# **Obstetricians/Trainee Obstetricians**

1. Have you had any personal experience in delivery of an impacted head at second stage caesarean section?

# Yes/No/Unsure

2. Approximately how many cases have you dealt with?

# **Open Answer**

3.

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the vagina							
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the head							
Asked for							
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agent to							
the mother							
Insertion							
of a							
Tydeman							
tube into							
the							
vagina, to							

elevate					
the head					

- a) If you have used any techniques other than those listed above, please specify here.
- 4. What is your preferred technique(s)? (tick up to 2)
  - Asked an assistant to push the baby's head upwards through the vagina: "push technique"
  - Baby's feet delivered first: reverse breech extraction or "pull technique"
  - Baby's shoulders delivered first: "Patwardhan method"
  - Insertion of a fetal pillow into the vagina to elevate the head
  - Asked for the operation table to be titled head down
  - Administration of a tocolytic agent to the mother
  - Insertion of a Tydeman tube into the vagina, to elevate the head
  - Other
- a) If you selected Other, please specify.
- 5. Do you think that any further training would improve your skill in delivery of an impacted head at caesarean section?

#### Yes/No

- 6. What training do you think should be provided for the management of an impacted fetal head?
  - Lecture
  - Online training
  - Demonstration
  - Hands-on training
  - Other
- a) If you selected Other, please specify.
- 7. Have you ever worked in a unit that has access to the equipment below?

	Yes	No
Fetal pillow		
Tydeman Tube		

8. Do you currently work in a unit that has access to the equipment below?

	Yes	No
Fetal pillow		

Tydeman Tube	

9. Do you think that a clinical trial in methods of delivery of an impacted fetal head at caesarean section would provide information to guide your clinical practice?

# Yes/No

10. Would you be willing to participate in such a clinical trial?

#### Yes/No

a) Do you feel that you would need any further training in delivery of an impacted fetal head prior to a clinical trial on the topic? If so, what training do you feel you would need?

	Yes,	Ι	Yes, I	Yes, I would	Yes, I	No, I
	would		would need	need training via	would	would
	need		training via	a demonstration	need	not need
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Asked an assistant						
to push the baby's						
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be titled head down			
Administration of a			
tocolytic agent to			
the mother			
Insertion of a			
Tydeman tube into			
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- b) Which techniques would you consider most appropriate for a clinical trial? (select up to 4)
  - Asked an assistant to push the baby's head upwards through the vagina: "push technique"
  - Baby's feet delivered first: reverse breech extraction or "pull technique"
  - Baby's shoulders delivered first: "Patwardhan method"
  - Insertion of a fetal pillow into the vagina to elevate the head
  - Asked for the operation table to be titled head down
  - Administration of a tocolytic agent to the mother
  - Insertion of a Tydeman tube into the vagina, to elevate the head
  - Other
- c) If you selected Other, please specify.
- 11. What is your specialty?

# **Obstetrics/Obstetrics and Gynaecology**

a) What percentage of your time is spent in obstetrics?

# Open answer

12. What is your current grade?

# Consultant/Staff grade/Specialty trainee (year 6-7)/Specialty trainee (year 3-5)/Specialty trainee (year 1-2)

a) We would like to invite you to take part in a further stage of our study. Following the results of this survey, we will be conducting a Delphi survey. The Delphi survey will help us know which techniques should be tested in a randomised controlled trial. The Delphi survey will consist of three rounds, each taking around 15 minutes to complete. If you would like to take part in our Delphi survey, please provide your email address below. Your responses to this survey remain anonymous.

# Option open answer to provide email address

13. Total time spent in obstetrics (years)

# Open answer

14. Duration of time in obstetrics in UK (years)

#### Open answer

15. Current employment

# **Full-time/part-time**

16. Number of deliveries annually in your current hospital

#### Open answer

17. Thank you very much for your time. If there is anything else you would like to tell us, please use the box below.

#### **Open answer**

# **Obstetric anaesthetists**

18. Approximately how many caesarean sections have you been part of in the past three months?

# 0/1-5/6-10/>10

19. During you career, can you recall any incidents of impacted fetal head or the operating surgeon experiencing difficult delivering the head in a second stage caesarean section?

#### Yes/No

a) How many times has this happened during your career?

### Open answer

b) How many times has this happened in the past year?

# **Open answer**

c) Of the techniques listed below, please specify if you have personally used them to help deliver an impacted fetal head, or if you have received training.

	you use this teclue?	i d s hniq	techr	Have you received training in this cechnique? Tick all that apply.  The provided your training?									
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d) What is your preferred technique(s)? (tick up to 2)

# Administration of tocolytic agents to the mother/Head down tilt of the operating table/Other

If you selected Other, please specify.

# Open answer

20. What is your preferred tocolytic agent?

# Salbutamol/Terbutaline/Nifedipine/Indomethacin/Magnesium sulphate/Glyceryl trinitrate (GTN)/Atosiban

a) What is your preferred route?

# Oral/Sublingual/Intravenous/Intramuscular/Subcutaneous/Other

- If you selected Other, please specify.
- b) What is your preferred dose? Please provide dose and unit.

### **Open answer**

c) Do you ever give a second dose?

# Frequently/Sometimes/Rarely/In the past/Never

21. How confident are you about your role and responsibilities when assisting at an operative birth with an impacted fetal head?

# 1 = not confident at all, 10 = very confident

22. Do you think that any further training would improve your skill in delivery of an impacted head at caesarean section?

# Yes/No/Unsure

- a) What training for the management of impacted fetal head would you like?
  - Lecture
  - Online training
  - Demonstration
  - · Hands-on training
  - Other

If you selected Other, please specify.

# Open answer

b) Do you think management of an impacted fetal head at caesarean section should be part of yearly training updates (mandatory study days)?

# Yes/No

23. Do you think that a clinical trial in methods of delivery of an impacted fetal head at caesarean section would provide information to guide your clinical practice?

# Yes/No

a) Would you be willing to participate in such a clinical trial?

# Yes/No

b) Would you feel that you needed any further training in the anaesthetic techniques used in aiding the delivery of an impacted head at caesarean section prior to a clinical trial on the topic?

# Yes/No/Not interested

c) What training do you feel you would need?

# Lecture/Online/Demonstration/Hands on/Other

If you selected Other, please specify.

## **Open answer**

- d) Which techniques would you consider most appropriate for a clinical trial? (select up to 4)
  - Asking an assistant to push the baby's head upwards through the vagina: "push technique"
  - Baby's feet delivered first: reverse breech extraction or "pull technique"
  - Baby's shoulders delivered first: "Patwardhan method"
  - Insertion of a fetal pillow into the vagina to elevate the head
  - The operation table to be titled head down
  - Administration of a tocolytic agent to the mother
  - Insertion of a Tydeman tube into the vagina, to elevate the head
  - Other
  - Unable to comment

If you selected Other, please specify.

#### Open answer

24. What is your speciality?

# Open answer

25. What is your current grade?

# Consultant/Staff grade/Specialty trainee (year 6-7)/Specialty trainee (year 3-5)

b) We would like to invite you to take part in a further stage of our study. Following the results of this survey, we will be conducting a Delphi survey. The Delphi survey will help us know which techniques should be tested in a randomised controlled trial. The Delphi survey will consist of three rounds, each taking around 15 minutes to complete. If you would like to take part in our Delphi survey, please provide your email address below. Your responses to this survey remain anonymous.

# Option open answer to provide email address

26. Total time spent in obstetric anaesthesia (years)

# Open answer

27. Duration of time in obstetric anaesthesia in UK (years)

### **Open answer**

28. Current employment

#### **Full-time/part-time**

29. Number of deliveries annually in your current hospital

# Open answer

30. Thank you very much for your time. If there is anything else you would like to tell us, please use the box below.

# Open answer

# **Midwives**

1. How many (approximately) caesarean section have you been part of in the past three months?

# 0/1-5/5-10/>10/Other

If you selected Other, please specify.

# Open answer

2. Do you ever scrub up for a caesarean section?

# Frequently/Sometimes/Rarely/In the past/Never

3. Can you recall of any incidents of impacted fetal head or the operating surgeon experiencing difficulty delivering the head in a second stage caesarean section?

# Yes/No

a) Approximately how many times has this happened during your career?

#### Open answer

b) Approximately how many times has this happened in the past year?

#### Open answer

c) Of the techniques listed below, please indicate whether you have personally used the technique to help deliver an impacted fetal head or received training.

	Have	e	Have y	ou rece						
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	Ye	N	Yes, I	Yes, I	Yes, I	Yes, I	No, I		If you	If you
	s	0	have	have	have	have	have		select	have
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Tydeman					
tube into					
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vagina,					
to elevate					
the head					

d) What is your preferred technique(s)? (tick up to 2)

Pushed the baby's head upwards through the vagina: "push technique"/Insertion of a fetal pillow into the vagina to elevate the head/Administration of tocolytic agents to the mother/Insertion of a Tydeman tube into the vagina, to elevate the head/Other

ii) If you selected Other, please specify.

# **Open answer**

31. How confident are you about your role and responsibilities when assisting at an operative birth with an impacted fetal head?

# 1 = not confident at all, 10 = very confident

32. Do you think that further training would improve your skill in delivery of an impacted fetal head at caesarean section?

# Yes/No

a) What training for the management of impacted fetal head would you like?

# Lecture/Online/Demonstration/Hands on/Other

If you selected Other, please specify.

33. Do you think management of an impacted fetal head at caesarean section should be part of yearly training updates (mandatory study days)?

# Yes/No

34. Do you think that a clinical trial in methods of delivery of an impacted fetal head at caesarean section would provide information to guide your clinical practice?

# Yes/No

e) Would you be willing to participate in such a clinical trial?

#### Yes/No

f) Would you feel that you needed any further training in delivery of an impacted fetal head at caesarean section prior to a clinical trial on the topic?

# Yes/No/Not interested

g) What training do you feel you would need?

# **Lecture/Online/Demonstration/Hands on/Other**

If you selected Other, please specify.

# **Open answer**

- h) Which techniques would you consider most appropriate for a clinical trial? (select up to 4)
  - Asking an assistant to push the baby's head upwards through the vagina: "push technique"
  - Baby's feet delivered first: reverse breech extraction or "pull technique"
  - Baby's shoulders delivered first: "Patwardhan method"
  - Insertion of a fetal pillow into the vagina to elevate the head
  - The operation table to be titled head down
  - Administration of a tocolytic agent to the mother
  - Insertion of a Tydeman tube into the vagina, to elevate the head
- 35. What is your band?

# Open answer

36. What is your job title?

### Open answer

37. Total time spent on birth unit/delivery suite or equivalent in the UK? (years)

# 0-5/5-10/>10

c) We would like to invite you to take part in a further stage of our study. Following the results of this survey, we will be conducting a Delphi survey. The Delphi survey will help us know which techniques should be tested in a randomised controlled trial. The Delphi survey will consist of three rounds, each taking around 15 minutes to complete. If you would like to take part in our Delphi survey, please provide your email address below. Your responses to this survey remain anonymous.

# Option open answer to provide email address

38. Number of years qualified

# Open answer

39. Current employment

# Full-time/part-time

40. Number of deliveries annually in your current hospital

# **Open answer**

41. Thank you very much for your time. If there is anything else you would like to tell us, please use the box below.

# Open answer

# **Parents**

42. Have you or your partner given birth in the last 5 years?

# Yes/No

43. How old are you?

# Under 18/Under 20/20-24/25-29/30-34/35-39/40 and over

44. Please select the correct statement.

# I have given birth in the last 5 years/I have given birth in the last 5 years

45. During the past 5 years, how many times have you or your partner given birth? 1/2/3/4/5

46. Please complete the table below to show how many times you/your partner have given birth in the last 5 years.

How was this baby	If this	If you do remember the doctor having difficulty
delivered?	birth	delivering the baby during emergency caesarean
	was	section, do you remember if the doctor used any
	perform	of the following techniques to help deliver your
	ed by	baby (they may have told you afterwards)?
	emerge	
	ncy	
	caesare	
	an	
	section,	
	do you	
	rememb	
	er if the	

				ere diff at poi	tor d an icult th nt c	y y e of							
				g bab	you y?	ır							
Vag inal ly	Plan ned caes area n sect ion	Eme rgen cy caes area n secti on	N / A	Yes	N o	Aske d an assis tant to push the baby upw ards thro ugh the vagi na	Bab y's feet deli ver ed first	Bab y's sho ulde rs deli ver ed first	A devi ce that look s like a ball oon inse rted into the vagi na befo re the caes area n sect ion calle d a	Ask ed for the ope rati ng tabl e to be tilte d dow n	Give n you a med icati on calle d a 'toco lytic' to rela x your wom b (giv en as a spra y und er the tong	Sili con e tub e ins ert ed int o the vag ina to pus h the bab y's hea d up war ds	I don' t rem emb er
									`feta I		ue or		

					pillo	by a	
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For the next few questions, we would like you to imagine a scenario:

You/your partner are in labour and you are told you need an emergency caesarean section. You are told that occasionally the doctor can encounter difficulty delivering the baby's head, because the baby has become deeply stuck in the pelvis, which means the doctor needs to take action quickly to avoid complications for the mother and baby.

Due to a lack of research in this difficult area, doctors do not know the best technique to deliver your baby and could choose from a number of different techniques. There is no evidence to suggest which techniques are better than others.

47. Which of the following techniques would you prefer your doctor to undertake? Please rate each technique using the table below.

	Please rate each technique							
	Very	Somewhat	Neutral	Somewhat	Not at all			
	acceptable	acceptable		not	acceptable			
				acceptable				
Asked an								
assistant to								
push the								
baby's head								
upwards								
through the								
vagina								
Baby's feet								
delivered first								
Baby's								
shoulders								
delivered first								
A device that								
looks like a								
balloon								
inserted into								
the vagina								
before the								
caesarean								
section								

started called			
a 'fetal pillow'			
Give you a			
medication			
called a			
'tocolytic' to			
relax your			
womb (given			
as a spray			
under the			
tongue or by			
a drip in your			
vein)			
Silicone tube			
inserted into			
the vagina to			
push the			
baby's head			
upwards			
I would prefer			
the doctor to			
undertake the			
procedure			
he/she felt			
most			
comfortable			
in			
I do not have			
a preference			

Still considering the same scenario, now think about being approached and asked to take part in a research study, whilst in labour.

In order to gain evidence on the best technique to deliver the baby in the situation, comparing different techniques could be undertaken. In this situation, neither the mother

nor doctor could choose which technique they would use to help deliver the baby; instead this would be randomly allocated by a computer.

48. If you were approached to take part in such a study during labour, on a scale of 1-5 (1 being the least likely, 5 being the most likely), how likely would you be to agree to take part?

#### 1-5 scale

- 49. If you would not like to take part in this study, why not?
  - I would prefer for my doctor to deliver my baby in the way they feel is best for me and my baby
  - I would not like a computer choosing the way in which my baby would be delivered
  - I would not like to have to think about a research study whilst in labour
  - Other

If you selected Other, please specify.

# **Open answer**

Thank you very much for your time. If there is anything else you would like to tell us, please use the box below.