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Research Reviews

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Birth control

Rachel Thompson and Yvette Miller (2014) Birth control: to what extent do women report being informed and involved in decisions about pregnancy and birth procedures? BMC Pregnancy and Childbirth 2014, 14:62 doi: 10.1186/1471-2393-14-62

Gemma McKenzie looks at this research on women's experiences of informed decision making

Methodology

The researchers sent a survey to all women who had, within a four-month period in 2010, a live birth in Queensland, Australia, and who had experienced one of the following procedures:

- Ultrasound scan (for any reason)
- Blood test (for any reason)
- Induction of labour
- Pre-labour caesarean section
- Vaginal examination during labour
- Fetal monitoring during labour
- Post labour caesarean section
- Epidural
- Episiotomy

The researchers included women who had both singleton and multiple pregnancies. They did not include, in their analysis of caesarean sections, women who had given birth to twins where one had been born vaginally and the other by caesarean section.

The survey contained questions that assessed the women's perceived receipt of information about the benefits and risks of the procedure and their role in decision-making about that procedure.

The questions were very basic. When surveying the receipt of information, the question required only a yes/no answer as to whether the medical professionals had discussed the pros and cons of the procedure

with the woman. The woman's role in decision-making was assessed by asking who decided that the woman would under take a particular procedure. The potential responses were:

- I decided from all my available options;
- My maternity care provider(s) decided and checked it was OK with me;
- My maternity care provider(s) decided without checking with me.

Results

The results showed that out of 3,542 women who completed the survey, many underwent procedures that they had neither been informed of nor consented to. Some of the statistics are as follows:

- 60% of the women had not been informed of the benefits and risks of vaginal examinations;
- 13% were uninformed and unconsulted about the vaginal examinations they experienced;
- 26% were neither informed nor consulted about their episiotomy;
- 19% had not been consulted or informed about the fetal monitoring of their baby;
- 48% had not been informed of the benefits and risks of ultrasound scans;
- 14% of women underwent a caesarean section without being informed of the benefits and risks associated with the procedure.

One of the important points that emerged from the study is that women felt least informed and consulted about the procedures that were most routinely carried out (ultrasound scans, blood tests, fetal monitoring and vaginal examinations). Worryingly, this suggests that once a procedure becomes routine, it undermines the process of informed decision making.

Limitations of the study

The researchers acknowledge that there were some limitations to their study. Firstly, only 34.2% of the women they asked completed the survey. Arguably, a higher response rate could have produced different results, or at least more reliable results.

Secondly, the researchers admit that they adopted a *'crude measurement of potentially complex decision making processes.'* This was done partly because they wanted to carry out large-scale data collection and also so as to capture the experiences of a range of people, including those frequently unconsulted in research. However, this process does create somewhat of a grey area around the respondents' perceptions of the information they received and the decision-making process associated with that.

Finally, some of the respondents did not complete their survey until up to a year after the procedure took place. This means that there may be some question mark over the accuracy of the respondents' recall of events. The researchers do, however, cite research that highlights how women typically recall their maternity care experiences with great detail even years after they have given birth.

Discussion points

In some respects, this research throws up more questions than it answers. One point to note here is that the researchers only assessed a woman's perceived receipt of information. If a woman is receiving all of her information from a medical professional and not looking at relevant literature or research herself, then she cannot be sure her care provider is giving her the full picture. The researchers, therefore, were not assessing whether the woman actually got the correct information to enable her to make an informed decision, but whether she believed that she was getting all of the relevant information. In other words, they were not researching how well informed the women actually were, but how informed they felt they were. This is highlighted in the example question given in the paper :

'Did your maternity care provider(s) discuss with you the pros and cons (benefits and risks) of having and not having a caesarean?'

Questions of this type presuppose that the care giver is able and willing to give a woman the full picture and that she is in a position to assess whether all of that information has been given to her. Of course, this is not always the case; therefore even for those women who answered 'yes', it is questionable whether they were truly 'informed' in the strictest sense of the word.

The type of information a woman is given may also depend on the position of the care giver and his or her perception of what is 'normal'. Statistics given in the paper show that 94.7% of the respondents who laboured had experienced fetal monitoring. Forty percent of all of the respondents had given birth via caesarean section. Further, 24.9% had been induced; 38.3% had had an epidural and 19.1% were subject to an episiotomy.

Most notably 98.1% of all births were in hospital and only 0.1% were planned homebirths. This suggests a medicalised maternity service in which inter is the norm. In turn, this begs the questions of how up to date the care providers were on the research on procedures and whether their perceptions of a normal birth would result in a woman not being given all of the relevant information so she could make an informed decision. In addition, it could explain why many women felt they had limited or no input into the decision-making process and the interventions they experienced. Perhaps, due to the frequency with which these procedures are taking place, they are slipping into the 'routine' category and medical professionals are feeling less need to discuss benefits and risks in detail or to fully gain the woman's agreement.

The last point to note is that a blank is drawn on how many women gave birth without any interventions whatsoever, as they would not have received the survey. Given that blood tests and ultrasounds are now routine aspects of antenatal care, it is unlikely that there would be many such women, but it would be interesting if the researchers had tapped into those women's experiences to see whether they had felt fully informed and therefore empowered to opt out of medical procedures.

Gemma McKenzie

Anti-D

Routine administration of Anti-D: the ethical case for offering pregnant women fetal RHD genotyping and a review of policy and practice. BMC Pregnancy and Childbirth 2014, 14:87. doi: 10.1186/1471-2393-14-87
Julie Kent, Anne-Maree Farrell and Peter Soothill (2014)

Nadine Edwards shares some vital information for informed decision and protocol making

This readable, open access paper discusses the potentially unnecessary use of anti-D during pregnancy.

Its authors suggest that, each year, about 40,000 women in England and Wales who are rhesus negative receive anti-D unnecessarily, because they are pregnant with a rhesus negative baby. They acknowledge the benefits of anti-D over the years, but question its routine use when there is now a 'non-invasive' test available to see whether it is needed or not. They say about the test that:

'it has been shown to be very accurate but the small possibility of false negative results remains. If the test gave a false negative result and routine cord blood phenotype testing at birth subsequently identified the fetus as RhD positive then postnatal Anti-D Ig would still be administered at that time, but potentially sensitisation could occur in these women affecting subsequent pregnancies. The risks of this happening have been estimated to be 1:86,000.2.'

In other words, while no test is 100% accurate, the likelihood of a false negative result and subsequent sensitisation is extremely small - one in 86,000.

The authors also describe how anti-D is produced in North America:

'a blood product made from pooled plasma, it is collected mainly from RhD negative men who are injected with RhD positive red blood cells, so that they produce antibodies. The men are paid a "premium" because of the risks they face when being injected by donor red blood cells.'

This is a useful paper, because accurate and reliable information about anti-D is not easily available to pregnant women who are rhesus negative, and despite concerns about receiving blood products, most are told that anti-D is necessary and that it is given routinely during pregnancy, and that not having anti-D could result in problems for their babies. As Sara Wickham points out:

'There isn't nearly enough research about how anti-D may affect the unborn baby. Moreover, a proportion of the women who receive antenatal anti-D do not need it because they are carrying a rhesus negative baby, and therefore the problem that anti-D is given to prevent simply didn't exist in the first place for these women. In the UK, this proportion is estimated to be around a third of rhesus negative women.'[1]

The authors rightly question the ethics of injecting women with a blood product during pregnancy that around 40,000 of them each year in England and Wales do not need, when there is now a reliable test

available that would prevent the need for this.

Abstract

Background

Since its introduction in the 1960s Anti-D immunoglobulin (Anti-D Ig) has been highly successful in reducing the incidence of haemolytic disease of the fetus and newborn (HDFN) and achieving improvements to maternal and fetal health. It has protected women from other invasive interventions during pregnancy and prevented deaths and damage amongst newborns and is a technology which has been adopted worldwide.

Currently about one third of pregnant women with the blood group Rhesus D (RhD) negative in the UK (approximately 40,000 women per year in England and Wales), receive antenatal Anti-D Ig in pregnancy when they do not require it because they are carrying a RhD negative fetus. Since 1997, a test using cell free fetal DNA (cffDNA) in maternal blood has been developed to identify the genotype of the fetus and can be used to predict the fetal RhD blood group.

Discussion

This paper considers whether it is ethically acceptable to continue administering antenatal Anti-D Ig to all RhD negative women when fetal RHD genotyping using maternal blood could identify those women who do not need this product.

Summary

The antenatal administration of Anti-D Ig to a third of RhD negative pregnant women who carry a RhD negative fetus and therefore do not need it raises important ethical issues. If fetal RHD genotyping using maternal blood was offered to all RhD negative pregnant women it would assist them to make an informed choice about whether or not to have antenatal Anti-D Ig.

References

1. www.sarawickham.com/riffing-ranting-and-raving/how-to-save-40000- women-a-year-from-having-an-unnecassary-blood-product/.