



ASA POSITION STATEMENT | MITIGATING SONOGRAPHER DISTRACTIONS IN OBSTETRIC ULTRASOUNDS

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Purpose

The purpose of this statement is to provide evidenced-based, best practise recommendations that workplaces can use to create and implement their own guidelines that will establish a safe working environment for sonographers.

Key Points

- The first and mid-trimester ultrasound scans have become a standard component of prenatal care and are used by clinicians to assess fetal number and viability as well as cervical, placental and morphological anomalies^{1,2}.
- 2% - 3.5% of all pregnancies will have a fetal structural abnormality or anomaly². 60% of major fetal anomalies have been reported to be detected in the first trimester ultrasound³ and approximately 25% of fetal conditions will not be diagnosable until the second and third trimester¹.
- It is recognised that obstetric ultrasounds have competing diagnostic and social interests⁴. Obstetric ultrasounds are emotionally beneficial to pregnant women when they provide reassurance, reduce parental anxiety and facilitate bonding^{5,6}.
- Pregnant women and their partners generally expect that having an obstetric ultrasound will be a positive experience. However, the scans are diagnostic examinations and this can make communicating an unexpected finding challenging and stressful for the sonographer⁷. This is amplified when multiple support people or children are present with their own expectations of the examination^{4,8}.
- A clearly articulated workplace guideline on the number of observers, the presence of children and the use of electronic devices would enable the emphasis to be on the diagnostic aspect of obstetric ultrasounds. An effective guideline would allow sonographers to control their work environment with support from their employer⁴ and ensure employers provide a safe working environment for their employees as required by Occupational Health and Safety (OHS) laws⁹.

Background and Context

Obstetric sonographers are tasked with performing a diagnostic ultrasound whilst balancing the social aspect of the scan; this is an extra workload not required in other fields of imaging. Sonographers use a mental checklist and a systematic approach to ensure all aspects of fetal anatomy and maternal structures are observed. Sonographer focus and concentration is therefore critical and distractions or interruptions to their systematic scanning can lead to an incomplete scan, false negatives, errors or missed abnormalities, with potentially devastating consequences^{4,6}.

The importance of the diagnostic aspect of an obstetric ultrasound is not always appreciated by pregnant women who like to share their obstetric ultrasound with family members, friends or other children^{7,8}. This social aspect has become widely promoted with the popular culture of 3-4D scans for entertainment and sharing images on social media⁸. When multiple support people and children are present the sonographer is required to consider their care, distracting the focus from the pregnant woman and fetus⁴. Additionally, multiple observers can cause distraction rich environments with background conversations, frequent questions and noise from mobile phones/ electronic devices⁶.

The presence of disruptive or restless children is reported to be the most common cause of sonographer distractions in an obstetric ultrasound; therefore, young children are discouraged from attending obstetric ultrasounds^{5,6,8,11}. There are physical risks to safety when mobile young children are in closed dark rooms with scanning equipment, electrical hazards and sharps disposal containers⁶. Restless young children can cause parental stress and frustration as they are unable to fully engage in the experience⁸. Research reveals that sonographers do not generally believe that obstetric ultrasounds assist with sibling bonding between a young child and fetus⁶.

Sonographers can also be placed in an ethically challenging and stressful position when a fetal demise or unexpected abnormality is detected. They may be required to communicate their findings to the pregnant woman in the presence of multiple observers whilst assessing and archiving the abnormality correctly. In addition, they will need to contact the reporting clinician and may be required to communicate the next step to the anxious patient (and observers)^{8,10}.

ASA Recommendations

1. A local departmental or organisational guideline should be developed and implemented to protect sonographers while performing ultrasound examinations from stress, loss of concentration, risk of misdiagnosis, patient complaints and unnecessary exposure to medical litigation⁶, which should include the following:
 - Limits should be placed on the number of observers (for example, no more than 2 observers) and ensure compliance with OHS laws to minimise sonographer distraction.
 - Young children should be discouraged from attending obstetric ultrasound appointments. If it is necessary for them to come to the appointment another adult should be present to supervise in case they become disruptive⁸. When implementing this recommendation consideration must be given to the patient's personal circumstances.
 - Mobile phones and electric devices should be placed on silent.
 - No food or drinks should be consumed in the ultrasound room.

2. A local departmental or organisational guideline should be implemented to support the sonographers actions and communication if an adverse or unexpected finding occurs within an obstetric ultrasound appointment¹².
 - To avoid sonographer stress adequate time must be given for an obstetric appointment. This is to provide empathetic care to the patient particularly in an event of an unexpected finding and to allow sonographers to adjust between emotionally charged appointments^{12,13}.

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