Name*:
Doctor Mark Houghton

Email*:

Phone number:

Address:

Postcode:

Are you responding on behalf of an organisation or as an individual?
Individual

Name of organisation (if applicable):

Position in organisation (if applicable):

Profession:
Author of Pregnancy and Abortion Your Choice, 2017 Gen practitioner retired medical doctor,

Please describe your interest in the questions raised by the inquiry:
I'm concerned That the UK Abortion Act is exposing unborn humans to needless suffering.

Do you wish for your evidence to be kept anonymous? (please select)
No

Questions

1. Fetal development and activity - current state of evidence

(Please note if you only have expertise in one area of fetal development, feel free to provide evidence only for that area. For all evidence provided please provide citations. Please give fetal age in weeks from conception.)

1.1 Please provide an outline of the current evidence regarding fetal development and what age of development each milestone is likely to begin to occur.

Examples of areas that can be covered in this section: Fetal response to light, sound,

taste/smell, touch, noxious stimuli and the response that is likely to occur eg limb movement, change in pulse rate, adrenaline level, facial expression; fetal awareness and learning.

day 18: heart begins to beat
week 4: basic structures of nervous system established
week 5: blood is forming
week 6: begins to move
week 10: reflexes begin -response to touch
week 12: thumb sucking begins, facial muscles move
week 13: eyes shut, but sensitive to light
week 17: all senses developed, including hearing
week 21: memories (subconscious) begin from this point onwards
year 25: cortical circuitry reaches mature state

Pregnancy and Abortion: Your Choice by Dr M Houghton, Dr E Luthy, Prof John Wyatt
http://www.cell.com/cell/fulltext/S0092-8674(17)30287-8
https://www.babycenter.com/fetal-development-week-by-week
1.2 Please provide an outline of psychological, physical or behavioural examples of how life in utero might impact later life, whether childhood or adult.

I have spoken to 2 clinical psychologists, one trained as a doctor at Charing Cross Hospital just before I did, he told me it is simple and quick to bring someone back in their memories into their pre-birth life and even their very early existence in the 1st trimester of pregnancy. Both doctors agreed that even the circumstances of conception have an effect on a person's life.

I have spoken to another clinical counsellor and psychologist who completely corroborated this view. Therefore simplistic denials that the fetus feels pain before a certain age because the relevant connections are thought not to be there should be taken cautiously. Err on the side of caution when we cannot be sure if the fetus is feeling or not.

2. Fetal pain and use of analgesia - current state of evidence

2.1 Please provide an outline of the current evidence regarding fetal pain.
(Eg 4D ultrasound, EEG signals, fetal analgesia for surgery in utero, children with hydranencephaly, measurable physiological responses to needling, mesodiencephalon/CNS maturity, extremely premature babies (20 weeks) etc)

A study from last year concluded that at 15 weeks the mesodiencephalon is sufficiently mature to allow pain experience.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5115678/#!po=1.66667

It has long been established that there are fetal stress responses to needling (not simple reflex responses) and these have been documented from 15 weeks onwards (Due to small fetal size,

these procedures are currently performed from 15 weeks at the earliest).
https://www.ncbi.nlm.nih.gov/pubmed/14711850 [article gives weeks as gestational]
Intermittent EEG signals occur from around 16 weeks onwards.
http://www.cirp.org/library/pain/anand/ [article gives weeks as gestational]

Fetal pain has been researched and established for decades. Here is a paper from 2004 that concludes fetal pain from 17 weeks:
http://www.nrlc.org/uploads/fetalpain/AnandPainReport.pdf [article gives weeks as gestational]

Spinothalamic fibres (responsible for transmission of pain) develop between 14 (some sources: 12) and 18 weeks. Fetal surgery uses fetal analgesia as well as muscle relaxant (Due to small fetal size, these procedures are currently performed from 18 weeks at the earliest). Fetal surgeries performed without analgesia cause profound long term effects on the individual.
https://academic.oup.com/bjaed/article/8/2/71/338464/Fetal-surgery-and-anaesthetic-implications [article gives weeks as gestational]
https://www.librarything.com/work/2185064/workdetails

Even though the cortex and thalamus are not fully connected until week 24, observations of babies and toddlers with hydranencephaly demonstrate that a cortex is not required to experience pain. These children's lives also demonstrate that a cortex is not necessary for a personality and the range of human emotions.
https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/consciousness-without-a-cerebral-cortex-a-challenge-for-neuroscience-and-medicine/C9B1B393176EF250D4AFBB3054A04E31

Some scientists have argued that fetal pain is impossible before the cortex is connected to the thalamus, however, experiments have shown that the cortex is not involved in the conscious perception of pain; pain perception is localised to the thalamus and spino-thalamic connections develop between 12-18 weeks.
https://academic.oup.com/brain/article/doi/10.1093/brain/awr265/261811/Stimulation-of-the-human-cortex-and-the-experience
http://www.cell.com/cell/fulltext/S0092-8674(17)30287-8

As medical care has advanced, babies are surviving at earlier and earlier ages. In high income countries 50% of extremely premature babies (20-22 weeks old) now survive. Medical practitioners are more than aware that not only do these babies feel pain, they experience pain to a higher degree the younger they are.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4438860/
https://www.librarything.com/work/2185064/workdetails
https://aaplog.wildapricot.org/resources/Documents/Condic%20fetal%20pain%20testimony.pdf

2.2 In your opinion, from what age would you consider that a fetus:
(i) Is very likely to feel pain (>90% certainty of pain)

18 weeks (spinothalamic pathway mature)

(ii) Probably feels pain (>50% certainty of pain)

15 weeks (mesodiencephalon mature)

(iii) Possibly feels pain (>10% certainty of pain)

12 weeks (connections between spinal cord and thalamus begin)

(iv) Is unlikely to feel pain, but is theoretically possible to (>1% certainty of pain)

8 weeks (spinal circuitry for pain detection is established

2.3 What reasons might a fetus have for experiencing more acute pain than an adult, and to what extent might this be experienced?

"Early in development, overlapping nerve terminals create local hyperexcitable networks, enabling even low-threshold stimuli to produce an exaggerated pain response." [Manual of Neonatal Care, Part 67; JP Cloherty et al. 2012]

Pain inhibitory pathways develop postnatally.
https://www.cambridge.org/core/books/case-studies-in-pain-management/pediatric-infant-and-fetal-pain/F726E679CB7E7D5C4480C7022D40F14B
"Increased sensitivity to pain. In 2010 one group noted that "the earlier infants are delivered, the stronger their response to pain."[xx] This increased sensitivity is due to the fact that the neural mechanisms that inhibit pain sensations do not begin to develop until 32-34 weeks post-fertilization (34-36 weeks gestation), and are not complete until a significant time after birth.[xxi] This means that unborn, as well as newborn and preterm infants, show "hyperresponsiveness" to pain.[xxii] Authors of a 2015 study used the fMRI technique to measure pain response in newborns (1-6 days old) vs. adults (23-36 years old), and found that "the infant pain experience closely resembles that seen in adults." [xxiii] Babies had 18 out of 20 brain regions respond like adults, yet they showed much greater sensitivity to pain, responding at a level four times as sensitive as adults"
https://lozierinstitute.org/fact-sheet-science-of-fetal-pain/

2.4 As medical science advances and surgery in utero can be performed even earlier, in your opinion, what will be the earliest fetal age that consultants need not administer any fetal analgesia and give muscle relaxant only?

0-8 weeks.

2.5 In your view, what will a fetus potentially experience during these procedures performed under the current published guidelines in the UK:

(i) Dilation & evacuation (used from around 15 weeks of pregnancy)

Dilation & evacuation (from around 15 weeks of pregnancy)
The mother would have general anaesthetic beforehand, but this would have little, if any, effect on the fetus. According to research into hypersensitivity, the fetus would experience the procedure at four times the level of sensitivity as an adult.
The fetus would experience a pair of toothed tongs firmly gripping onto their leg and then pulling until the leg comes off. This is then repeated with his or her other leg. Each arm is then gripped and pulled off. Sometimes the intestines are also pulled off. Finally, the fetus would feel the tongs clamp firmly around their skull which are then tightened until their skull is crushed.

There were 9,520 abortions by Dilation and Evacuation in England and Wales in 2016.

https://en.m.wikipedia.org/wiki/Dilation_and_evacuation
https://m.youtube.com/watch?v=jgw4X7Dw_3k&list=PLRCroccSjXWR9HVr_ooA3ErEAR0SifdwY
https://elifesciences.org/articles/06356
https://www.bpas.org/abortion-care/abortion-treatments/surgical-abortion/dilatation-and-evacuation/

(ii) Feticide by potassium chloride (used from around 22 weeks of pregnancy)
The mother would have local anaesthetic beforehand, but this would have little, if any, effect on the fetus. Using ultrasound to navigate, the medical practitioner injects potassium chloride into the fetus' heart causing cardiac arrest. There were 1,508 such feticides in England and Wales in 2016.
The fetus would feel the searing burning sensation caused by the potassium chloride moving into his or her heart (adults receiving dilute IV KCl describe this pain in their veins).
The fetus would feel their heart go into cardiac arrest (surviving adults describe this as if a car is driving over their chest).
According to RCOG, asystole is "typically within minutes after injection" -their death is not quick.
A fetus' sensitivity to pain is four times that of an adult.
https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/019904s014lbl.pdf
https://myheartsisters.org/2009/08/14/how-does-it-feel/
http://www.reproductivereview.org/index.php/site/article/1093/
https://en.m.wikipedia.org/wiki/Lethal_injection
https://elifesciences.org/articles/06356
https://www.bpas.org/abortion-care/abortion-treatments/the-abortion-pill/feticide/

3 Views on the law, guidance and practice
3.1 Giving reasons, in your opinion, are the current guidelines (eg RCOG Fetal Awareness

2010) relating to fetal development and activity effective:
(i) For medical practitioners?

For the fetus they are not effective.

From RCOG's point of view, the guidelines on Fetal Awareness, initially published in 1997 and then updated in 2010, are effective. The guidelines' conclusion that a fetus does not feel pain during an abortion would be effective in protecting its members and medical colleagues from the scientific evidence and also their own experiences during late term abortion procedures. Having been successfully shielded, they have then been able to proceed with their work without having to raise questions regarding their impact on the products of conception.

Medical practitioners involved in the industry would have been aware at the time of the growing scientific debate and evidence regarding fetal pain. During the procedures themselves, they would see with ultrasound the effect of their own actions are having on the fetus, which would be understandably potentially incredibly distressing. By following the guidelines, they could rest assured that the movements they witness day after day are merely reflex actions of a fetus that is never actually conscious.

(ii) For women requesting an abortion?

Women, their partners and fathers of their unborn children are inaccurately served by these guidelines.
From the RCOG's point of view, their guidelines would be effective for the actual procedure. From the Information for Women and Parents section, there are recommended answers for common questions. eg Q: "Will the fetus/baby feel pain?" A: "No, the fetus will not feel pain." P.30. Such a strong statement from a medical practitioner, given as an absolute certainty, could be effective in putting a mother's fears to rest.

Based on the current scientific evidence, and on the available evidence at the time of writing the guidelines, it seems that thousands of mothers and parents have been misled.

So, from the mother's point of view, the RCOG guidelines are not just ineffective, they are negligent at best: they result in her trustfully giving consent for her child to endure the termination procedure without any pain relief whatsoever.

(iii) For the fetus?

No, since, unless the fetus is the patient, such as during surgery in utero, where fetal anesthetic is standard practice, the fetus is subject to pain during the abortion procedure.

3.2 Please make any recommendations for changes in the following areas that you think would reflect the current evidence regarding fetal development and activity:

a) Law

(i) lower abortion limit to 12 weeks (the age from which spinothalamic connections and therefore the possibility of pain awareness to begin).

(ii) mandatory effective fetal pain relief prior to any terminations from 12 weeks onwards.

ii) review the law regularly to consider if full analgesia for the fetus and mother should be given for terminations before 12 weeks.

b) Guidance for:
(i) Medical practitioners

a) an interim addition to all dilation & evacuation and feticide procedures: prior injection of fentanyl .

b) an interim guidance for all medical practitioners to advise their patients in line with the current scientific evidence eg Q: Will my baby/fetus feel pain?
A: No, because beforehand we will give your baby/fetus a painkiller.

c) a working group to investigate 1) how to administer a fentanyl injection with a minimal level of fetal distress 2) whether other procedures, such as termination by vacuum aspiration, would also warrant additional considerations regarding fetal distress
(ii) a review of scientific evidence regarding fetal awareness and publishing a new guidance paper by a working group and peer reviewers independent of the abortion industry and any other outside interests
(iii) the BMA, who base their policies and guidance in this area on RCOG's authority, to update their policies and guidance accordingly [to both (i) and (ii)].

d) Give authority for these guidelines to another body of independent experts not the RCOG or BMA who have vested interests.

(ii) Women requesting an abortion

This would follow on from the previous answer: Medical practitioners would be able to advise that the fetus may well feel pain during surgical procedures but measures can be taken that will usually allow reassurance of women that their baby/fetus would not feel pain (because of the fentanyl injection prior to the procedure).

c) Support for:
(this section might be incorporated into b))
(i) Medical Practitioners

c) Education

(i) Fetal Development and sensation to be included in the KS4 Science Curriculum
(ii) Pregnancy, birth and infant care to be curriculum in KS3 and 4 Sex and Relationships Education

3.3 Giving your reasons, do you think the current systems (eg RCOG/DH) in place that develop and review guidelines on issues such as fetal development and activity are effective, accountable and impartial to outside interest? Can you suggest ways in which the current systems can be made more effective, accountable and impartial?

The most important step is to remove the advisory role from the RCOG and other professional bodies that have vested interests in abortion and fetal surgery. This vital job for the well-being of humans must be given to independent experts without any financial interest.

So the answer is, No, because the Department of Health has devolved guidance and policy making to RCOG, whose members both regulate and benefit from an estimated £140 million* annual income of the UK Abortion Industry. This can be compared to the Tobacco Manufacturers Association regulating the production, marketing and sales of cigarettes. It is not surprising that, as a result of self-regulation, their policies and recommendations for clinical practice are written with a bias that benefits themselves and protects their own interests instead of being care focused.

It is not surprising, therefore, that the RCOG working party and peer assessors published the 2010 fetal awareness guidelines that ignored the majority of evidence for fetal pain (including by minimising/excluding the works of Anand, Fisk and Glover -the lead experts) and turned the remaining evidence that they chose to review into sweeping conclusions. One of the co-author's definition of pain is so advanced in cognitive function that it is beyond most toddlers -an argument used in the document to further muddy the waters. The culmination of the document is the assertion that fetal pain cannot occur at any stage of pregnancy and then sets out guidance on how to advise mothers accordingly.

I was recently informed that RCOG consultants now administer fentanyl prior to a feticide by potassium chloride. While this news is most welcome that some babies are now beginning to receive painkiller and their position on fetal pain is thawing, they declined to reveal when they began this practice, from what fetal age they now give this painkiller and whether or not this practice is reflected in their official guidelines. Their guidelines are therefore ineffective from the aspect of not being in step with their current practices. While publicly denying fetal pain, in practice they acknowledge it.

As with other industries, the abortion industry's operations need to be overseen/regulated by an independent, impartial body that it is accountable to (possibly the Care Quality Commission). The independent body and the abortion industry need to operate with transparency (including

disclosure of profits).
The independent body needs sufficient ‘teeth’, with the power to apply sanctions, as appropriate.
The independent body would ensure that the industry is care, not profit focused eg ensuring independent and impartial counselling. After decades of self-regulation, it is likely that other unfair practices have been occurring and these will need reviewing.

*figure estimated by single abortion cost multiplied by the annual number of procedures. The actual figure is unknown because, according to the Department of Health, the information is not collected centrally.

3.4 In what ways can you suggest improvements in reassurance to mothers requesting a late term abortion that their fetus will not suffer in terms of:

(i) Fetal pain
I cannot offer reassurance at the moment because I think the analgesia for the unborn is inadequate in view of the research above.

(ii) Being born alive after abortion
In the year 2012 over 60 babies were born alive after legal abortion attempts. Since then the numbers have stopped being counted because of the embarrassment to the government, NHS and professionals.

3.5 In what ways can you suggest to improve data collection and reporting on abortions (including, but not limited to, fetal pain and babies being born alive after abortion)
It is long overdue that every legal abortion in the UK is linked to the central register with the patient's NHS number. It is scandalous that repeated requests for this simple measure by researchers have been denied.

Suspicion is growing that the government and the professionals are trying to hide something which is affecting the well-being of women, their unborn and their subsequent children – because the latter are at higher risk of being born premature after abortion. See the chapter Premature Birth and Abortion by Prof John Wyatt in the book Pregnancy and Abortion Your Choice.

3.6 In your view, are there any useful precedents for abortion legislation or professional guidance reflecting evidence on fetal pain, awareness and physiological responses from other jurisdictions?
Yes

If yes, please specify:

Yes.

The Pain-Capable Unborn Child Protection Act passed the House of Representatives last month. Citing fetal pain science, it would lower the fetal age of abortion from birth to 20 weeks gestation (18 weeks from fertilisation). The USA remains only one of 7 countries globally that retain no age limit to abortion. However, since 2010, an increasing number of states (currently around 17) have passed fetal pain laws that either restrict abortion age or make anaesthesia mandatory to/after 20 weeks gestation (18 weeks from fertilisation). Federal law banned 'partial birth abortions' in 2003.
In Europe, the UK and the Netherlands both stand out in terms of abortion law because they permit abortions up to 24 weeks on request:
Ireland and Malta countries have tight restrictions, followed by Cyprus, Portugal and Spain. Then there is the majority: 18 countries that permit abortion on request until 12 weeks gestation (10 weeks from fertilisation). Romania has a 14 week limit. We are one of two countries that have approximately double the permitted abortive fetal age of the other 24 European nations. At our current understanding of fetal pain, these countries only need to consider fetal pain laws in exceptional cases as opposed to the UK and the Netherlands. Unlike Holland, though, our laws do not include a 5 day pause between the initial consultation and the procedure.
http://news.bbc.co.uk/1/hi/world/europe/6235557.stm
If the UK lowered the fetal age limit to 12 weeks gestation, then fetal pain would only be an issue for exceptional cases.

3.7 Do you have any personal examples or experiences relating to fetal development and activity that you would like to communicate to this Inquiry?