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Learning how to deliver bad and challenging news: Exploring the experience of trainee sonographers – A qualitative study

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Abstract

Background: Previous studies suggest there is a need to improve the delivery of bad and challenging news in obstetric ultrasound settings. However, no research has explored the experiences of trainee sonographers when learning how to deliver challenging news. Understanding this could identify gaps in current provision and inform future training interventions.

Aims: To explore the experiences of trainee sonographers when learning how to deliver challenging news.

Methods: Semi-structured interviews were conducted with trainee sonographers ($n = 7$) from four training centres to explore their experiences and preferences for news delivery training.

Results: Learning how to deliver difficult news was a journey where trainees developed their confidence over time. Most learning occurred in clinical settings, but classroom teaching complemented this. Trainees appreciated the opportunity to observe clinical practice and to hear from patient representatives. However, quality of teaching varied between centres and trainees reported uncertainty regarding the specific language and behaviours they should use. They described building their own personal protocol for news delivery through the course of their training.

Discussion: An ultrasound-specific news delivery protocol which details the words and behaviours sonographers can employ could help reduce uncertainty in trainees. Trainees may also benefit from receiving structured feedback on their news delivery performance.

Keywords

Sonography, breaking bad news, training, feedback

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Background

Around 15% of pregnancies result in miscarriage or stillbirth and in 2–5% an anomaly is found which could indicate foetal disability.[1–4] Ultrasound is often used to identify or confirm these complications, but the way this initial news is delivered to expectant parents varies internationally. In the UK, the sonographer conducting the scan routinely communicates difficult news during the appointment.[5] In other countries such as Australia and the US, sonographers may communicate

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this news or may instead refer expectant parents to their doctor to find out the results of their scan, depending on the practices of the organisation they work in.[6] Studies suggest that immediate disclosure by sonographers is preferred by expectant parents, but news delivery skills vary between practitioners; some expectant parents describe better experiences than others and poorer experiences are linked with higher parental stress levels.[7–10] Healthcare professionals delivering news via ultrasound also report finding these situations stressful. Challenges in this setting include the subjective nature of 'bad news', the immediacy with which the news must be communicated and the difficulty of delivering news which is unclear.[5,11–13]

Several frameworks for delivering bad and difficult news have been proposed.[14,15] The most widely used is the SPIKES, which outlines six steps for news delivery which together form the acronym: (1) Setting up interview, (2) assessing patient Perception, (3) obtaining patient's Invitation, (4) giving Knowledge to the patient, (5) acknowledging Emotions empathically and (6) Strategy/Summary.[15] A recent meta-analysis found that news delivery training interventions were effective for improving both doctors' objective skills and doctors' confidence levels in this area.[16] Interventions based on the SPIKES framework were particularly effective. However, no studies have tested the effectiveness of interventions for improving the news delivery skills of sonographers. Furthermore, while recommendations have been issued for breaking bad news in ultrasound settings,[17,18] there is no evidence-based framework which specifies the behaviours and words sonographers should use in these situations. Tailored guidance may be beneficial, as expectant parents often recount the specific actions and phrases used by sonographers at this time.[7,19,20]

A small number of studies have explored the experiences of healthcare professionals in delivering difficult news via ultrasound scan,[5,11–13] but there is a lack of research investigating experiences of news delivery training. The evidence which does exist suggests that qualified sonographers find post-qualification training beneficial, and that receiving this is linked with lower levels of one type of burnout (disengagement).[21] However, no studies have been conducted into the news delivery training experiences of trainee sonographers. In the UK, although qualified sonographers are expected to deliver difficult news as standard, there is no mandated training that trainee sonographers must receive and no required assessment that they must pass in this area. As such, it is unclear what experiences trainees have in learning how to break bad news, and whether there are variations between different training centres. Understanding how sonography trainees learn about best practice in news delivery and how they develop skills in this area could help to identify unmet training needs and inform the development and enhancement of news delivery training curriculums. In order to address this gap, the present study aimed to explore the lived experience of trainee sonographers' in learning how to deliver bad or challenging news.

Method

A qualitative study design was adopted to explore the experiences of trainee sonographers during their course. Ethical approval for this research was granted by the School of Psychology Research Ethics Committee at the University of Leeds, England (reference: 17-0153/22-May 2017).

Sample

Participants were recruited on a voluntary convenience basis. Eligibility criteria included participants that were studying a masters-level sonography or medical ultrasound training course based in the United Kingdom (UK) with accreditation from CASE. Recruitment involved directly contacting course leaders to circulate information via internal e-mail or virtual blackboards, and advertising the study via two social media platforms (Facebook and Twitter) and an online forum for UK-based students (The Student Room).

Procedure

The interview schedule was developed through iterative discussion amongst the authors (JJ, PVK, MH, RH, and JA) and informed by relevant literature on the topic (see Box 1).

In-depth semi-structured interviews were conducted via telephone by the authors (MH/PVK). Study information was sent in advance of the interview and verbal informed consent recorded directly prior to the interview. To ensure anonymity, pseudonyms were assigned to participants, consent and demographic data was recorded in separate digitals audio files and access was limited to members of the research team.

Analysis

Interviews were transcribed verbatim and analysed by a primary researcher (LT) using an inductive thematic analysis approach.[22] This involved reading and familiarisation with the interviews, to develop codes and themes. A subset of interviews ($n = 3$) was coded by a second researcher (JJ). The codes and themes were discussed to reach a consensus of opinion. The final set of themes represented the lived experiences of trainee sonographers who participated within the study.

Box 1. Interview schedule.

What experiences have you had of difficult news delivery during your training?
- If you haven't had any first hand experiences, have you observed others delivering difficult news?
- How has this been done?
- What was done well/not done well?
- Any service-level features that help news to be delivered better?

What training have you received for difficult news delivery?
- What have you been taught is best practice?
- What methods have been used in your training (e.g. didactic lecturing, group discussions, videos, role-play or simulation)
- Do you feel like you spent enough time being trained in delivering bad/difficult news?
- How do you feel about the training you have received?
- What do you think was good about the training you received?
- What methods of training would you have liked to be trained in?

Table 1. Key characteristic of study participants.

Participant	Age (years)	Identified gender	Background
Sara	36	Female	Midwife
Paul	38	Male	Radiographer
Rachael	48	Female	Radiographer
Caroline	38	Female	Radiographer
Marie	33	Female	Radiographer
Kate	27	Female	Midwife
Jenny	25	Female	Radiographer

Table 2. Themes and sub-themes.

Themes	Subthemes
1. The training continuum	The emotional load Developing self-confidence
2. How learning happens	Clinical setting Classroom setting

Results

Seven participants took part in the study. Key characteristics are displayed in Table 1. There were six female and one male trainee sonographers with a mean age of 35. Two trainees were midwives and the five remaining participants were from a radiography background.

The analysis explored the experience of trainee sonographers delivering bad and challenging news within the obstetric setting. The main themes were 'the emotional continuum' and 'how learning happens' (see Table 2). The following section presents a discursive narrative of participants' accounts using extracts from the in-depth interviews.

The training continuum

Trainees travelled along a journey from being the observer to the professional performing the scan. A high level of discomfort and anxiety associated with delivering difficult news appeared to be a consistent feature for the participants throughout the training course. As Kate poignantly summed: "...no amount of training will prepare you for the first time you tell someone the baby they thought they were carrying and going to give birth to, is actually not alive".

The following subthemes, the emotional load and developing confidence, explored the psychological impact for the trainees and the way they built individual self-confidence strategies.

The emotional load. The trainees' accounts revealed the extent to which they found watching and delivering difficult news challenging. The reactions illustrated their desire not to cause any additional pain and their feelings of discomfort and awkwardness. Jenny described watching parents waiting for second opinions as 'difficult' and Kate commented on a specific scan that was 'hard to watch':

> The baby didn't have a heart beat and she had no idea, she, er, thought everything was okay . . . she hadn't brought her partner to the scan with her, because he couldn't get the time off work. So she was in a real state of shock because of that and then she had to go home and tell him the bad news herself . . . I know what these parents are thinking and feeling . . . they probably feel awful.

Kate's midwifery background may have enabled her to take a more holistic view of the situation but the sense of shock and vulnerability for parents was clearly felt in her account. Marie described the moment she realised she would have to break bad news, and the anxiety that this engendered: "It was awful . . . my hands were shaking throughout the entire scan because I already knew what the outcome was and at 12 weeks, obviously [not] what they're expecting".

The trainees' accounts also revealed the very welcomed and reassuring support received from the trained staff when presented with, as Sara described, the 'really daunting' prospect of delivering difficult news: "They had, I think a hand on my shoulder because obviously, I started the scan at the uterus and the uterus was empty" (Marie).

The non-verbal support provided in this scenario was significant; by placing a hand on the shoulder, the supervisor instantly recognised the issue and the conversation that was about to follow. Jenny also recognised the impact of breaking bad or challenging news on the qualified staff and how 'stressful' it could be. This was exemplified by trainees observing staff who were unsure what to say; Caroline commented that she had seen staff 'struggling with their wording'.

Developing self-confidence. Over the training continuum, trainees talked about the way they built their self-confidence to deliver bad and challenging news. Some drew upon previous professional knowledge and experience; some also drew upon broader life experience. Sara said she 'pulled' on her previous experiences as she had 'delivered a lot of bad news as a midwife'. Marie felt it was important to have gained life experience before starting her training so that her personal skills were 'up to scratch' as she was worried about having to deliver bad news: ". . . that's always the thing that put me off wanting to do ultrasound, was having to break bad news".

Others preferred to develop confidence through the real-world experience of observing and having an opportunity to deliver bad news. The following extract from Paul highlighted the way he became more assured:

> I would really prefer to learn how to do [delivering bad news] from the clinical aspect of the training, from the people who are actually doing it so I can see them doing it and I can watch them how they cope with it and pick up on the phrases they use. . . I wouldn't be able to pick that up from a lecture or a book, I'd have to live it and watch it and that's the way that I've done it and that's given me loads of confidence now to be able to do it myself.

Confidence building was also about developing a personal practice when delivering bad or difficult news. This ranged from giving 'warning shots' early in the scan to using a gradual disclosure technique. Paul felt he was able to sensitively break difficult news by slowly taking a woman through the images from the scan, while being supported by the qualified sonographer:

> . . . I asked her if she would like me to show her the baby. . .She said yes, so I showed her there's no heartbeat and explained it in a little more detail, very thoroughly, calmly and let her have enough time. We'd also got some pictures for her as well.

Kate described gently starting the process of delivering bad news using prompts about the medical history before finally sharing the findings from the scan:

> . . . we go through the test questions at the beginning about bleeds . . . So she'd said [the patient] about having a bleed. Um, so I asked her how heavy was the bleed. So was it like, what colour was it, so kind of getting the thoughts in my head.

At the moment of delivering bad news, all the participant accounts described the need for an empathetic approach and adhering to principles of good communication. For some trainees, their self-confidence grew over time but for others the training did not adequately prepare them once they were qualified. Jenny reflected this anticipated situation: "I think that's gonna be quite tough but I think that's just unfortunately the way it is really".

Thus, the reality of being newly qualified, being expected to deliver difficult news and feeling apprehensive appeared to be met with a level of acceptance that this was an inevitable part of being a sonographer.

How learning happens

This theme referred to the different ways the trainees learned how to deliver bad and challenging news. The subthemes included the clinical setting and classroom learning.

The clinical setting

The majority of learning was perceived to occur on clinical placements. Shadowing and buddying up with qualified sonographers were techniques used at the start of the training programme. There appeared to be a gradual transition so that towards the end of training, the trainees conducted the whole scanning process, including sharing results with patients. This was seen as a way to develop essential knowledge and skills in order to become an independent practitioner:

> So you're just literally a fly on the wall type taking it in and then later on in the training when its, the roles are

> swapped around and I'm the one conducting the examination and the sonographer is observing me then I've been expected to, communicate possible, er, significant findings to the patient as well. (Paul)

However, the accounts revealed there was limited first-hand experience of delivering challenging news. Paul commented that he had 'lots of experience listening' and Kate summed up the limited level of practice expressed across the trainee accounts: "I've seen a lot of bad news being given and I have actually had to do it myself once or twice".

The need for reassurance and feedback on these occasions was vital with trainees anxious to know that they had said the right things and had shown the correct degree of empathy. What was apparent was the conflicting advice shared by qualified staff in terms of actually what to say:

> ... we're encouraged to ... introduce the idea that everything maybe isn't alright so, that maybe saying something along the lines of um, "I'm really sorry, I think you're going to have to prepare yourself for some bad news" or "I'm really sorry, I think I've found a problem. (Caroline)
>
> ... one sonographer said to me that you should never say "sorry" to a patient. Um, because that makes, it might make them feel like they've done something wrong ... but then most of the time when I'm with sonographers do break bad news, they, they often do say "sorry" and it kind of feels natural ... (Jenny)

It was inferred from the accounts that there was little time to discuss issues arising from delivering challenging news situations. Opportunities were reduced to quick conversations between scans. The need for validation that they had delivered the news well was evident across several accounts. Feedback from the trained staff was seen as a vital way to help build confidence that they were doing and saying the right things.

All participants commented on how well their qualified colleagues delivered challenging news. However, in one divergent account, Rachael described watching one sonographer insensitively deliver difficult news. She said she felt like she wanted to be 'swallowed up'. Although she recognised the human factors that might have played a part in the qualified sonographer's behaviour, she did not feel empowered to intervene:

> ... the sonographer ... had scanned lots and lots of patients in the morning ... and she wasn't expected to scan this patient. She took this lady in and [the patient] explained what had happened to her and the sonographer couldn't believe they hadn't scanned her at a different department, and more or less putting blame on this patient because she hadn't been scanned and then just said to her, "just get on the bed and we'll have a look", and then immediately put the probe on, and there was nothing there, and then just said "there's nothing there to see, I need to do an internal" ... because I was a student ... I felt out of control ... (Rachael)

This extract illustrated the variation in experiences for trainees when in clinical practice, but also the lack of time available for reflection. It also suggested that trainees may not feel capable of challenging poor practice, when in the clinical environment.

Classroom learning

Formal learning structure and content varied across different training providers. Some trainees received brief and self-guided learning sessions. There was no guidance for delivering news in ultrasound in particular. Marie indicated that the SPIKES protocol had been discussed in one classroom-based session and Kate described her brief academic experience as:

> ... personally have only had three lectures ... that have talked about how to deliver bad news. I wouldn't call it training to a certain extent, because, er, we were basically just told how not to do it ...

Across the accounts it was evident that trainees had received little advice about what language to use:

> I don't feel like I've had that much experience really of knowing what's right or wrong [what to say] or advice really on how it's best done. (Jenny)
>
> We've had lectures at university about it ... the way you should conduct yourself and the, you know, being honest and empathetic and caring and trying to read the situation. (Caroline)

However, the value of listening to and talking to people that had delivered and received bad and difficult news was seen as an important aspect of the training. There were several ways this was managed, including watching YouTube video clips of parents who had gone through the experience, inviting women who had received difficult news to speak in lectures and representatives from charitable organisations. Caroline described her amazement when listening about the perspective of the patient:

> Well surprisingly, the lady that came in to speak to us from the Stillborn and Neonatal Deaths charity,

> they said that we should always use the words "died"... if you're vague and say things like "I'm very sorry, I can't find a heartbeat"... that that could be really confusing... but in practice, I see very few people doing that.

The importance of being able to talk openly, away from the clinical setting to understand the best way to break bad news was considered invaluable. The trainees wanted to know more about how other sonographers coped with the emotional fallout from patients and how to answer the follow-up questions. Sara was keen to know how she should respond to patients when she was unable to answer their questions:

> ... the best way to answer the question, 'cause sometimes you break bad news and people are full of questions, and if you haven't got that knowledge, it's the right thing to say, isn't it?

Trainees also valued having the opportunity of peer learning and support. The importance of being able to practice scenarios and talk about experiences appeared to support learning. Following a small group discussion and role play exercise, Kate explained that her peers were able to give 'hints or tips on what we thought was good, or what we thought wasn't good' about each other's practice. Having time to reflect on learning how to deliver challenging news was considered a vital aspect of classroom-based learning. Kate also suggested that more 'peer time' would be useful to discuss 'our perceptions or what we've seen or witnessed'. However, the use of role play appeared to have a polarising effect on the group:

> I think people hate role play, absolutely hate it with a vengeance. (Caroline)
> I have done a lot of role play in my old training, communicating with patients and break bad news, but I think it's something that should be done. (Rachael)

The overall experience for trainees' sonographers was summed up by Paul in the following extract which described the reality about the way trainee sonographers learn:

> We often have discussions... but there's no real sort of set framework or anything written down for any of this, this is all just the sonographers experiences that we're buddied with on the day. And they will impart their own experiences on us and you get different learning outcomes of each sonographer and then it's up to you to formulate your own way from that.

Discussion

The study used a qualitative approach to explore trainee sonographers' experiences of learning how to deliver challenging news. Learning was a 'continuum'; a journey which progressed from the start of training to qualifying. Through this journey, trainees carried an 'emotional load'. They found news delivery situations stressful, as they empathised with the distress of the expectant parents and worried they could cause harm through their words or behaviours. They also had to develop their self-confidence in news delivery, which they did by drawing on previous experiences and practicing in clinical settings. Most of the trainees' learning occurred in clinic and all trainees commented that they have observed good news delivery examples by their qualified colleagues. However, advice provided by qualified staff was sometimes conflicting and trainees described having little opportunity for reflection on news delivery events in clinic. Classroom learning experiences varied between training centres. Trainees appreciated talks from patient representatives and also welcomed peer discussion and support, but some trainees still felt ill-equipped to deliver challenging news towards the end of training. They understood the principles of news delivery but were uncertain in particular about the specific steps they should follow.

This is the first study to explore how trainee sonographers develop skills in delivering difficult news. A large number of studies have focused upon the experiences of expectant parents when receiving challenging news via ultrasound, which have indicated a need to improve news delivery practice.[7,8,10,19,20] However, few have focused upon the experiences of the staff who deliver difficult news via ultrasound,[5,11–13,21] and only one has explored sonographers' experiences of news delivery training in particular.[21] This found that sonographers felt training was effective for improving their news delivery skills and that having received news delivery training was linked with lower levels of disengagement, one form of burnout. Similar with participants in the present study, sonographers' preferred training techniques included observing clinical practice, receiving teaching from patient representatives and group discussions.[21] Our present study extends this work by employing a qualitative approach, which allows for a much richer understanding of experience than can be provided using survey techniques. It also extends this paper by focusing on trainees rather than qualified sonographers. Our findings suggested that some elements of current training approaches are valued by trainees. However, we have also identified some gaps in provision, including a lack of specific guidance for sonography settings, receiving conflicting advice from qualified staff and a lack of feedback regarding news delivery performance.

Implications for policy and future research

Two main implications arise from these findings. First, they highlight the need for a news delivery protocol focused on ultrasound settings, which specifies the words and behaviours sonographers can use. Currently, the most widely used news delivery framework is the SPIKES.[15] However, this was developed for use by doctors in oncology settings and no studies have tested this in ultrasound settings with sonographers.[16] The SPIKES provides news delivery principles rather than specific steps sonographers can use, and as a result, each trainee in our study was tasked with developing their own personal protocol for bad news delivery through the course of training. This was challenging for trainees and left them feeling uncertain about the quality of their practice. An evidence-based, detailed and ultrasound-specific news delivery protocol could help address this uncertainty and reduce the burden of responsibility on individual sonographers.

Second, they highlight a strong need in trainees for advice and feedback from qualified staff regarding their news delivery practice. Most learning occurred on placement, but trainees commented that there was little formal opportunity for reflection or feedback on their news delivery performance. Training courses could capitalise on these experiences by introducing structured feedback opportunities for trainees; providing placement supervisors with feedback sheets that they can use to consider different aspects of trainee's news delivery practice and including this as part of their overall assessment.

Strengths and weaknesses

Our study benefited from a diverse sample which included trainees from four different training centres, across different ages with both midwifery and radiography backgrounds. However, we were unable to recruit trainees from non-White ethnic minority backgrounds and findings may not generalise to this group.

Conclusion

The study used a qualitative approach to understand the experiences of sonography trainees when learning to deliver bad and challenging news. Results suggested that training was a journey where trainees built their confidence over time. Learning occurred mainly in the clinic setting. While trainees were exposed to positive examples of news delivery by qualified staff, they also received conflicting advice and felt unsure about the specific words and behaviours they could use. Future work could address these issues by developing an ultrasound-specific framework for news delivery which carefully considers the particular phrases and behaviours sonographers can employ during these events.

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Contributors

Liz Tomlin: Substantial contributions to the study design or analysis and interpretation of data. Drafting the article and revising it critically for important intellectual content. Final approval of the version to be published.
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