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Citation: Walker, S., Scamell, M. & Parker, P. M. (2016). Principles of physiological breech birth practice: a Delphi study. Midwifery, 43, pp. 1-6. doi: 10.1016/j.midw.2016.09.003

This is the accepted version of the paper.

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Permanent repository link: https://openaccess.city.ac.uk/id/eprint/15347/

Link to published version: https://doi.org/10.1016/j.midw.2016.09.003

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Principles of physiological breech birth practice: a Delphi study

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Abstract

Objective: to establish a multi-professional consensus on shared principles underlying the practice of physiological breech birth.

Design: three-round Delphi e-survey.

Setting: multi-national.

Participants: a panel of thirteen obstetricians and thirteen midwives, experienced in facilitating physiological breech births in varied settings, and involving varied maternal birthing positions, and two service user representatives.

Methods: an initial survey contained open-ended questions. Answers were coded, amalgamated and categorised. A total of 164 statements were put to the panel in the second round, and 9 further statements were proposed in the third round. The panel indicated the extent of their agreement using a 5-point Likert scale. The pre-determined level of consensus was 70% of respondents indicating 4 or 5 on the Likert scale (agreement or strong agreement).

Findings: the panel indicated consensus on 37 of 66 proposed statements under the theme, 'Principles of Practice.' Negative data (29/66 statements) are also reported, highlighting areas of divergence. The findings suggest a paradigm shift away from management strategies based on prediction and control, and towards facilitation strategies based on relationship and response.

Conclusion
Concepts of breech-specific normality require further exploration. The principles articulated in this research can be used to design further researcher exploring the influence of physiological breech practices on neonatal and maternal outcomes, including women's experiences of maternity care.

Keywords
Breech presentation, midwifery, obstetrics, Delphi, physiological birth, models of care

Highlights

- Upright positioning is a tool, and not a rule, of physiological breech birth
- In physiological birth, locus of greatest efficacy perceived within mother-baby unit
- Clinical ability to enable rather than control birth process is linked to experience
- Calm, supportive relationships in birth environment considered a key safety factor
- Restrictive policies and negative attitudes may undermine safety of breech birth

Introduction

This paper outlines a set of guiding principles for the practice of physiological breech birth, as determined by a Delphi consensus technique survey involving experienced midwives, obstetricians and service user representatives. It addresses an apparent disparity between practices which have been thoroughly researched, and thus used to provide evidence-based guidelines, and differing practices as described by a group of professionals and women experienced in physiological breech birth, which have been much less thoroughly researched. In order to create meaningful studies to determine the safety of these new practices, it is useful to consider how physiological breech practices differ from mainstream practices at the most fundamental and even philosophical levels, which often remain tacit when more practical guidelines and training manuals are written.

Breech presentation at term, where the fetus presents bottom- or feet-first at the time of birth, affects approximately 1:25 women (Ferreira et al, 2015). Mode of birth is controversial (Caughey, 2007), with many breech presenting infants being born by caesarean section, but there is renewed interest in vaginal breech birth (Marko et al, 2015). Prior to this research, professional literature indicated some midwives and obstetricians were facilitating vaginal breech births (VBBs) in ways differing significantly from the assisted breech delivery protocols used in randomised controlled trials informing practice recommendations internationally

(Advanced Life Support in Obstetrics (ALSO), 2010; PROMPT, 2012; RCOG, 2006). Practitioners advocating fundamental changes in practice have argued that upright maternal positioning, in particular, promotes spontaneous physiological birth (Banks, 2007; Cronk, 1998; Evans, 2012; Krause, 2006; Reitter et al, 2014). Additionally, anecdotal and women's advocacy literature indicates that at least some women preferred a more active, physiological approach to VBB (Berkley, 2006; Sanders and Lamb, 2015). However, the most recent Cochrane Review comparing the safety of VBB with caesarean section delivery (CS) made clear the results cannot be generalised to 'methods of breech delivery which differ materially from the clinical delivery protocols used in the trials reviewed' (Hofmeyr et al, 2015, p. 3), in which supine maternal positioning and routine assistance were standard practices. This point has also been made previously by midwifery critics (Fahy, 2011). Therefore, a meaningful gap in the evidence exists concerning whether or not use of upright maternal positioning constitutes a 'materially different' VBB method, and whether or not such differences result in materially different outcomes.

Although the Cochrane review suggests that 'materially different' methods may affect the outcomes of planned VBB, to date only a small study by Bogner et al (2015) has provided outcome data concerning the use of upright positioning. In Bogner et al's study, use of hands/knees maternal positioning appeared to be similarly safe for the infant as supine positioning, however they reported a significant variation between rates of perineal damage for upright VBB (14.6%)

and lithotomy VBB (61%). This suggests a material difference between either the necessity or the inclination to perform an episiotomy when upright positioning is used, which affects maternal morbidity outcomes. In order to affirm or discount this variation, future research would need to acknowledge and measure this difference in practice. Because other differences may produce similar important changes in outcomes, establishing a set of agreed principles underpinning the practice of physiological breech birth using a multi-professional consensus technique is an essential step towards improving practice, evaluation and research design in this area of care.

The primary purpose of this Delphi study was to establish such a consensus on standards of competence for the practice of upright breech birth, defined as *a VBB in which the woman is encouraged to be upright and active throughout labour and able to assume the position of her choice for the birth*, and the results of this aspect of the study have been reported separately [Supplementary Information 1]. However, due to the potential material differences as described above, it was necessary to explore the underlying principles of practice as they emerged in the research, and not assume that upright VBB will share such principles with mainstream assisted breech delivery methods. In the process, it became immediately apparent that participants perceived upright positioning itself to be a product of the underlying principle of optimising labour and birth physiology, rather than an essential feature of practice – upright positioning is a *tool* and not a *rule* of physiological VBB practice. Therefore, adopting this

participant-led focus, a secondary aim in the research was to establish a set of guiding principles for the practice of physiological VBB. These principles of practice are reported in this paper.

Methods

This research consisted of a three round Delphi e-survey, conducted from June 2014 – June 2015, involving an initial round of open-ended questions, followed by two rounds in which participants rated their level of agreement with an aggregate set of statements in order to establish a consensus [Supplementary Information 1]. Participants were recruited by purposive, network and social media sampling, and worked in a wide variety of settings internationally. The 28-member panel which participated in the Delphi study included 13 midwives and 13 obstetricians working in the following countries: Australia, Austria, Brazil, Canada, Germany, Mozambique, New Zealand, United Kingdom, and the United States of America. At least half worked primarily in hospitals, but the panel's experience included home and birth centre settings. The professionals' mean years of experience was 27 (range of 5-50) and mean number of total breech births attended was 135 (range of 20-400). The research also involved two service user representatives identified as leaders of national advocacy organisations. These women were also considered 'experienced' due to their personal encounters with breech pregnancy and their extensive involvement supporting other women planning VBBs, albeit the nature of their experience was

different from the professionals'. Ethical approval for this study was obtained from the Research Ethics Committee of City University London (Ref: PhD/14-15/13).

A more detailed account of the methods and recruitment process of this study have been reported in a complementary paper, along with results pertaining to the theme, Standards of Competence [Supplementary Information 1]. This paper reports results from the same study under the theme, Principles of Practice. Results have been reported separately to enable a fuller discussion of the philosophical implications of these principles. This paper includes one variation from the previously reported methods. In the second round (R2), a multiple-choice question (MCQ) was added to ascertain the variety of participants' experience with maternal birthing positions described in the first round, in answers to open-ended questions. The MCQ enabled all relevant options to be checked and included an 'other' box. The principles of Practice theme included 66 statements grouped into the following categories: first principles (14 statements), maternal positioning (12 statements and 1 MCQ), birth environment (18 statement), fetal positions (14 statements), and safe progress (8 statements). This theme contained 60 statements and 1 MCQ in R2 and 6 statements in R3.

The findings reported below also differ from classical Delphi methods in an important way. Items failing to reach a 70% rate of agreement (*negative results*) were removed from further consideration, rather than re-evaluated in R3. Instead,

6 modified statements formed from the panel's feedback were included in R3. Negative results are also reported in this paper. Delphi studies have been criticised for tending to force a consensus and masking evidence of dissent, such as bimodal results indicating a meaningful split in opinion (Thangaratinam and Redman, 2005). To avoid a potential bias toward consensus, this study has reported the significant number of positive results where a strong (>70%) consensus was achieved, as well as the statements which were not supported at this level.

The experienced panellists participating in this Delphi survey research returned a consensus-level agreement on 37 statements under the Principles of Practice theme. These statements are reported under the categories they were grouped into during the research in *Table 1*, along with the percentage of respondents who agreed with that statement, the mean of the responses on a 5-point Likert scale (1=strongly disagree; 5=strongly agree) and the standard deviation (SD). Negative results, those which did not achieve a minimum 70% rate of agreement among respondents, are reported in *Table 2*. Language taken directly from the consensus statements is in italics in the text descriptions below.

Participant responses in the first round, including comments about the research question, indicated that most viewed upright maternal positioning to be a product of a facilitative approach aiming to optimise physiology. Responsiveness to feedback and member checks is a central aspect of trustworthiness in Delphi

research (Hasson and Keeney, 2011). Therefore, most statements proposed reflected the panellists' orientation and used the phrase, *physiological breech birth*, rather than imposing the researcher's original language, *upright breech birth*.

Findings

First Principles

Participants in the research referred to *first principles* and the *teaching of principles* in their responses. Therefore, statements concerning fundamentals or philosophical approaches to practice were grouped into this category for consideration. The panel strongly agreed that the purpose of upright positioning was to *optimise physiology*, facilitating *the mother's ability to birth her baby with maximum efficiency*, and that optimising this physiological process could increase the *safety* of VBB for both mother and baby. The principles achieving consensus in this study reflect a philosophy of care which recognises the locus of greatest efficacy as lying within the mother-baby unit, as opposed to the active management strategies and procedures performed by professionals, which are the subject of most contemporary guidelines. The phrases *power from above*, *uncompromised baby moves in ways which assist his/her own birth*, *the mother's attitude*, *no routine manoeuvres*, *uncommon to need to do anything*, *woman-led positions*, all suggest a perceived effectiveness inherent to the physiological

process, dependent on contributions from both mother and baby. The participants' consensus statements suggested they perceive a strong but not absolute tendency toward success within this physiological process, which again differs significantly from training programmes suggesting spontaneous breech birth at term is uncommon (PROMPT, 2012).

Although in this approach attendants may appear to 'do' less than they would in an assisted breech delivery, the panellists' view that the attendance of *skilled and experienced professionals* significantly impacts the safety of VBB gained the highest level of consensus in this category. Clinical actions consistent with a physiological VBB approach may be facilitative, using *judicious guidance* to contribute to physiological optimisation, or they may be responsive to a perceived problem. In contrast, although the result was borderline, the panel did not reach a consensus-level agreement around the view that *antenatal screening … has a significant impact on the safety* of VBB, nor did they recommend stricter screening criteria as a means of reducing risk where available skill and experience were minimal. The results in the first principles category emphasised relationship, such as within the mother-baby unit and with caregivers, and response, such as the experienced attendant's on-going assessment of steady progress. They de-emphasised models of care based on prediction of risk, the foundation of antenatal screening, and control, such as further limiting the ability of women to access VBB based on narrower selection criteria, although this

strategy is a mainstay of national-level breech delivery guidelines (RCOG, 2006, Kotaska et al, 2009).

Maternal Positioning

The statements which achieved consensus in this category reflected an approach to maternal positioning which was enabling and responsive, rather than prescriptive and directing. Again, the locus of greatest efficacy was within the mother-baby unit, with attendants recognising this inherent ability and responding to the unfolding process rather than controlling it. Phrases such as *variety of maternal positions*, *judicious guidance … to resolve delay*, *the mother's ability to move*, and *spontaneous positioning … guided by interactions with the baby*, encapsulated this philosophy within the consensus statements. The embodied knowledge of mother and baby was privileged in the caregiving relationship, and the clinical ability to enable the birth process, rather than control it, was linked to *skill which develops with time and experience*.

The participants reported experience supporting VBBs in a variety of maternal positions, including water births. Figure 1 illustrates the percentage of respondents (n=20) reporting experience with the 10 different maternal birthing positions described; one service user declined to respond as her baby had been born by CS. This variety confirmed the panel's initial feedback that upright position was a tool and not a rule of physiological VBB, although more of the

panel reported experience with kneeling and hands/knees positions than the others. In contrast, statements promoting a directive or restrictive approach to maternal positioning did not achieve consensus support with this panel. The experience and consensus statements also differ significantly from most international guidelines and training programmes which direct attendants to place women in a lithotomy position in order to assist a breech delivery.

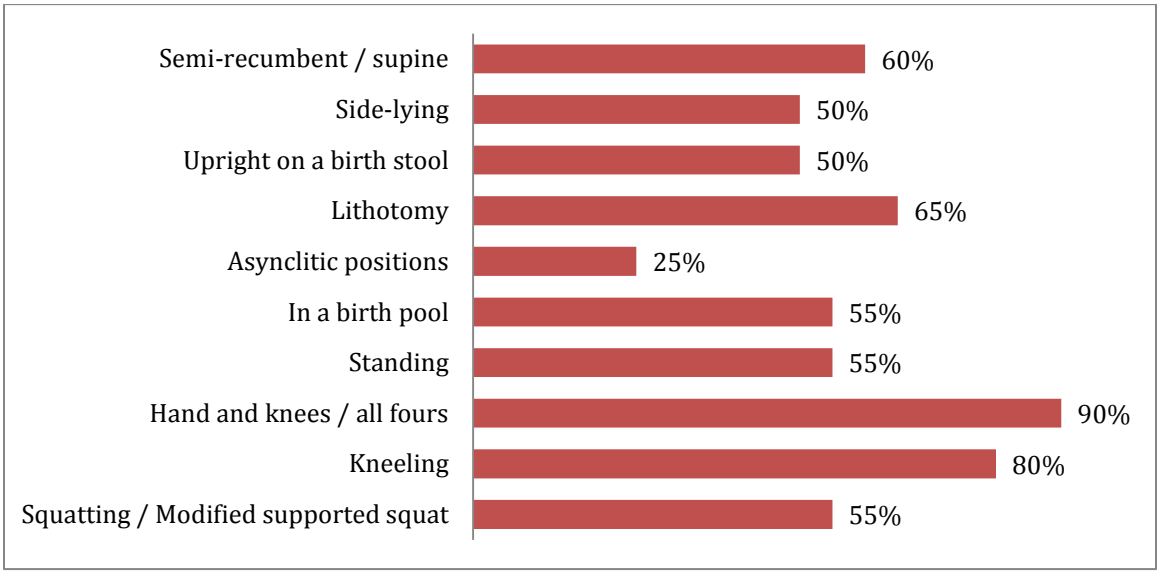

Figure 1. *Maternal birthing positions encountered by panel members*

Birth Environment

The statements which received consensus in this category emphasised the importance of *calm*, *supportive* and familiar relationships within the birth environment, and the detrimental effects of conflict and *fear-based language*. The panel indicated strong agreement around the premise that the quality of

relationships, between women and caregivers, and breech attendants and the wider multi-professional community, impacts both the physiological process and the overall safety of VBB. Although the panel clearly valued *skilled and experienced* professional attendance, they did not agree that *access to skilled midwifery and medical care* is the *most important* aspect of birth setting. This appeared to be because the panel considered that attitude and other environmental factors also contribute significantly to birth safety. The panel did not return a consensus on any statements regarding particular birth location, which probably reflects the multi-professional diversity and differences in practice settings within the panel. However, they did agree that restrictive policies and negative attitudes affect the ability of both women and skilled providers to access hospital-based birth settings.

Fetal Positions

The statements achieving consensus in this category reflected a new approach to evaluating the relative safety of proposed VBB in relation to fetal position. A consensus-level number of the panel were willing to support the range of longitudinal fetal positions (legs extended / *frank*, legs flexed / *incomplete*, one or more hips extended / *footling*) as potential candidates for a safe VBB, although not necessarily recognising them all as '*normal*.' Negative data indicated that strategies of attempting to predict outcomes from supposed static fetal positions and applying limiting pre-labour selection criteria received little support. Instead,

the panel supported the more open and responsive approach of assessing the advisability of proceeding with a VBB throughout labour, using criteria similar to those used in cephalic births – *lack of descent or lack of fetal well-being at the time of labour*. This also contrasts many contemporary guidelines which permit a trial of labour for only frank or complete breech presentations, and sometimes only frank breech presentations.

Safe Progress

Only one statement in this category achieved consensus-level agreement. Panel members considered a period of passive second stage, *a pause after full dilatation and before active pushing begins*, to be common and unproblematic. The variety of statements which failed to reach a consensus again suggests the panel's preference for a responsive, rather than prescriptive, approach to assessing progress within the unique complex of each individual birth, and in relation with each individual woman.

Discussion

This is the first research to describe a set of principles underpinning the practice of physiological VBB agreed by an experienced multi-professional panel including both midwives and obstetricians. In areas of professional practice where experimental evidence is not available, use of a consensus method like

the Delphi survey makes the process of expert opinion development transparent and collaborative. The significant number of statements which achieved 100% consensus in this process demarcate a clear common ground in the practice of physiological VBB among obstetricians and midwives working in very disparate settings, which is unlikely to be attributable to a localised cultural norm. Four out of the ten universally agreed statements contained the word ‘safety.’ We therefore propose that this common ground can be used to inform the design of future research to test the safety of practices based on these principles, using quantified methods.

The negative results reported in this paper also enable the identification of areas where further research is needed to answer questions which were important to this panel, but remained undecided. One of these areas concerned what sort of progress in labour should be considered ‘normal for breech,’ as evaluation of normal progress was considered a key safety concern. As the negative data [*Table 2*] indicate, the panel’s open-ended responses in R1 suggested that the progress of breech labours could be generally quicker, slower, or roughly similar to cephalic labours, but none of the associated statements achieved a consensus-level agreement. Similar discrepancies occurred in the fetal positions category. This suggests that these topics require further consideration using different methods. Descriptive studies involving a population of unmedicated labours and births attended by experienced physiological practitioners would be a useful contribution to the research basis concerning what is ‘normal for breech.’

The lack of a clear consensus that antenatal screening significantly improves safety was an unanticipated finding, although it is important to note that this result was borderline, and the principle did still achieve majority support. Professional guidelines and research reports commonly list a set of criteria used to identify a sub-group of women and breech-presenting fetuses for whom a VBB is considered to pose comparatively less, or more, perinatal risk, usually based on expert opinion (Kotaska, 2009; RCOG, 2006). Strict application of selection criteria is credited with improved perinatal morbidity and mortality outcomes observed in some settings (Borbolla Foster et al, 2014; Goffinet et al., 2006), although criteria and rates of VBB vary considerably between settings (Michel et al, 2009). However, some before-and-after studies have indicated that stricter application of selection criteria and an increased CS rate has not resulted in improved perinatal outcomes among the remaining VBBs (Hartnack Tharin et al, 2011; Hehir et al, 2012; Vlemmix et al, 2014). The panel's consensus statements suggested that, while physical variables pertaining to women and their babies may correlate with certain birth outcomes, other variable characteristics pertaining to provider, environment and relationships may affect the safety of VBB. These elements deserve further attention to balance the current focus on 'risk factors' in assessing suitability for VBB.

The finding that 91% of a panel with this level of experience feel that *episiotomy is never, or rarely, needed* to assist an upright breech birth is significant, given

that cutting a timely episiotomy has been identified as a key skill in assisted breech delivery in other research (Jordan et al., 2016; Maslovitz et al., 2007; Secter et al., 2015). This suggests that the lower maternal morbidity noted in Bogner's study (2015) is likely to be replicable in further research into physiological VBB practices. Similarly, the panel's consensus that *the mother's attitude and approach to birthing a breech baby* is a significant safety concern resonates with research indicating that strength of preference for vaginal birth is significantly predictive of ultimate mode of birth (Wu et al., 2014). Future VBB research should take account of maternal attitudes and self-perceived efficacy as potential safety factors, and take into consideration the likelihood that women with a strong preference for a particular mode of childbirth are less likely to consent to randomisation.

Considered in light of their divergence from most current international guidelines and research, the findings of this consensus research suggest within this panel a shift away from programmes of management based on prediction and control, and toward a philosophy of facilitation based on relationship and response. This is particularly evident in the openness around maternal birth position. . Although a enabling approach to positioning is often associated with greater maternal satisfaction (Priddis et al, 2012, Thies-Lagergren et al, 2013), the panel's consensus statements associate it with greater safety, a position which warrants further investigation. A responsive approach is also suggested in other areas such as using the individualised evaluation of progress of labour and fetal well-

being as the main indicators of appropriateness for vaginal birth, compared to the current emphasis on predictive selection criteria based on generalised relative risk.

Conclusion

Within this panel's physiological VBB model, the locus of greatest efficacy is considered to be within the mother-baby unit. Caregiver activities are primarily aimed at enhancing the mother-baby unit's self-efficacy, by judicious guidance and the maintenance of a facilitative environment, founded on supportive, collaborative relationships. In the facilitative approach described, perceived safety depends on the attendant's ability to recognise and respond to actual emerging problems in the individual situation, rather than anticipate potential risk based on generalised quantified data. This panel viewed attendants' ability to do less and enable more as a function of skill and experience, the need for which achieved the highest level of agreement as a safety concern. These elements are difficult to measure in quantitative studies based on clinical criteria and outcome data, but more creative methods of assessing competence and clinical decision-making surrounding VBBs may be fruitful. Given evidence that some care providers are actively obstructive to women wishing to attempt a VBB and the professionals supporting them (Catling et al., 2015; Powell et al., 2015), and the possibility raised in this research that such failure to collaborate has safety implications, research into outcomes of VBB should strive to include some

measurement of environmental and relationship factors perceived by women and professionals within the care episode.

This Delphi study reports the consensus agreements of a very experienced panel by modern standards. A 2007 survey of Australian obstetric specialist trainees indicated final-year trainees had attended a mean of 12 VBBs (Chinnock and Robson, 2007), compared to the panel's mean of 135. However, it is important to remember that the agreed principles of an experienced panel are not equivalent to safety data. Rather, the results of this research should be used to guide future research into the safety outcomes associated with these practices. The results may also be used to enable individual practitioners and institutions to consider the principles which underpin their own breech practices, and whether they are based on stronger evidence than presented here. Given the preference for physiological birth strategies expressed by at least some women requesting a VBB, individuals and institutions may also want to consider whether they are open to change by reflecting and comparing their own principles and strategies to those presented here.

Acknowledgments

Thank you to the experienced professionals who contributed to this research [*Table 3 – not included in blinded peer review*]. This work was supported by the Iolanthe Midwifery Society. The authors wish to thank Dr Kenda Crozier, of the

University of East Anglia, for her help in developing this research in its early stages.

Declaration of Interests

The first author has been funded to provide physiological breech birth training, as well as obstetric emergencies training in assisted breech delivery.

Table 1. *Consensus statements on principles of practice for professionals attending physiological breech births* – Percentage of panel in agreement, Likert mean and standard deviation (SD)
Likert scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

Statement	*%*	*Mean*	*SD*
First Principles			
Ensuring skilled and experienced professionals attend the birth has a significant impact on the safety of breech birth.	100	4.82	0.39
The primary purpose of upright breech birth is to optimise physiology, e.g. facilitate the mother's ability to birth her baby with maximum efficiency.	100	4.77	0.43
The safest breech birth exhibits optimum physiology: e.g. labour begins spontaneously at or near term and progresses steadily.	100	4.77	0.43
Power from above is safer than pulling from below.	100	4.73	0.46
In a physiological breech birth, a healthy, uncompromised baby moves in ways which assist his/her own birth.	100	4.64	0.49
Optimising the physiological process increases the safety of breech birth for the baby.	96	4.68	0.57
The mother's attitude and approach to birthing a breech baby has a significant impact on the safety of breech birth.	96	4.55	0.60
Optimising the physiological process increases the safety of breech birth for the mother.	91	4.55	0.67
Episiotomy is never, or rarely, needed to assist an upright breech birth.	91	4.50	0.67
In a physiological breech birth, there should be no touching of mother or baby unless there is a problem requiring assistance. There are no routine manoeuvres.	91	4.43	0.81
It is the mother's ability to move at the time of expulsive efforts that supports the physiological process.	87	4.35	0.71
It is uncommon to need to do anything in physiological breech birth, that is, non-medicated woman, baby at term, spontaneous labour with woman-led positions.	74	3.95	0.95
Maternal Positioning			
Care providers should develop skills to facilitate breech births safely in a variety of maternal positions.	100	4.86	0.36
Sometimes maternal-led positioning is most conducive; sometimes judicious guidance is appropriate, especially to help resolve delay.	100	4.61	0.50
Care providers should not disturb women's spontaneous movements in an otherwise normally progressing breech birth.	95	4.73	0.55
Ability to support breech births in a variety of maternal positions is a skill which develops with time and experience.	95	4.55	0.60
Care providers should share the evidence base concerning the affect of birth positioning on outcomes for women and their babies.	95	4.55	0.60
Care providers should share their preferences and experience levels regarding maternal birth positions.	91	4.32	0.65
Care providers should actively support a woman not to push if a premature urge to push occurs, such as in a footling birth.	86	4.09	0.75
Mother-led positioning offers the greatest physiological advantages.	82	4.18	0.85
When the mother is able to move freely during birth, her spontaneous positioning can be guided by interactions with the baby.	77	4.23	0.81
When facilitating a physiological breech birth, care providers proactively use maternal position (or change in position) to promote normal descent.	77	3.95	0.79
Birth Environment			
The appropriate setting for a breech birth is in a calm and supportive room with competent and kind caregivers.	100	4.86	0.35
A calm, quiet, warm environment enhances a woman's ability to give birth.	100	4.82	0.39
Having to fight to be 'allowed' to birth her baby physiologically over the last few weeks of her pregnancy is frequently detrimental to the physiological processes that occur during this time and therefore will effect the birth.	100	4.30	0.47
Many doctors and midwives who attend breech births face extreme hostility for doing so, and this sometimes limits their access to facilities and the skills of the multi-professional team.	96	4.48	0.73
The introduction of strangers in the birth environment interferes with a woman's ability to give birth.	95	4.27	0.70
Birth environment affects a woman's ability to give birth.	95	4.67	0.58
Conversations about risk and fear-based language in the birthing space interfere with a woman's ability to give birth.	91	4.50	0.80
A suboptimal birth environment leads to unnecessary intervention.	91	4.41	0.67
While non-interference in a well-progressing birth is an important principle, some women appreciate and benefit from supportive, encouraging touch during labour.	91	4.26	0.92
Mothers are aware of hospital politics and negativity towards breech birth, and this is a deterrent for some mothers who might otherwise prefer to be there.	86	4.38	0.86
Fetal Positions			
An incomplete breech (one leg up, one leg folded) can be born safely but requires attentive professional support.	91	4.09	0.68
A diagnosis of 'abnormal' breech position (unsafe for vaginal delivery) should be determined by lack of descent or lack of fetal well-being at the time of labour.	82	4.00	1.07
Frank breech is the optimal position for a breech birth.	77	4.00	0.69
A footling presentation can be born safely but requires attentive professional support.	77	4.05	0.84
Safe Progress			
There is often a pause after full dilatation and before active pushing begins. This is not problematic.	86	4.18	0.66

Table 2. *Negative data: Statements on principles of practice for professionals attending physiological breech births which did not achieve consensus* – Percentage of panel in agreement, Likert mean and standard deviation (SD)
Likert scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

Statement	*%*	*Mean*	*SD*
First Principles			
Antenatal screening of candidates has a significant impact on the safety of breech birth.	69%	3.95	1.09
Where the availability of skilled and experienced attendance is minimal, screening criteria will need to be stricter.	57%	3.68	0.95
Maternal Positioning			
Care providers should instruct women to assume a physiologically advantageous position for the birth.	64%	3.64	1.05
Care providers should ensure the mother's bottom is off the bed/floor enough for the baby to be born.	64%	3.68	1.09
Birth Environment			
The appropriate setting for a breech birth is the place chosen by the mother where she and the provider feel comfortable and safe. It can be the home, a birth centre or hospital.	68%	3.81	1.4
Access to skilled midwifery and medical care is the most important aspect of birth setting.	68%	3.77	0.87
Breech births should ideally take place in a setting where emergency services (caesarean section and neonatal services) are readily available.	68%	3.68	1.25
The appropriate setting for a breech birth is where the woman feels safe and confident. For some this will be in a hospital setting and for some this will be in their own homes.	64%	3.86	1.25
A co-located midwifery-led unit (hospital-based birth centre) is an appropriate setting for a breech birth.	50%	3.59	0.91
An obstetric-led unit is the appropriate setting for a breech birth.	36%	2.95	1.05
The appropriate setting for a breech birth contains just one experienced and silent birth attendant.	32%	3.0	1.02
Breech births should only occur in hospitals which have over 1500 deliveries per year.	9%	1.95	1.17
Fetal Positions			
Complete breech is the second most optimal position for a breech birth.	68%	3.68	0.78
With multiparous women, fetal position is less of an issue.	64%	3.63	0.90
No breech presentation is 'inappropriate' for a vaginal breech birth, so long as the mother has made an informed choice.	59%	3.68	1.17
The diagnosis of a footling breech should be made in labour with ruptured membranes, by determining whether or not the buttocks have engaged in the pelvis.	48%	3.33	0.85
Any presentation is 'normal' until there is a problem.	41%	3.23	1.15
The optimal breech position at the start of labour is Right Sacrum Anterior/Lateral.	36%	3.36	0.79
An extended head on ultrasound in labor (chin higher than the occiput) is unsafe for vaginal delivery.	36%	3.36	1.00
A knee-presenting baby normally starts labour in a posterior position.	29%	3.38	0.80
A footling presentation (at least one hip extended) is unsafe for vaginal delivery.	27%	2.77	0.97
A dorsoposterior position is unsafe for vaginal breech birth.	9%	2.68	0.65
Safe Progress			
Ideally, the birth should be complete within one hour of active pushing.	68%	3.67	1.11
Ideally, the birth should be complete within two hours of active pushing.	64%	3.77	1.02
Physiological breech births progress similarly to cephalic births.	55%	3.5	1.06
Following the birth of the buttocks, the head should ideally be born or delivered within the next 3-5 minutes.	55%	3.72	1.16
Progress should be rapid from the birth of the umbilicus to the birth of the head.	45%	3.36	0.90
Physiological breech births usually progress more quickly than cephalic births.	36%	3.0	0.98
Physiological breech births usually progress more slowly than cephalic births.	14%	2.68	1.04

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