mediolateral approach to episiotomy of which 67% of the participants voted for only adopting right mediolateral approach while 12% adopted only left mediolateral approach. In comparison 16% of the respondents are flexible with adopting with either right or left mediolateral episiotomy approach based on the clinical assessment.

Almost an equal number of participants were comfortable in preforming midline and J-shaped episiotomies. 5% of the participants voted as being comfortable in performing midline episiotomy while 4% of the participants would prefer to perform J-shaped episiotomy instead.

More than half of the participants are confident in assessing 3rd &4th degree tears, had attended courses in performing episiotomies and are confident in repairing 3rd &4th degree tears. 57% of the participants had attended a course on basic perineal repair while 54% of the participants have attended OASIS course.

For most of the maternal indications, most participants agreed on adopting routine episiotomy approach to prevent adverse outcomes except in 2 scenarios. In the case of spontaneous vaginal delivery 57% of the participants disagreed on performing routine episiotomy. Similarly 56% of the respondents would not perform routine episiotomy in a patient with short stature.

In contrast, majority of the participants agreed that they adopt routine episiotomy approach in instrumental deliveries: 91% for forceps delivery and 88% in vacuum deliveries.

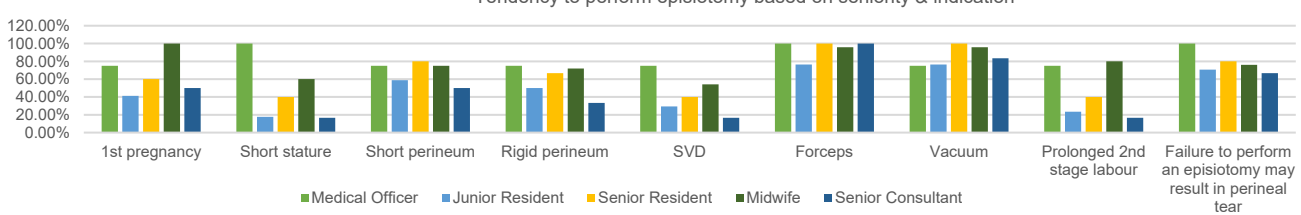
There is equivocal response to adopting routine episiotomy approach to prolonged 2nd stage of labour - 53% of the respondents agreed with this approach.

In terms of mediolateral episiotomies, largest percentage of respondents - 46% voted for 60 degrees as an ideal angle for episiotomy. Both 45 degrees and ">60 degrees to <90 degrees" angle episiotomies have comparable amount of participants while 90 degree and 30 degree angle episiotomies have the least number of participants. None of the participants did episiotomies that were "J shaped" or more than 90 degrees.

Most of the participants – 72%, are describe themselves as having a liberal to low threshold approach to performing routine episiotomies; which is to say that their typical rate of episiotomy is >30%. In contrast 19% of all participants, who are all midwives, would adopt a restrictive approach to episiotomies; meaning avoiding episiotomies unless absolutely necessary. Surprisingly, 7% of the participants mentioned that they would perform episiotomies in all cases and in contrast 1% voted as never performing episiotomies (midwifery staff who has not been trained in episiotomy).

Conclusion:
Approach to episiotomy appears to be liberal in significant no of practitioners, formal training is lacking both in basic perineal repair as well as OASIS. Only a minority of obstetricians practice the recommended angle of incision for mediolateral episiotomy, ie 60 degrees. There is a need for education and increased awareness in the evidence for and against episiotomy

Tendency to perform episiotomy based on seniority & indication



Fetal Indications for Routine Episiotomy	Medical Officer	Junior Resident	Senior Resident	Midwife	Senior Consultant
Big baby > 4kg	100%	82.35%	80%	92%	100%
OP position	75%	64.71%	100%	88%	66.67%
Fetal distress	100%	41.18%	60%	88%	66.67%
Shoulder dystocia	100%	82.35%	100%	96%	66.67%