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### **Sonographers' Experiences of Breaking Bad News in Prenatal Ultrasound**

#### **Abstract**

All pregnant women in the UK are offered a prenatal ultrasound examination between 8 and 12 weeks gestation, and again between 18 and 22 weeks gestation to determine the viability of the pregnancy and to screen for abnormalities. Many women, however, do not appreciate the screening function of prenatal ultrasound and see the scan as a social event in which they get to see their baby for the first time. One in five examinations will reveal a miscarriage and abnormalities will be detected in a further six percent.

Bad news in pregnancy is, therefore, often unexpected and if handled ineptly in these situations can lead to long term psychological morbidity in the women. In the UK, sonographers are the most likely health professionals to break bad news in prenatal ultrasound, yet there are no specific guidelines to help them. This is partly because very little research has been carried out from the sonographer's perspective. The advice that does exist stems from research in the medical profession and focuses on the importance of advance preparation, which is impractical given the immediate nature of bad news during prenatal ultrasound.

This project will look at sonographers' experiences of breaking bad news. The aim of the research is to identify elements of good practice that can be incorporated into a protocol to guide future breaking bad news interactions. It is hoped that this will also provide a framework for training novice practitioners.

## a) Aims and Objectives

All pregnant women in the UK are offered a prenatal ultrasound examination between eight and twelve weeks gestation, and again between eighteen and twenty two weeks gestation to determine the viability of the pregnancy and to screen for abnormalities (1). However, almost fifty percent of women do not appreciate the screening function of prenatal ultrasound (2); others do not realise that abnormalities can be detected using ultrasound (3); and many are not aware that the results might necessitate the need for further, more invasive tests (4). Instead, for many women the ultrasound examination is a social ritual through which they get to see and meet their baby for the first time (3). Unfortunately, figures show that having to break bad news is relatively common, even in low risk pregnancies. One in five examinations will reveal a miscarriage and abnormalities will be detected in a further six percent (5).

Until recently sonographers have been constrained by the medical profession in what they were allowed to communicate to pregnant women regarding the results of the obstetric ultrasound scan (6), but today reporting on scans and communicating information regarding fetal abnormalities by sonographers has become common practice (7). Sonographers are now the mostly likely health professionals to tell women the news that a fetal anomaly has been detected (8).

Bad news during these ultrasound examinations is an uncontrollable, unexpected event, which results in feelings of loss and of bereavement (9). It is associated with a wide range of psychological disorders; acute stress disorder; post traumatic stress disorder; and increased anxiety (10). Whilst these psychological effects will subside over time in most women (11), the inept handling of women by sonographers when breaking this bad news can increase the woman's long-term psychological morbidity (12). There is also a suggestion that the stress faced by sonographers when breaking bad news may lead to psychological burnout later on (13). Consequently, sonographers must undertake the responsibility of breaking bad news in the best way possible.

Unfortunately there is little advice to guide sonographers in how to break bad news, although protocols, where they exist, have been found to help (13). These existing protocols are predominantly aimed at the medical profession where bad news is often expected and time is afforded to preparing what to say and how to say it (14); few of these protocols are supported by empirical evidence (15). Therefore sonographers typically learn to communicate bad news through trial and error, or by observing more senior practitioners undertaking the role, resulting in an activity that has its basis in common practice, rather than in evidence based practice.

The aim of the research will be to identify good practice, when breaking bad news in prenatal ultrasound, with the objective of translating these findings into a protocol that can be used to guide sonographers who undertake this role. Owing to the nature of the topic and the lack of empirical evidence, the method employed will use an interpretative phenomenological approach. The study will be qualitative and data will be generated from interviews with experienced sonographers.

Research Question:

What is 'good practice' for breaking bad news in prenatal ultrasound screening?

Aim:

To identify 'good practice' guidelines for breaking bad news in prenatal ultrasound, using an interpretative phenomenological methodology

Objectives:

1. To interview sonographers who are involved in prenatal ultrasound screening
2. To identify from the analysis of these observations/interviews evidence of 'good practice' for breaking bad news.
4. To incorporate this evidence into a protocol that can be used to guide sonographers when giving bad news to women during prenatal ultrasound scanning.

b) Methodology

A qualitative approach will be used to collect the data. Qualitative research aims to portray the reality under investigation, by giving it meaning and value, based on the experiences and views of the individuals who 'live' in that situation (16). In this research the reality of breaking bad news in prenatal ultrasound will be portrayed, using the sonographers who actually undertake this task. Owing to there being very little written about breaking bad news in prenatal ultrasound from the sonographer's perspective a phenomenological methodology will be employed. Phenomenology is a way of uncovering the background reality of a situation by revealing aspects that may otherwise remain hidden (17). By illuminating both good and bad practice, this

investigation should provide the foundations of a framework for understanding the breaking bad news interaction and how it may be improved. The practitioner's perspective gained from this study will complement the abundance of literature that has already explored women's' experiences of receiving bad news concerning foetal abnormalities during pregnancy (18-34).

Unstructured interviews will be the method of data collection, allowing sonographers to tell their own stories of breaking bad news. This is one way of giving voice to the research participants. Transcripts of the interviews will be analysed using the Interpretative Phenomenological Analysis (IPA) methodology (35). Themes will be generated and incorporated into a narrative account using verbatim extracts from the transcripts as supporting evidence. The researcher will take a reflexive stance, acknowledging that their prior conceptions form part of their interpretive resources. A level of validity will be achieved by incorporating participant feedback on the initial analysis into the results.

Given that this method is qualitative it is not possible to determine exactly how many participants will be needed to reach a point of data saturation. IPA literature tends to recommend relatively small, homogeneous sample sizes of between five and ten participants (36-38) although there is no 'right' sample size (39). It looks closely at each participant's account of the phenomenon and does not try to generalise its findings. Although IPA is not opposed to making general claims for larger populations, it is committed to analysis of small numbers of cases which may subsequently lead on to generalisations. IPA uses purposive sampling in order to find a more closely defined group for whom the research question will be significant. In this study the topic under investigation, namely sonographers' experiences of breaking bad news in prenatal ultrasound, will define the boundaries of the relevant sample.

As the giving of bad news is a process, not a single event, it will be the intention of the research to investigate all interactions, not only those where bad news is given. This will enable the researcher to build a picture of how sonographers prepare all women for examinations, how they ascertain what a woman knows, or wants to know and how they build up a rapport with women. Those interactions that actually involve the giving of bad news, will determine exactly what is said and how it is said.

Given that the main body of the research will involve participants who will be recruited by virtue of their professional role in the NHS, ethical approval has been applied for and granted by the National Research Ethics Committee. Although the focus of the research is on the behaviour/feelings of the sonographers, it is apparent that participants will be subject to some inconvenience. For this reason it is the intention to take consent from the sonographers involved. Participant information sheets will reflect this and it will be

made clear that they have the right to withdraw at any time and have their data destroyed. Sonographers will be identified from records held at the School of Medical Imaging Sciences, Lancaster.

#### c) Potential Impact

This project will provide knowledge about an under-researched area of sonographers' professional practice. Understanding the way sonographers break bad news may lead to measures to improve its delivery and thereby improve the experience for both the patient and the sonographer. One aim of the research is to develop guidelines for breaking bad news during a prenatal ultrasound scan, where none have previously existed.

#### d) Projected Outcomes

It is anticipated that this research will identify examples of good practice, employed by sonographers, when breaking bad news in prenatal ultrasound. The long term objective is to incorporate these techniques into a protocol, similar to those that exist in medicine, which is suited to the task of breaking bad news in prenatal ultrasound. However, further research would be necessary to determine the reliability and validity of such a protocol in practice.

#### e) Evaluation and Dissemination Strategy

The project is regularly evaluated by the researcher's supervisory team at the University of Cumbria. In addition, a PhD transfer panel has reviewed the project and deemed it to be worthy of doctoral level research. Ultimately the project will be examined by a panel of experts following submission of the thesis.

Findings will be disseminated in peer reviewed journals prior to and following the final examination process. Conference papers will also be given by the researcher as the project progresses.

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