Received: 15 February 2019 | Revised: 26 May 2019 | Accepted: 5 July 2019

DOI: 10.1111/jep.13243

ORIGINAL PAPER

WILEY Journal of Evaluation in Clinical Practice
International Journal of Public Health Policy and Health Services Research

Shared decision-making in maternity care: Acknowledging and overcoming epistemic defeaters

Keith Begley PhD[1] | **Deirdre Daly PhD**[2] | **Sunita Panda MSc**[2] | **Cecily Begley PhD**[2]

[1] Department of Philosophy, Trinity College Dublin, Dublin, Ireland

[2] School of Nursing and Midwifery, Trinity College Dublin, Dublin, Ireland

Correspondence
Keith Begley, Department of Philosophy, Trinity College Dublin, College Green, Dublin, Ireland.
Email: begleyk@tcd.ie

Funding information
Health Research Board, Ireland, Grant/Award Number: HPF-2016-1671

Abstract

Shared decision-making involves health professionals and patients/clients working together to achieve true person-centred health care. However, this goal is infrequently realized, and most barriers are unknown. Discussion between philosophers, clinicians, and researchers can assist in confronting the epistemic and moral basis of health care, with benefits to all. The aim of this paper is to describe what shared decision-making is, discuss its necessary conditions, and develop a definition that can be used in practice to support excellence in maternity care. Discussion between the authors, with backgrounds in philosophy, clinical maternity care, health care management, and maternity care research, assisted the team to confront established norms in maternity care and challenge the epistemic and moral basis of decision-making for caesarean section. The team concluded that shared decision-making must start in pregnancy and continue throughout labour and birth, with equality in discourse facilitated by the clinician. Clinicians have a duty of care for the adequacy of women's knowledge, which can only be fulfilled when relevant knowledge is offered freely and when personal beliefs and biases that may impinge on decision-making (defeaters) are disclosed. Informed consent is not shared decision-making. Key barriers include existing cultural norms of “the doctor knows best” and “patient acquiescence” that prevent defeaters being acknowledged and discussed and can lead to legal challenges, overuse of medical intervention and, in some areas, obstetric violence. Shared decision-making in maternity care can thus be defined as an enquiry by clinician and expectant woman aimed at deciding upon a course of care or none, which takes the form of a dialogue within which the clinician fulfils their duty of care to the client's knowledge by making available their complete knowledge (based on all types of evidence) and expertise, including an exposition of any relevant and recognized potential defeaters. Research to develop measurement tools is required.

KEYWORDS

caesarean section, duty of care, evidence-based knowledge, obstetric violence, philosophy, shared decision-making

1 | INTRODUCTION

Shared decision-making (SDM) involves health professionals and their patients or clients working together with the key objective of achieving true person-centred health care. However, this goal is not often realized, and the barriers are largely unknown. Discussion between philosophers, health care practitioners, managers, and researchers can assist in confronting the epistemic and moral basis of clinical practice, with benefits to all. The aim of this paper is to describe what SDM is, discuss its necessary conditions, and develop a definition that can be used in clinical practice to support excellence in maternity care.

2 | WHAT IS SDM?

In this section, we will elucidate some necessary conditions for SDM. SDM should be carefully distinguished from other concepts that are often confused for it or conflated with it. First, we should note that SDM is certainly not *shared-decision* making. That is, it is not the judgement of two minds in some way sharing particular judgements, which might not even be intelligible. Instead, SDM must be a process that takes place by way of a common medium. Such a medium must be capable of relating the contents of the judgements of participants in the decision-making process. Hence, the process of SDM must be mediated by language (broadly construed); that is, linguistic communication is required for SDM in medical practice. Moreover, not all uses of language can achieve this aim. The content of the final decision is not merely communicated from one person to another, like a decree, or a statement of fact, but is instead the common aim of an enquiry undertaken by more than one person. Hence, language must be employed in the mode of dialogue, rather than that of monologue.

However, if a certain dialogue consisted of the communication of a decision by one person, and the mere agreement of the other, it would follow that such a decision is not shared; the decision, including all that led to it, would be entirely on one side. Therefore, although some clinicians conflate the two[1] (and examples from empirical studies will be given later), mere decision and consent, or *informed consent*, could not be SDM. Such situations usually occur when there is an asymmetry in power between the people involved in the dialogue. If my superior officer gives an order, I might assent to it or not, but I do not decide upon the order. That is, although I might influence my superior, our dialogue is not the medium of a decision-making process, given that the decision is the responsibility of my superior alone. However, my superior could conceivably share the decision-making process with me by, for example, respecting my autonomy as a decision-making agent, making their knowledge available to me, and allowing me to deliberate regarding options. Thus, SDM could conceivably operate within such an asymmetric structure but only when facilitated by the superior person in that structure.

Another more specific kind of asymmetry in power is asymmetry in knowledge. People can know more than each other about a specialist matter and are called "experts," "specialists," or "professionals," on that account. This is usually the case in the context of maternity care, where clinicians will generally have more technical knowledge than women receiving their care. Thus, at least in most decision-making structures involving clinician and patient/client, there is an asymmetry in power due in part to an antecedent asymmetry in knowledge. Therefore, such decision-making processes can be shared only if facilitated by the clinician. That is, the clinician who facilitates SDM must, to the best of their ability and within reason, reduce the asymmetry of knowledge between themselves and their patient/client.

We do not mean by this that the patient should be sent back to school, rather, that they should have the benefit of the clinician's complete expertise, conveyed in a transparent manner. Such a clinician would have a duty of care not only for their patient's bodily and mental health but also for the adequacy of their patient's state of knowledge regarding possible care pathways and their potential consequences.

It is important to note here that the duty of care is to the patient's state of *knowledge* and not merely to their comprehension of facts, or to their having mere true beliefs; in this regard, clinicians are like teachers of pupils. This very old epistemological distinction, between true belief and knowledge, goes back at least to the works of Plato (cf *Theaetetus* 200e ff.; *Meno* 97 ff.).[2] Take the following hypothetical case for illustration: Assume that there is some course of care, C, such that (B) "The best course of care is C" is true in this situation. Assume also (for the sake of argument) that B could be known only by reviewing the scientific evidence, S. My doctor persuades me (by whatever means) to believe that "The best course of care is C." However, S is never mentioned. So although I believe B, and B is in fact true, *I do not know* B.

Some philosophers have argued that what is needed is a further necessary condition, an extra ingredient, which together with true belief would be sufficient for knowledge; for example, an *account* of *why* a certain belief is true or a *justification* for *why* it should be believed to be true. Other philosophers produced counterexamples to this definition of knowledge as justified true belief, now known as *Gettier cases* after Edmund Gettier's seminal *Analysis* article from 1963.[3] Take the following hypothetical example of a *Gettier case* in maternity care: My obstetrician, O, gives me the standard information regarding a course of care, C, and recommends that (B) "The best course of care is C," which is true. I comprehend the information about C and believe B, and I am justified in believing B because O is an experienced obstetrician who knows B and I am a lay person, and O has recommended C. However, unbeknownst to me, the reason that O recommended C is not that O has applied their expertise and employed evidence-based research and knows B, it is that O also knows (A) "O will likely be paid more if O recommends C." So although I am justified in believing B and, because B is true, I will nonetheless get the best care C, *I do not know B*. Other people might be even less *lucky*, receiving suboptimal care. Similar Gettier cases have been suggested in the literature regarding informed consent,[4] but the phenomenon, we suggest, is all the more important in the context of SDM, due to the need to elucidate the clinician's duty of care to the client's state of *knowledge*.

Such philosophical problems pertaining to knowledge per se are yet to be solved decisively and, indeed, might be insoluble. Many suggested solutions and resulting definitions have themselves been beset by further and more complicated counterexamples that are analogous to Gettier cases.[5] We are more concerned here to pick out necessary conditions for SDM in maternity care and hence merely some necessary conditions for knowledge in this context. The above hypothetical cases showed that mere true belief is not sufficient for knowledge and that there are *some* further cases in which one can have a justified true belief but nonetheless lack knowledge, in the context of clinical decision-making. However, aiming for true belief together with good reasons more generally might nonetheless serve as a helpful heuristic or practical "rule of thumb," with knowledge remaining an ideal.

When informed consent is mistaken for SDM, or when the relevant knowledge is not offered freely, or when personal beliefs, biases, ideological positions, market or legal forces, etc, impinge upon decision-making, and evidence-based medicine is cherry-picked or supressed, or just ignored, the decision cannot be a *shared* one, for SDM requires adequate sharing of knowledge that is aimed at the best outcome, eg, a healthy labour and birth for mother and baby. For example, the knowledge that the insurance company will pay more for a caesarean section (CS), or that it can be done by appointment and thereby mechanized for greater profit and convenience, etc, does not bear logically upon whether it is an appropriate course of action to take medically. Indeed, it could not, because it is not evidence-based medical knowledge; it is knowledge about other contingent circumstances. However, medical decision-making nonetheless involves human beings who are so influenced. That one's clinician is so influenced might be a "*defeater*"[6] to one's justified true belief in the recommendation offered by them, just as it was in our hypothetical Gettier case above.

For example, if the insurance company does, in fact, pay more for a CS (whether it should or not), then this should be made known to those it might affect, as being a possible bias in the system (whether it is a bias or not), given that it seems to reward a practice that, when overused, causes considerable morbidity[7] without reducing maternal or perinatal mortality[8] and has been recognized as such by clinicians themselves and by researchers studying their views.[9] Therefore, all of the relevant and recognized potential factors should be discussed in order to fulfil the duty of care to the woman's state of knowledge. That is, the clinician's duty of care to the state of their client's knowledge extends to making any such recognized potential "defeaters" (eg, that the insurance company pays more for a CS) known to their client. You might believe me, and, in a best-case scenario, I might be correct, and you might be justified in believing me, but there is something else you should know about how I arrived at my recommendation, by virtue of which you lack knowledge and the decision we make cannot be a *shared* one.

The acknowledgement of defeaters might not be sufficient for client knowledge either, ie, it might not ensure it, but it would nonetheless be a reasonable aim in the context of SDM in clinical settings. As such, it is important to note that the clinician's duty here is a duty of *care* to the client's knowledge. This is analogous to a duty of *care* to the client's health in that it does not entail that the clinician is responsible for the client's epistemic state, only for their own attitude of *care* toward it. The client's health could be irrecoverable due to factors beyond the control of the clinician. Analogously, the client could lack knowledge due to factors beyond the control of the clinician. What is important in the context of SDM is that the factors that are within the control of the clinician, eg, recognized potential defeaters, are acknowledged and overcome.

Thus, we have arrived at some necessary conditions for SDM in maternity care. It is an enquiry by clinician and expectant woman aimed at deciding upon a course of care or none, which must be in the form of a dialogue for which the clinician makes available their complete knowledge and expertise, including an exposition of any relevant and recognized potential defeaters, having a duty of care to their client's state of knowledge. This is not a jointly sufficient condition, of course, because there are other aspects to SDM in a clinical context besides knowledge asymmetry, for example, particular extrinsic legal or policy structures, or cultural norms. However, in the field of evidence-based medicine, other things being equal, *knowledge* (based on all types of evidence) should be central to decision-making. Therefore, if the above arguments are accepted, decision-making that does not meet the above necessary conditions cannot truly be called *shared*.

3 | SDM in maternity care

The core ethos of SDM depends on the acceptance of the premise that individual self-determination is an acceptable and desirable goal and that health care professionals need to support their clients or patients to achieve this goal.[10] Maternity care is an ideal branch of the health services to use SDM, as the World Health Organization (WHO) has stated that "childbirth is a physiological process that can be accomplished without complications for the majority of women and babies" (WHO 2018).[11(p1)] Given that most women in high- and middle-income countries are healthy, they can be self-determining throughout their pregnancy and birth. However, rates of intervention are rising due to increased medicalisation of childbirth, without apparent benefit to women or babies.[12] In Brazil, where the CS rate is now 56%, a study interviewing women in pregnancy and postpartum found that 64% of women attending a consultant obstetrician privately had an elective (planned) CS, while just 24% of those in the public sector had one. Among 243 women attending an obstetrician privately, who wanted a vaginal birth but ended up having a CS, only 31 (13%) had a true medical justification for their scheduled CS. This appears to indicate that their obstetricians frequently persuaded the women to agree to a planned CS without any medical reason.[13]

A recent systematic review and meta-synthesis of 34 studies, conducted from 1992 to 2016 across 20 countries, reported on the views of 7785 obstetricians and 1197 midwives of the factors they believed influenced decision-making to perform a CS.[9] The three themes that emerged did not refer to clinical indications for a CS, except obliquely in reference to difficulties in differentiating "Ambiguous versus clear clinical reasons." The main themes were "clinicians' personal beliefs" (perception of vaginal birth as risky and CS as safe, despite all the literature to the contrary, lack of cooperation and trust between obstetricians and midwives, or between obstetricians of different grades, beliefs in relation to women's request for CS), "health care systems" (concerns over litigation, lack of resources, private versus public insurance where women who attend privately have a higher rate of CS, and the constraining effects of guidelines and management policies), and "clinicians' characteristics" (lack of confidence and skills for all types of vaginal birth, clinicians' age and gender, with males and more experienced obstetricians performing more CSs, and "personal convenience" with CSs performed to suit obstetricians' lifestyle limitations).[9]

For the vast majority of these reasons for CS, as described by these clinicians, there appears to be little or no SDM. Although "women's request for CS" emerged as a subtheme and could be taken to indicate that women's views might be included in decision-making for mode of birth, this is not borne out by the literature as being a major factor. In a systematic review of 38 studies, including 19 403 women in high and middle-income countries, only a minority (15.6%) of women stated a preference to give birth by CS.[14]

Contrary to our definition of SDM above, it was clear from some studies that obstetricians believed that SDM and informed consent were the same. For example, this quote from one obstetrician was included in a study interviewing 12 midwives, six obstetricians, and 18 women who had a CS[1]:

"Interviewer:	Do you feel that it's important to have a joint decision making process between the medical staff involved as well as the couples or the woman presenting?
[Obstetrician 1]:	It'll always be like that, because that's the nature of informed consent … it's astounding that you're asking this question. It is astounding. It's like asking "is the sky blue?" We do not do surgical procedures without actually explaining to people and asking them whether they agree."[1(p1194)]

Other data from the same study showed that many obstetricians believed that women had the right to choose an elective CS, without a medical indication, as one of their options:

> *"I feel very strongly that women, at the end of the day it's their body and it's their right to choose. And I certainly feel that as long as it's an informed consent, I would be very agreeable to obliging either way (training obstetrician 3)."*[1(p1194)]

This is borne out in the literature, where clinicians have noted that women request CS for a variety of reasons including a previous poor birth experience[15,16] or fear of labour[16,17] as well as for social and cultural factors or body image.[15,17,18] In general, obstetricians are seen as more likely than midwives to agree to a women's request for CS.[19-22] A recent study, interviewing 11 midwives and five obstetricians in Sweden, where the CS rate is only 17%, found that women were very involved in decision-making for most aspects of care, including CS on request in very rare situations.[23] The midwives described how women who were fearful of birth were cared for:

> *"We have Aurora, counselling team with midwives. [A] woman who wish for a CS comes to this counselling programme and talks to a midwife, so we give them options like induction, pain relief, birth plan and … a CS contract. Which means when… in labour [if] the woman feels that it's too traumatic or too painful… she can by herself request for CS… And when they have this contract they feel … in control…" (FGI with Midwives, Site 1)."*[23(p4)]

This description seems to epitomize SDM at its best and, as can be clearly seen from the overall low CS rate, did not lead to high intervention rates because the Swedish clinicians had an overriding belief in, and support of, normal birth,[23] the term commonly used to convey no interference with physiological labour and birth processes.

Despite the acceptance of health care professionals in various countries of the principle that women should be able to choose a CS birth, in general, they do not think that women should be allowed to *refuse* a CS when their care givers believe it is necessary. In a Swedish study by Panda et al,[23] women had little role to play in decision-making around unplanned ("emergency") CS, yet because of the culture of belief in normal birth and SDM, CS rates remained low. An Australian study by Bryant showed how, in the following situation of a country with high CS rates, women were not accorded the right to an informed choice, let alone any SDM:

> *"You must distinguish between the attempt at vaginal delivery and an elective Caesarean section. Because these are the only choices we can freely make. Those are the only choices you can debate in an informed consent … . The choice between vaginal delivery and emergency Caesarean does not exist. You must do an emergency Caesarean, there's no other option. (obstetrician 1)."*[1(pp1195–1196)]

This dichotomy is seen across the world in a number of court cases where clinicians have attempted to force women into having CSs against their will; for example, in Ireland, the judge for the case of the *Health Service Executive v B* found in favour of a woman who was refusing a planned CS because she did not believe it was necessary. The Health Service Executive had requested the court to authorize her care givers "to use 'such reasonable and proportionate force and/or restraint' to perform invasive surgery upon Ms. B against her will,"[24(p496)] but the judge decreed that this would be "a grievous assault"[24(p497)] and declined the request. The fact that a body responsible for the health care of the nation would take this course of action when caring for a sane woman indicates that the principles of our definition of SDM would appear to have no place in their practice.

It may be that clinicians think it is too difficult to attempt SDM when a woman is in labour and a complication arises that they believe requires a CS. Although SDM is perceived as possible in general medicine, even in emergency room situations[25], that is not the same as caring for a woman in labour when the fetal heart rate shows sudden deterioration and there is sometimes little time to discuss options with her. Because of this, SDM needs to start in the antenatal period, with discussions of possible pathways in labour and the development of a trusting relationship between the care provider and the woman, and clear explanations of what is happening throughout labour are also important.[26] Elwyn et al[10] suggest that clinicians consider including the three steps of "choice talk," "option talk," and "decision talk" to enable true SDM to occur. "Choice talk" is about making patients aware that more than one reasonable option exists; "option talk" provides more detail about each option; "decision talk" is where the clinician helps the patient to consider preferences and make a decision.[10] The three steps together form one kind of structure for a dialogue that would seem to approximate our definition: "for which the clinician makes available their complete knowledge and expertise, including an exposition of any relevant and recognized potential defeaters, having a duty of care to their client's state of knowledge," when it is "aimed at deciding upon a course of care or none." However, Elwyn et al are not clear about what they mean by "knowledge." For instance, they deploy the term in the context of the following test as part of their "options talk":

> *"**Check knowledge**. Even well-informed patients may only be partially aware of options and the associated harms and benefits, or misinformed. Check by asking: "What have you heard or read about the treatment of prostate cancer?"."*[10(p1364)]

It is clear that this could not be a test for knowledge in the sense in which the term is used in the philosophical literature, or in which we have used it above in our definition of SDM. Consider the following Gettier case: If I have read something in a book, and remember and believe it, and it happens to be true, and I am justified in believing it, it does not follow that I know it. Were it the case that I am merely *lucky* that the book happens, due to a printing error, to record a treatment for prostate cancer correctly, while it is systematically flawed regarding all other treatments, a test by Elwyn et al would show that I had knowledge when I do not. Therefore, although having a true belief is surely a necessary mark of knowledge, testing for true beliefs is not testing for knowledge. Perhaps due to their conception of "knowledge," Elwyn et al do not pay any attention to potential defeaters as part of their three kinds of talk. We suggest that their system should be modified to incorporate a duty of care to the client's *knowledge* and that this entails a duty to share knowledge regarding recognized potential defeaters.

SDM is a dynamic, incremental process.[26] Maternity care clinicians have time to achieve this during pregnancy, over the course of months, through continuity of care, and even more so in health systems that provide continuity of carer. However, in some countries across the world, even those in middle- or high-income brackets, SDM is so far removed from usual maternity care that the routine practices used have been labelled as "obstetric violence." These include performing episiotomies and other invasive procedures without consent and using manual pressure on the woman's abdomen to "deliver" babies.[27] The extent of abusive practices, including withholding treatment and hitting women, in the maternity services across high-, middle-, and low-income countries[28] is such that the actions of clinicians in studies described above, who tended to make the decision themselves that a CS was needed, and then persuade the woman that it was necessary, may not seem as reprehensible. However, the attitudes involved (not valuing women or their views, not putting the well-being of women and their babies at the forefront of all decisions, not using evidence to guide decisions) are similar, and there is only a fine line between the difference in actions.

4 | Changes required in our current thinking and practice to make SDM in maternity care practice a reality

Maternity care is ostensibly based very firmly on research evidence, ever since Archie Cochrane awarded "the wooden spoon" to obstetrics in 1979 for being the least evidence-based branch of medicine.[29] Following this challenge, obstetrics took on board the movement towards randomized controlled trials (RCTs), and systematic reviews of these trials, to generate the evidence required to underpin their work. Maternity care has become increasingly medicalized, possibly because of this emphasis on randomized trials, which tend to be conducted on new technology, drugs and interventions, in direct contrast to the "masterful inactivity" promoted as key to good care in labour.

Despite the proliferation of trials, however, many of the results have not been put into practice, particularly in relation to those that demonstrate how CS rates may be reduced. It is possible that this might indicate a far-seeing, open-minded cadre of health care professionals, which gives equal recognition to evidence derived from other types of data, as well as evidence from RCTs, and has therefore reached a decision not to implement some results that derive from RCTs alone. For example, the authors of one Cochrane review, on active management of labour (which involves strict diagnosis of labour, routine rupture of the membranes, oxytocin infusion for slow progress and one-to-one support in labour), presented the results of their meta-analysis of 6 trials, including 3475 women, which showed a slight decrease in CS rates with active management (RR 0.77 95% CI, 0.63-0.94).[30] They concluded their review by saying that, although active management was associated with modest reductions in the CS rate, it is "highly prescriptive and interventional"[30(p2)] and recommended that further research be conducted to determine the acceptability of active management to women in labour, an acknowledgement that other forms of research are needed to give a fully rounded answer to clinical questions. However, for some aspects of care (such as not using electronic fetal monitoring for low risk women because it is known to lead to increased CS rates, with no benefit to women or babies),[31] the evidence from systematic reviews of RCTs is largely ignored or cherry-picked in favour of intervention. The overuse of electronic fetal monitoring has more to do with ease of workload for staff, or with fears of litigation, than with any intended benefit and exemplifies the documented “too much, too soon” regime of obstetrics in high-income countries.[32]

The review of clinicians' views described above[9] appears to show that decisions made by clinicians are often based on nonclinical factors personal to the clinician and are therefore made without the input of the women involved, as clinicians would not discuss defeaters (such as their personal wish to perform a CS now and then go home to sleep, or insurance companies' payment policies) with them. Some of the literature included also shows that decisions on unplanned (“emergency”) CSs are conducted with no SDM, and almost without consent,[1] and the literature on court cases uncovers a similar undercurrent in relation to court-ordered CSs,[33,34] including prelabour planned CSs[24] and, what Pope describes as, “Physician coerced” and “Physician-ordered” caesarean sections.[33(pp166–167)]

SDM in maternity care must, by definition, include expectant, labouring, and postnatal women in dialogue. Such a dialogue requires that not only RCT evidence but also data derived from observational studies, mechanistic reasoning, and clinical evidence be included in the deliberations as those three sources take account of the views of patients, clients, and consumers of health care. Tonelli, in a critique of evidence-based medicine, describes how its prioritization of clinical research results and support of a clear hierarchy of evidence are unjustifiable in clinical decision-making.[35] So, for SDM to be a reality in present-day maternity care, clinicians need to review and consider *all* types of evidence, in discussion with expectant women at all stages of pregnancy, labour, and birth.

4.1 | Barriers to establishing SDM as the norm in maternity care practice and policy

Despite the obvious advantages to SDM, and the ethical and moral imperative to provide this for all expectant women as a basic human right in standard maternity care, it does not appear to exist in many high-income countries. The key barriers are probably similar to those listed in the systematic review on decision-making for CS[9]: concerns over litigation, lack of resources and time for discussion, private insurance that pays more to the obstetrician if more interventions are carried out, the constraining effects of guidelines and management policies, clinicians' age, gender and lack of confidence and skills, and making decisions based on personal convenience for clinicians. In addition, there is the issue in most countries of there being no acceptance of the culture of SDM, so that any new initiative will have to battle against existing cultural norms of “the doctor knows best” and “patient acquiescence” that prevent defeaters being acknowledged and discussed.

4.2 | Measuring success of implementing SDM as the norm in maternity care practice and policy

Measuring the success of implementing a policy of SDM in maternity care will be difficult. Probably, the only measure worth relying on is a short survey of all postnatal women, pre-tested for validity and reliability, that asks how *they* perceived the level of SDM to be. Clinicians' views of SDM will, by definition, be biased in a more positive direction, given the literature discussed above that showed how SDM can be confused with informed consent and how knowledge can be confused with information or mere true belief, or, in the case of Gettier cases, justified true belief. Such a survey might ask for information on the length of time spent in dialogue, the number of options discussed, whether or not evidence-based research was presented for each option, whether or not any of the clinicians' possible biases and other recognized potential defeaters were discussed, and whether the woman felt that she truly agreed with the final decision, reluctantly agreed, or felt coerced into agreeing.

In theory, a decrease in intervention rates, especially CS rates, may occur as a result of more SDM, because clinicians would be less likely to perform CSs for nonclinical reasons, if all reasons and recognized potential defeaters had to be discussed with women in full. However, unless women are truly knowledgeable about the clinical reasons proffered for their proposed CS, they may still be persuaded to have a CS for “fetal distress” or “prolonged labour” when the clinician describing this is perhaps only somewhat sure of the diagnosis but quite afraid of being sued if anything goes wrong with a spontaneous birth. SDM in such a situation may reduce unnecessary CSs if the clinician is able to present the (perhaps slight) evidence for their concern, discuss their fears honestly, and ask what action the woman would prefer to be taken. For example, some women may wish to be given a little more time to labour, or push the baby out themselves, and taking their views into account could help prevent some CSs performed solely out of fear of litigation. However, as a measure of the degree of SDM, this probably would not be useful, as other factors may decrease intervention rates also.

An ideal result of SDM would be that there would be no more court cases trying to compel women to have a CS (or any other intervention) against their will. This would be measurable but so infrequent that it would not be useful as an indicator of success. A similar measure would be noting any decrease in litigation cases. Between 2000 and 2010 in the United Kingdom, maternity claims accounted for the highest value, and the second highest number, of claims,[36] while in Ireland, annual statistics from the State Claims Agency (SCA) for 2014 showed that 54% of all clinical claims related to maternity care.[37]

5 | CONCLUSION

SDM needs to start in the antenatal period, as part of developing a trusting relationship between the care provider and the woman, and to continue throughout labour and birth. It takes place within a dialogue between two people who have symmetry in power relations or, if within an asymmetric structure, where equality in discourse is facilitated by the superior person in that structure. Clinicians have a duty of care not only for their patient's bodily and mental health but also for the adequacy of their knowledge, which can only be fulfilled when relevant knowledge is offered freely, and when personal beliefs and biases that may impinge on decision-making (defeaters) are disclosed. As such, informed consent is not SDM, yet it was clear from the literature that some obstetricians believe it is. Countries where women appeared to be more involved in decision-making in maternity care do not have as high intervention rates. Across the world, however, clinicians find it difficult to "allow" women to *refuse* a CS, as evidenced by a number of court cases. Similarly, obstetric violence is widespread in many countries where neither informed consent nor SDM are evident, and the "too much, too soon" regime of obstetrics in high-income countries is another facet of the same attitudes.

SDM in maternity care can thus be defined as an enquiry by clinician and expectant woman aimed at deciding upon a course of care or none, which takes the form of a dialogue within which the clinician fulfils their duty of care to the client's knowledge by making available their complete knowledge (based on all types of evidence) and expertise, including an exposition of any relevant and recognized potential defeaters. Key barriers include the existing cultural norms of "the doctor knows best" and "patient acquiescence" that prevent defeaters being acknowledged and discussed. Further research in this area should include the development of a short survey for postnatal women, pre-tested for validity and reliability, that asks how they perceived the level of SDM to be in their antenatal, intranatal, and postnatal care.

ACKNOWLEDGEMENTS

Sunita Panda is funded by the Health Research Board, Ireland, through a Fellowship for Healthcare Professionals (HPF-2016-1671). The authors wish to thank two anonymous reviewers for their helpful comments.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ORCID

Keith Begley https://orcid.org/0000-0003-1448-4344
Deirdre Daly https://orcid.org/0000-0003-3045-9894
Sunita Panda https://orcid.org/0000-0003-2308-1045
Cecily Begley https://orcid.org/0000-0003-2240-8763

REFERENCES

1. Bryant J, Porter M, Tracy SK, Sullivan EA. Caesarean birth: consumption, safety, order, and good mothering. *Soc Sci Med*. 2007;65(6):1192-1201.
2. Cooper JM (Ed). *Plato: Complete Works*. Cambridge: Hackett; 1997.
3. Gettier EL. Is justified true belief knowledge? *Analysis*. 1963;23(6):121-123.
4. Cohen S. The Gettier problem in informed consent. *J Med Ethics*. 2011;37:641-645.
5. Ichikawa JJ, Steup M. 'The analysis of knowledge'. The Stanford Encyclopedia of Philosophy. 2017. Online. https://plato.stanford.edu/entries/knowledge-analysis
6. Chisholm RM. *Theory of Knowledge*. London: Prentice-Hall; 1989.
7. Villar J, Carroli G, Zavaleta N, et al. Maternal and neonatal individual risks and benefits associated with caesarean delivery: multicentre prospective study. *BMJ*. 2007;335(7628):1025.
8. Betran AP, Torloni MR, Zhang J, et al. What is the optimal rate of caesarean section at population level? *Reprod Health*. 2015;12:57.
9. Panda S, Begley C, Daly D. Clinicians' views of factors influencing decision-making for caesarean section: a systematic review and metasynthesis of qualitative, quantitative and mixed methods studies. *PLoS ONE*. 2018;13(7):e0200941. https://doi.org/10.1371/journal.pone.0200941
10. Elwyn G, Frosch D, Thomson R, et al. Shared decision making: a model for clinical practice. *J Gen Intern Med*. 2012;27(10):1361-1367.
11. World Health Organization. *WHO recommendations: intrapartum care for a positive childbirth experience*. Geneva: World Health Organization. 2018; Licence: CC BY-NC-SA 3.0 IGO. Cataloguing-in-Publication (CIP) data. CIP data are available at https://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf
12. Johanson R, Newburn M, Macfarlane A. Has the medicalisation of childbirth gone too far? *BMJ*. 2002;324(7342):892-895.
13. Potter JE, Hopkins K, Faundes A, Perpetuo I. Women's autonomy and schedules caesarean sections in Brazil: a cautionary tale. *Birth*. 2008;35(1):33-40.
14. Mazzoni A, Althabe F, Liu NH, et al. Women's preference for caesarean section: a systematic review and meta-analysis of observational studies. *BJOG: Int J Obstet Gynaecol*. 2011;118(4):391-399.
15. Weaver JJ, Statham H, Richards M. Are there 'unnecessary' caesarean sections? Perceptions of women and obstetricians about caesarean sections for nonclinical indications. *Birth: Issues in Perinatal Care*. 2007;34(1):32-41.
16. Dencker A, Nilsson C, Begley C, et al. Causes and outcomes in studies of fear of childbirth: a systematic review. *Women Birth*. 2018;32:99-111. pii: S1871-5192(17)30706-0. https://doi.org/10.1016/j.wombi.2018.07.004 [Epub ahead of print]
17. Fuglenes D, Oian P, Kristiansen IS. Obstetricians' choice of caesarean delivery in ambiguous cases: is it influenced by risk attitude or fear of complaints and litigation? *Am J Obstet Gynecol*. 2009;200(1):48.e1-48.e8.
18. Kwee A, Cohlen BJ, Kanhai HH, Bruinse HW, Visser GH. Caesarean section on request: a survey in The Netherlands. *Eur J Obstet Gynecol Reprod Biol*. 2004;113(2):186-190.
19. Kamal P, Dixon-Woods M, Kurinczuk JJ, Oppenheimer C, Squire P, Waugh J. Factors influencing repeat caesarean section: qualitative exploratory study of obstetricians' and midwives' accounts. *BJOG: Int J Obstet Gynaecol*. 2005;112(8):1054-1060.
20. Faas-Fehervary P, Schwarz K, Bauer L, Melchert F. Caesarean section on demand: influence of personal birth experience and working environment on attitude of German gynaecologists. *Eur J Obstet Gynecol Reprod Biol*. 2005;122(2):162-166.
21. Chigbu CO, Ezenyeaku CC, Ezenkwele EP. Obstetricians' attitudes to caesarean delivery on maternal request in Nigeria. *J Obstet Gynaecol: J Institute Obstet Gynaecol*. 2010;30(8):813-817.
22. Arikan DC, Ozer A, Arikan I, Coskun A, Kiran H. Turkish obstetricians' personal preference for mode of delivery and attitude toward caesarean delivery on maternal request. *Arch Gynecol Obstet*. 2011;284(3):543-549.
23. Panda S, Begley C, Daly D, et al. Factors influencing decision-making for caesarean section in Sweden—a qualitative study. *BMC Pregnancy Childbirth*. 2018;18(1):377. Published 2018 Sep 17. https://doi.org/10.1186/s12884-018-2007-7, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6142337/pdf/12884_2018_Article_2007.pdf
24. Wade K. Caesarean section refusal in the Irish courts: Health Service Executive v B. *Med Law Rev*. 2017;25(3):494-504. https://doi.org/10.1093/medlaw/fwx007

25. Flynn D, Knoedler MA, Hess EP, et al. Engaging patients in health care decisions in the emergency department through shared decision-making: a systematic review. *Acad Emerg Med*. 2012;19(8):959-967. https://doi.org/10.1111/j.1553-2712.2012.01414.x Epub 2012 Jul 31
26. Nieuwenhuize MJ, Korstjens I, Jonge AD, de Vries R, Largo-Jansen A. On speaking terms: a Delphi study on shared decision-making in maternity care. *BMC Pregnancy child birth*. 2014;14(223):1-11.
27. Begley C, Sedlicka N, Daly D. Respectful and disrespectful care in the Czech Republic: an online survey. *Reprod Health*. 2018;15(1):198. https://doi.org/10.1186/s12978-018-0648-7
28. Bohren MA, Vogel JP, Hunter EC, et al. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. *PLoS Med*. 2015;12(6):e1001847. https://doi.org/10.1371/journal.pmed.1001847
29. Godlee F. Obstetrics and the wooden spoon. *BMJ*. 2012;345(oct17 1):e7017. https://doi.org/10.1136/bmj.e7017
30. Brown HC, Paranjothy S, Dowswell T, Thomas J. Package of care for active management in labour for reducing caesarean section rates in low-risk women. *Cochrane Database Syst Rev*. 2013;4(9):CD004907. https://doi.org/10.1002/14651858.CD004907.pub3
31. Alfirevic Z, Devane D, Gyte GML, Cuthbert A. Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database Syst Rev*. 2017;3(2):CD006066. https://doi.org/10.1002/14651858.CD006066.pub3
32. Miller S, Abalos E, Chamillard M, et al. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. *Lancet*. 2016;388(10056):2176-2192.
33. Pope TM. Legal briefing: unwanted cesareans and obstetric violence. *J Clin Ethics*. 2017;28(2):163-173.
34. Borges MT. A Violent Birth: Reframing Coerced Procedures During Childbirth as Obstetric Violence. *Duke Law J*. 2018;67(4):827-862.
35. Tonelli MR. In: Howick J, ed. *Not a philosophy of clinical medicine: a commentary on 'The Philosophy of Evidence-based Medicine'.* Oxford: Wiley-Blackwell; 2001 ISBN- 9781405196673, pp. 248. Journal of Evaluation in Clinical Practice. 2011; 17(5). https://doi.org/10.1111/j.1365-2753.2011.01741.x
36. Anderson A. Ten years of maternity claims: an analysis of the NHS Litigation Authority data—key findings. *Clinical Risk*. 2013;19(1):24-31. https://doi.org/10.1177/1356262213486434
37. Clinical incidents and claims report in maternity and gynaecology services: a five year review: 2010-2014. 2015.

How to cite this article: Begley K, Daly D, Panda S, Begley C. Shared decision-making in maternity care: Acknowledging and overcoming epistemic defeaters. *J Eval Clin Pract*. 2019;25:1113–1120. https://doi.org/10.1111/jep.13243