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Women's Opinions on Cardiotocograph Monitoring and Staff Communication During Labour

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Abstract

Aims
This study was undertaken to ascertain women's opinions of having fetal monitoring done in labour, how they felt the staff taking care of them communicated with them about cardiotocograph (CTG) and how they rated their birthing experience.
Methods
An anonymous survey was given to women in September 2018, asking them about their experience of CTG monitoring and staff communication.
Results
All forty-eight women said the staff explained the CTG to them, and 93.8% were satisfied with this communication. Nearly all women, 97.9%, felt confident that the staff knew what they were doing and 89.6% felt included in any clinical decision that was made. Of the forty-eight women, 20.8% said they wanted to know something about the CTG but didn't ask at the time. When asked about their overall experience of communication from staff, 60.4% said excellent.
Conclusions
It is important to assess patient's satisfaction with communication from staff members.

Introduction

Effective communication plays a vital role in healthcare by enhancing the patient experience[1]. As many of patient complaints are a result of poor communication from staff[2], it is essential to be aware of patients' satisfaction with communication received. Communication is said to be effective when the sender of a message adequately conveys a message so that it is understood by the receiver[3]. Understanding the current level of patient satisfaction with communication helps to design the teaching and training of staff to address any deficits in this area.

Sources of communication breakdown during delivery are complex and can compromise patient safety resulting in adverse outcomes[4]. Each year, nearly 3% of doctors will receive a formal complaint against them[5]. This is a difficult situation for both healthcare providers and the person making the complaint. Communication is an aspect of professional practice which often emerges as a key factor in medical litigation[2]. The Irish Medical Council report in 2015 recommended that healthcare workers need to adopt communication styles to adapt to each individual patient and situation that they find themselves in, so that patients feel their concerns are being addressed[5]. A recent report stated that the two most common reasons for women to complain in an obstetric setting were issues with

cardiotocograph (CTG) monitoring in labour and with communication received during labour[2]. Overall, a key component in patient safety is effective communication[6].

Interpretation of the CTG can lead to a sudden change to the management of women in labour. As this can cause anxiety leading to a traumatic experience, it is important to inform women of any changes to their care. This study was undertaken to ascertain whether the women felt included in the decision to use CTG during labour, how they felt the staff communicated with them about the CTG findings, and if the satisfaction with the communication correlated with their overall birthing experience.

To our knowledge, there is limited, if any, studies which describe or evaluate the communication about fetal monitoring from a patient's perspective. This is why this study was undertaken.

Methods

Prior to undertaking the study, a literature search was carried out using PubMed and MEDLINE. A combination of keywords related to "cardiotocograph", "intrapartum fetal monitoring" and/or "communication" were used.

This prospective study was undertaken in University Maternity Hospital Limerick in September 2018. Our unit has implemented CTG classification stickers which are placed in women's charts in order to standardise CTG interpretation in the hospital. One hundred questionnaires were distributed to women when they were still in the delivery suite, after they had delivered. Adequate time after labour was provided to complete the questionnaire. The completed questionnaire was collected from the women before they were discharged from hospital. All women who had continuous CTG monitoring during labour and delivery were included, regardless of mode of delivery. Any women who had an elective caesarean section and therefore were not in labour were excluded from the study. We also excluded women who did not have a good understanding of the English language.

Two anonymous questionnaires, one for the woman in labour and the other for the staff member, were drafted by the research team and distributed to the study population on a pilot basis before compiling the final version. Women received an information leaflet explaining the study. A consent form was signed by all women before partaking in the study. The questions were designed to understand their experience of CTG monitoring, staff communication and their overall birthing experience. Most questions were formulated to be simple requiring yes/no responses. Some questions required qualitative responses that rated staff communication regarding the CTG, their feelings on being included in clinical decisions that were made as a result of CTG findings, their perception about having CTG monitoring done during labour and their rating of the overall birthing experience **(Questionnaire 1)**.

QUESTIONNAIRE 1: WOMAN'S QUESTIONNAIRE

Title of Research Study: What did they tell you about your baby's heart monitoring?

Name of Principal Investigator: Dr Gabriela McMahon

Please circle your answer.

1. Did the staff caring for you explain your baby's heart rate monitoring to you?
   Yes No
2. If yes, were you satisfied with this communication?
   Yes No
3. Was another member of staff called into the room to offer a second opinion on the baby's heart rate monitoring?
   Yes No
4. If yes, were you satisfied with the communication from the second person?
   Yes No
5. Did you feel confident that the staff knew what they were doing?
   Yes No
6. Did you feel included in any decision that was made about your care as a result of your baby's heart rate findings?
   Yes No
7. Is there anything that you wanted to know about your baby's heart rate monitoring at the time but didn't ask?
   Yes No
8. How did you feel about having your baby's heart rate monitored during labour?
   1 – Very anxious 2 – Worried 3 – Neutral 4 – Reassured 5 – Very reassured
9. Please rate your overall experience of the communication from the staff taking care of you regarding the baby's heart trace.
   1 – Poor 2 – Below average 3 – Average 4 – Good 5 – Excellent
10. Please rate your overall birthing experience.
    1 – Poor 2 – Below average 3 – Average 4 – Good 5 – Excellent

Thank you for your participation.

A second information leaflet was given to the staff members taking care of the women which also explained the study. The staff questionnaire was completed by the specific staff members taking care of the women in labour **(Questionnaire 2)**. Questions in this survey included basic patient demographics, the mode of delivery, analgesia used during labour, and length of labour. As the study was anonymous, the two questionnaires were both coded with matching numbers so that they could later be paired for data collection and analysis.

QUESTIONNAIRE 2: STAFF QUESTIONNAIRE

Title of Research Study: What did they tell you about the CTG?

Name of Principal Investigator: Dr Gabriela McMahon

Please answer the following questions

1. Patient's age _____
2. Parity _____
3. Previous LSCS _____
4. IOL or SOL _____
5. Antenatal concerns _____
6. Length of labour _____
7. Type of delivery _____
8. Analgesia _____

Thank you for your participation.

To help eliminate bias, women were not expected to return the questionnaire to the staff member who cared for them during labour. Instead, the questionnaire was collected from them before discharge from hospital. They had the option

of either returning the completed questionnaire to an anonymous response box placed on each hospital ward or to return it to in an envelope a member of staff.

Data was collected and analysed using SPSS v25.0.

Results

In total, forty-eight women completed the survey, giving a response rate of 48%. The mean maternal age at delivery was twenty-nine years (Range of twenty to thirty-nine years). The mean duration of labour was four hundred and thirty-five minutes. Of these forty-eight women, four (8.3%) had one previous caesarean section.

Table 1. Patient Demographics

Parity	
Zero	12 (25.0%)
One	20 (41.7%)
Two	12 (25.0%)
Three	4 (8.3%)
Labour Onset	
Spontaneous Onset of Labour	28 (58.3%)
Induction of Labour	20 (41.7%)
Mode of Delivery	
Spontaneous Vaginal Delivery	29 (60%)
Instrumental Delivery	11 (23.3%)
Emergency Caesarean Section	8 (16.7%)
Analgesia in Labour	
Nil or Medical Nitrous Oxide	8 (16.7%)
Intramuscular Pethidine	12 (25.0%)
Epidural Catheter	28 (58.3%)

Table 2. Questionnaire Responses

Question	Yes	No
Did the staff caring for you explain your baby's heart rate monitoring to you?	48 (100%)	0 (0%)
If yes, were you satisfied with this communication?	45 (93.8%)	3 (6.2%)
Was another member of staff called into the room to offer a second opinion on the baby's heart rate monitoring?	44 (91.7%)	4 (8.3%)
If yes, were you satisfied with the communication from the second person?	40 (83.3%)	8 (16.7%)
Did you feel confident that the staff knew what they were doing?	47 (97.9%)	1 (2.1%)
Did you feel included in any decision that was made about your care as a result of your baby's heart rate findings?	43 (89.6%)	5 (10.4%)
Is there anything that you wanted to know about your baby's heart rate monitoring at the time but didn't ask?	10 (20.8%)	38 (79.2%)

Table 3. Questionnaire Responses cont.

Question	Excellent	Good	Average	Below Average	Poor
Please rate your overall experience of the communication from the staff taking care of you regarding the baby's heart trace.	29 (60.4%)	15 (31.3%)	4 (8.3%)	0 (0%)	0 (0%)
Please rate your overall birthing experience.	25 (52.1%)	18 (37.5%)	5 (10.4%)	0 (0%)	0 (0%)

When asked about how they felt about having CTG monitoring done during labour, twenty-six (54.2%) women felt very reassured, seventeen (35.4%) felt reassured, four (8.3%) felt neutral about having CTG monitoring done and one (2.1%) felt worried. Overall experience of communication about the CTG was not influenced by onset of labour (p=0.495), analgesia choice (p=0.068), parity (p=0.331) or type of delivery (p=0.150).

Discussion

In this study, women rated the quality of the communication from both doctors and midwives about the CTG during labour and delivery quite highly. Although this study is limited by a small sample size, the results may be used to improve staff training in the future to help improve women's birthing experience. Nearly 21% of women said that they had questions about the CTG which they didn't ask at the time. This may highlight an opportunity to ask women if they have any questions, and encourage them to enquire about any issues or concerns that they may have during labour and delivery so as to further improve their experience of childbirth. This may decrease the incidence of secondary tocophobia in subsequent pregnancies[7]. A recent meta-analysis showed that the prevalence of tocophobia is up to 14% and that this figure is rising[8]. Secondary tocophobia can often be linked to traumatic experiences in previous deliveries. Ineffective communication during delivery and a woman who feels out of control in labour and delivery may contribute to a feeling of tocophobia in future pregnancies[7].

The WHO recently published new recommendations on effective communication between healthcare providers and women in labour[9]. These are mirrored in the NICE guidelines on the intrapartum care for healthy women and babies[10]. Women should be in control of their labour and involved in the events that are happening to them. It is therefore essential to establish a rapport with the woman, which can only be done with the help of good communication. It is important to enquire how women feel during labour and if they have any concerns or worries[11].

Continuous CTG monitoring in labour is now widely practiced during labour and birth. Most women will not be aware of the importance of CTG monitoring and how the management of abnormal CTGs may impact their care. It is therefore essential for healthcare providers to explain why labour may have to be interrupted or delivery may have to be expediated in the event of an abnormal CTG. Women should always feel in control of their labour and delivery, and healthcare workers play an integral role in ensuring this. The best way to ensure this is to communicate well with them during their time on the labour ward to ensure they feel up to date with any changes with the CTG and included in any decision or management plan that is made as a result of the CTG.

Bryson published a study which was undertaken to investigate women's views on STAN fetal monitoring[12]. Overall, it found that women's opinions about fetal monitoring varied widely and depended on certain factors such as labour preferences, the information being received, and how they understood this information.

A study published in 2018 asked women their opinions of fetal monitoring by a system called Moyo during their labour[13]. Most women gave positive feedback about its use and thought it improved their care because it provided reassurance and improved communication from birth attendants. Another paper published in 2015 suggests various ways to improve communication with patients, including having standardised fetal monitoring language and

application[14]. They highlight opportunities to improve communication with patients and the need to be conscious about this importance with the aim of continuously improving it in the future.

This study highlights that, overall, women seem to be satisfied with communication regarding CTG received from staff during childbirth. The positive feedback in this study is also highlighted in the fact that the majority of women rated their birth experience as being very positive and felt reassured to have CTG monitoring done. However, this study also shows the importance of routinely ensuring women are satisfied with the care that is provided to them.

Declaration of Conflicts of Interest:
The authors would like to declare there were no were conflicts of interest.

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