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ScienceDirect
International Journal of Nursing Studies 45 (2008) 224–231
INTERNATIONAL JOURNAL OF NURSING STUDIES
www.elsevier.com/locate/ijnurstu

Pregnant womens' views about choice of intrapartum monitoring of the fetal heart rate: A questionnaire survey

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Received 22 March 2006; received in revised form 23 August 2006; accepted 30 August 2006

Abstract

Aim: To investigate the degree of choice pregnant women at low obstetric risk had in making informed decisions on the use of intrapartum fetal monitoring techniques.
Methods: An exploratory descriptive design was used as part of a larger, multi-method study. A total of 63 pregnant women at low obstetric risk were approached to complete antepartum and postpartum questionnaires. Sixty-three women completed antepartum questionnaires, 38 of these 63 women also completed postpartum questionnaires. The data were analyzed using descriptive statistics.
Results: More than half of the sample wanted electronic fetal monitoring (EFM) in labor despite being classified at low risk for obstetric complications. Having choices and being in control was important to all respondents whilst in labor. Despite this, almost all respondents stated that midwives had not given them a choice of monitoring method. More than a half of the sample received some form of EFM.
Conclusions: Intrapartum fetal monitoring practices for women with normal pregnancies do not reflect current evidence. Women still expect EFM in labor. Choice and control are very complex issues and as such are difficult to measure.

Keywords: Electronic fetal monitoring; Informed choice; Intermittent auscultation; Midwives

What is already known about the topic?

- There is a dearth of literature pertaining to womens' choices around the use of intrapartum fetal monitoring techniques.
- Little is known about current preferences for intrapartum fetal monitoring techniques.

What this paper adds

- Current practices in intrapartum fetal monitoring are not based on best evidence whereby women at low obstetric risk are routinely monitored by electronic means.
- Women expect to be monitored by high-tech means despite their low-risk status.
- Choice and control are complex concepts that are difficult to measure. For example, despite the fact that the majority of women reported that they had not been offered a choice of monitoring method, they

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doi:10.1016/j.ijnurstu.2006.08.019

also reported that they felt they had received an informed choice.

1. Introduction

Intrapartum electronic fetal monitoring (EFM) of the fetal heart rate entails the use of a machine, which gives a continuous paper recording of the fetal heart rate in relation to uterine activity. This can be undertaken by external means using belts around the abdomen to which ultrasonic tocographic leads, are attached or via internal means, where a fetal electrode is applied vaginally to the fetal scalp in order to gain a more accurate recording. EFM can be used both intermittently and continuously. Womens' intrapartum care is increasingly dominated by the use of this technology and it has been postulated that the use of EFM has conferred protection on the fetus by preventing cerebral damage due to hypoxia in childbirth (Cockburn, 1996). However, others refute this as the cerebral palsy rate has remained unchanged since the advent of EFM (incidence 2–3/1000 live births, (MacLennan, 1999). This is compounded by the fact that the causes of perinatal mortality and morbidity are not solely confined to the occurrences of childbirth (Stanley et al., 2000). Therefore, the application of EFM, as a routine measure for all women, regardless of risk, is not based on best evidence and expert opinion has recently reported that intrapartum, intermittent auscultation (IA) or periodic listening, is a safe alternative (Royal College of Obstetricians and Gynaecologists, 2001). Despite this, it seems that the evidence has not been well implemented as the core value system in some maternity units, is based upon a scientific and technological ethos of care, that is often fuelled by a fear of litigation (Priddy, 2004). Consequently, the ritualistic implementation of intrapartum EFM has helped to promote a model of care that may be contradictory to prioritizing womens' inclusion in decision making (Kirkham, 2004; Maternity Center Association, 2004). The use of EFM has directly contributed towards 22% of the overall causes for cesarean section, without improvement in health outcomes (Parliamentary Office of Science and Technology POSTNOTE, 2002). Effective midwifery decision making should take into account the best available evidence, along with womens' preferences and values (Cioffi and Markham, 1997). Yet, there is evidence to suggest that women are not always provided with all the relevant information in order to make an informed choice on the type of fetal monitoring method chosen (O'Cathain et al., 2001). On the contrary, it seems that midwives sometimes use strategic communication with women in order that the midwives' preferences for care are paramount over those of the woman (Skene and Smallwood, 2002). The needs of women during the process of giving birth are very complex and it seems that these can be affected by a number of factors ranging from the attending professional staff to the environment of care and the leadership/policy making in the overall organization providing the services. Despite the recent, increased emphasis on consumer empowerment and women-centered care in the British National Health Service (NHS), (DoH, 2003), it would appear that little is known on how this is implemented for women in labor. While there is current literature investigating informed choice for women in the maternity services, much of this has focused on antepartum screening (Marteau, 2004), there is little evidence specific to intrapartum fetal monitoring.

2. Aim

The aim of this study was to ascertain womens' views on intrapartum fetal monitoring techniques and informed choice. This was only one aspect of a larger study that appraised intrapartum fetal monitoring guidelines in one region and investigated midwives', views on the use of intrapartum fetal monitoring techniques. This paper will report the findings from the surveys of pregnant womens' views.

3. Method

3.1. Design

An exploratory, descriptive approach was used via surveys of 63 pregnant women at low obstetric risk in the antepartum period, and 38 of these women also completed a postpartum survey. This was conducted using a questionnaire.

3.2. The participants

All of the 63 pregnant women considered to be at low obstetric risk approached in the antepartum period agreed to participate. The sample was spread across two hospital providers of maternity services (center 1, $n = 30$ and center 2, $n = 33$). Only women with no underlying medical disorders and a predicted spontaneous vaginal delivery for the index pregnancy were included. It was important to include only low-risk women as national guidelines stipulate that for this group, it is preferable to use IA rather than electronic forms of monitoring (Royal College of Obstetricians and Gynecologists, 2001). The women completed the questionnaires between 34 and 40+ weeks of pregnancy; a gestation period beyond 34 completed weeks of pregnancy was chosen in order to maximize the chances of gaining a sample considered to be at low obstetric risk.