Guidelines for midwifery led care in labour

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Contents

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Introduction

Movements to implement change in maternity services to meet the individual needs of women, have grown considerably in the 1990s. In the UK, the initiatives have called for a lead role and greater responsibility for midwives in normal pregnancy and labour (Dept of Health 1993). Such midwifery led care has been seen to have as good outcomes as shared care, met with greater satisfaction from the women (McVicar et al 1993, Shields et al 1998, Turnbull et al 1996) and reduce obstetrical intervention rates (Campbell et al 1999, Hundley et al 1994).

Midwifery care perceives labour as a normal physiological process characterised by a spontaneous onset between 37 and 42 weeks, in a woman whose pregnancy has been uncomplicated. It also recognises that for the woman labour is not 'just normal' but actually extraordinary : as a 'good' or 'bad' experience it has great implications for her psychological well-being (Simkin 1991) and her relationships with her family.

The history of childbirth, that has moved it towards being a medically assessed event only perceived as normal in retrospect (RCM 1997), has brought with it considerable interventions that have become traditional and routine in many midwifery units. There has also developed the current status quo of policies and protocols which, combined with the powerful fear of litigation, has come to undermine midwives and women's confidence in accepting or even understanding the normal. As Cochrane commented in 1972, obstetricians and gynaecologists were at the forefront of unevaluated practice: such direction impacted dramatically on midwifery. The indictment however lead to the impressive work of systematic reviews contained in Effective Care in Pregnancy and Childbirth (Chalmers et al 1989) and the Cochrane Library. Such quality research is now readily available to midwives and offers them a useful resource to challenge routine practice which interferes with the normal birth process. There is also a growing body of research exploring midwives' and women's views of the childbirth experience. These guidelines are an attempt to make some of the current research useful to midwives for midwifery led care in this unit.

Midwifery led care is committed to the right of women to have good information and be involved in decisions about the care of themselves and their babies. Failure to pay attention to the quality of that information and an over optimistic view of interventions can have serious consequences in terms of iatrogenic harm, unnecessary costs and increased dissatisfaction (Coulter 1998). The contents of this document are clearly not exhaustive and will need to be reviewed regularly in response to new research. There is also no intention to be entirely prescriptive as care has to be individual. However, it is recommended that a clear cut departure from the evidence should be justified and documented in the notes.

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Methodology

The guidelines presented here are from a literature search using the following method:

- search of the electronic databases: Cochrane, MEDLINE, CINAHL, MIDIRS.
- hand searching key journals and looking for frequently cited literature.
- consultation with local midwife researchers
- peer review by another midwife researcher

Literature covering the following perspectives was reviewed

- that of prospective randomised controlled trials
- that from midwives' research and reviews
- that exploring women's views
- reports from professional bodies (RCM & RCOG) and government policy directives
- expert opinion

In line with the philosophy of midwifery led care, particular weight was given to finding women's views, despite this being such an under-researched area.

The subjects investigated were determined in group discussion with midwives in the unit.
An on-going educational strategy, offering workshops and lectures on key areas, was incorporated from the beginning[1]

A comprehensive evaluation of the development and implementation of the first edition of the guidelines was undertaken (Munro & Spiby 1999). This used an *Appraisal Instrument for Clinical Guidelines* (Cluzeau et al 1997), it sought both midwives and users of the service views, and measured change of practice shown in routinely collected data. The findings of the evaluation informed this updated edition.

[1] If used by other units, the authors draw to your attention that the guidelines form only one part of introducing evidence based practice. It is not anticipated that the document would be introduced without the educational support for safe transition.

Birth Environment

- "Women should receive clear, unbiased advice and be able to choose where they would like their baby to be born" (DoH 1993 p25). There is no evidence to suggest that it is inadvisable for women without complications to book for birth at home or in a GP or midwifery unit (MIDIRS 1997).

- Hospital is an alienating environment for most women where institutionalised routines and lack of privacy can contribute to feelings of loss of control (Steele 1995). The studies by Green et al (1998) and Simkin (1991;1992) found that control, or lack of it, was important to the women's experience of labour and their subsequent emotional well-being.

- Trials have demonstrated the benefits to women of having a low-risk, midwife-led area as an alternative to the traditional labour ward (Hundley et al 1994; McVicar et al 1993)

- Women in early labour are best assessed away from the delivery unit as this results in fewer interventions during the active phase of labour (McNiven et al 1998)

- Respect of a woman's wishes and her involvement in decision making is essential to her care in pregnancy and labour (DoH 1993). **The birth plan should be discussed in full with the midwife looking after the woman in labour**

Pre-Labour Rupture of Membranes at term

- **The woman who gives a history of a sudden gush of fluid from the vagina followed by uncontrollable leaking is correctly self-diagnosing 90% of the time (Garite 1995).** If doubt exists, the history can be confirmed with an amnicator and speculum if necessary.

- **Digital examination must be avoided to prevent the introduction of infection** (Hannah et al 1996).

- In line with the philosophy that PROM is within the spectrum of normal pre-labour activity, the fetal heart can be auscultated over one minute using a portable Sonicaid. The midwife should also document descent of the presenting part, quality of the liquor and maternal observations.

- **All women should be screened for group B haemolytic streptococcus**. An introital swab appears to be the appropriate method: cervical cultures are not acceptable (US Dept of Health & Human Services 1996).

- **When women are known to be Group B haemolytic streptococcus positive, they should be offered immediate oxytocin induction and antibiotics** (Hannah et al 1997).

- When expectant management of up to 96 hours was compared with early induction, there appeared no difference in the risks of infection for the baby but an increase in the likelihood of chorioamnionitis for the women (Hannah et al 1996).

- Women have preferences about the methods of care available to them (Hannah et al 1996). Information should be provided to enable women to choose which method of care they prefer.

- Women choosing to await the onset of labour must be given information about when to contact the hospital or midwife. They should check their temperature twice a day and report any changes in colour or odour of the liquor or any signs or symptoms of infection (Hannah et al 1996). The community midwife should make contact once a day. **An appointment should be made for the woman to attend the Labour Suite no later than 3 days after PROM has occurred.**

Supporting women in labour

- Descriptive studies have suggested 4 dimensions to the support that women want in labour: **emotional support; informational support; physical support and advocacy** (MIDIRS and the NHS Centre for Reviews and Dissemination1999).

- **Continuous support is associated with shorter labour, lower use of pharmacological analgesia, and less operative vaginal delivery (Hodnett 1996).**

- Support from the midwife may include helping the woman in her wish to avoid pharmacological pain relief or helping her choose among pharmacological and non-pharmacological methods of pain relief (Enkin et al 1995) A pain free labour does not ensure satisfaction with childbirth (Enkin et al).

- Midwives should keep up to date with non-pharmacological methods of pain relief. These include water, positions and movement, massage, TENS. coping strategies and alternative therapies (Mander 1998)

- Preparation for childbirth during pregnancy has been shown to reduce the need for pain relief in labour (Wagner 1994). Midwives should ask women about their preparation in the use of coping skills in birth planning (Spiby et al 1999)

- Women who give birth in low-tech, midwife-led facilities e.g. home or birth centres, require less pharmacological analgesia (Skibsted & Lange 1992, Chamberlain et al 1997)

The use of water for labour and birth

- From two national surveys of neonatal morbidity and mortality, there is nothing to suggest that this method of care cannot be made available to women (Gilbert and Tookey 1999; Alderdice et al 1995).

- Quality assurance measures are important and include the need for checking the quality of water reaching the pool (Robb et al 1991) and on thorough cleaning of the pool after use (Forde et al 1999).

- The woman's temperature should be monitored closely and a rise of 1 degree Centigrade above baseline should result in advice to discontinue use (Charles 1998)

- Water temperature should be monitored closely and kept comfortable for the woman and not above 37 degrees Centigrade (Charles 1998)

- There is no evidence to support restricting the duration of use and little to support the imposition of arbitrary points at which the use of water should commence. Early immersion (before 5cm dilatation) has been associated with prolongation of labour and increased need for epidural and syntocinon (Eriksson et al 1997)

- The use of water for labour and birth should be provided within controlled trials or with on-going audit for untoward side effects until further research is available (Nikodem 1997).

Pharmacological Pain Relief

- Sometimes midwives can underestimate the intensity of pain experienced by women in labour and over estimate the relief offered by analgesic drugs (Niven 1994, Rajan 1993). Labour pain can only be partially relieved by the use of analgesic drugs such as pethidine and entonox (Mander 1997).

- Pharmacological methods of pain relief all have side-effects (Enkin et al 1995). If women have not had access to good information antenatally, the midwife on the labour ward must take responsibility for offering it.

- **There are considerable doubts about the effectiveness and concerns about maternal, fetal and neonatal side-effects of pethidine** (Elbourne & Wiseman 1998).These include depression of neonatal respiration , depression of reflexes including impaired suckling, lassitude and drowsiness (Priest & Rosser 1991) Side effects to the mother include nausea, vomiting, dizziness, dysphoria and drowsiness (Mander 1998)

- Fairlie et al's (1999) small study found that there appear to be benefits to using diamorphine as the opiate in labour: they found a higher level of pain relief, less maternal vomiting and a lower incidence of low 1 minute Apgar scores.

- Epidural analgesia is a commonly used method of pain relief in labour in the UK (RCOG 1995**).** It is the most effective method of pain relief in labour. There are, however, a number of possible unwanted consequences and side-effects (Lieberman et al 1999, Thorp & Breedlove 1996, Bogod 1995). Women should be counselled about these risks before labour begins (Howell 1999). Epidural analgesia is associated with longer first and second stages of labour, an increased incidence of fetal malposition, an increased use of oxytocin and instrumental delivery (Howell 1999) Other associated risks are intrapartum fever (Howell 1999, Liberman et al 1999) and significant perineal trauma (Robinson et al 1999, Donnelly et al 1998). Potentially life threatening complications occur in about 1:4000 cases. Dural tap occurs in about 1% of women (MIDIRS & the NHS Centre for Reviews 1999).

Fetal heart rate monitoring

- The decision about fetal monitoring should be made antenatally in joint discussion between the woman and her midwife (Thacker et al 1997).

- If this discussion has not taken place by the time that woman goes into labour, it should form part of the initial birth planning.

- Electronic fetal monitoring was found to increase the caesarian section rate by about 250%, in the early randomised controlled trials. In later trials , the caesarian section rate increased by 30%: this could be due to the use of fetal blood sampling or improved skills in interpreting EFM traces. It also increases the operative vaginal delivery by 30% (MIDIRS & The NHS Centre for Reviews and Dissemination 1999).

- Electronic fetal monitoring was found to reduce the rate of neonatal seizures, but only where labours were induced or augmented with oxytocin (Macdonald et al 1985) The neonatal seizures prevented by intensive monitoring are not those associated with long term impairment (Enkin et al 1995)

- **Because of the high level of intervention associated with electronic fetal monitoring, intermittent auscultation with a hand held instrument is the recommended method for normal labours (RCOG 1993). This consists of measuring the fetal heart**

  FIRST STAGE - for one complete minute beginning immediately after the end of a contraction every 15 minutes

  SECOND STAGE - for one minute after every maternal push

  All values should be recorded .
  If the auscultated fetal heart rate gives reason for concern, then a continuous record should be obtained using EFM (RCOG 1993).

- **The admission trace has not been properly evaluated. It should not be used routinely until such time as reliable research has shown it to be of benefit (MIDIRS & The NHS Centre for Reviews and Dissemination 1999)**

Assessing Progress in Labour

- **Simkin & Ancheta (2000) suggest there are six ways to progress in labour: the cervix moves from a posterior to an anterior position; the cervix ripens or softens: the cervix effaces; the cervix dilates; the fetal head rotates, flexes and moulds; the fetus descends.**

- Monitoring the progress of labour, however, requires more than the assessment of cervical dilatation and uterine contractions (Crowther et al 1995). Midwives should give weight to their other skills such as abdominal palpation and a knowledge of women's changing behaviour (Baker & Kenner 1993, McKay & Roberts 1990, Leap 1999).

- Vaginal examinations remain the most accepted method of measuring progress in labour (Crowther et al 1995). These examinations, however, should not be routine or prescriptive but carried out only where there is clinical necessity and after discussion with the woman. "Repeated vaginal examinations are an invasive intervention of as yet unproven value" (Enkin 1992).

- Vaginal examinations are an imprecise measure of the progress of labour when performed by different examiners (Clement 1994, Robson 1991). **Where possible therefore, they should be carried out by the same midwife.**

- The process of care in labour usually demands a focus on the woman's genitalia, with exposure to people that are strangers. **Midwives must give consideration to the emotional and psychosexual aspects of any procedure (Devane 1996).** Many women find vaginal examinations painful and sometimes traumatic (Menage 1996)

Rupturing Membranes

- **Amniotomy is not part of normal physiological labour** (RCM 1997). It should be reserved for women with abnormal labour progress (Fraser et al 1997).

- The intervention can cause an increase in pain which makes labour unmanageable (Fraser 1993; NCT 1989; Inch 1985). Any intervention that interferes with a woman's ability to cope in labour can have long term implications for her own well-being and her relationship with her baby (Robson & Kumar 1980; Oakley 1979)

- Amniotomy is associated with a reduction in labour duration of between 60 and 120 minutes, more commonly in nulliparous women (Johnson et al 1997). More analgesia and more fetal heart abnormalities are reported with early amniotomy (Goffnet et al 1997).

- The decision to rupture membranes should only be taken in direct consultation with the woman, when the evidence is discussed and the intervention is not minimalised. This discussion should form part of the birth plan and not take place just before or during a vaginal examination.

Positions for Labour and Birth

- There are significant advantages to assuming an upright position in labour (MIDIRS and the NHS Centre for Reviews and Dissemination 1999) and birth (Nikodem 1995). However, lying down continues to remain the most common position.

- **Women often 'choose' to do what is expected of them and the most common image of the labouring woman is 'on the bed'. Midwives therefore need to be proactive in demonstrating and encouraging different positions in labour.**

- The environment is key to freedom of movement. There should be a variety of furniture and props available in the room that encourage women to try different positions.

- The use of electronic fetal monitoring, intravenous infusions and different methods of analgesia will all affect a woman's mobility. Women need to be aware of this in order for them to make an informed choice of their use (MIDIRS and The NHS Centre for Reviews and Dissemination1999).

Nutrition in Labour

- There is insufficient evidence to support the practice of starving women in labour in order to lessen the risk of gastric acid aspiration (Baker 1996; Johnson et al 1989).

- Fasting may result in dehydration and acidosis which, combined with starvation and fatigue, can increase the need for active management and instrumental delivery (Broach & Newton 1988).

- Eating and drinking can allow a woman to feel normal and healthy (Frye 1994). Denial of food can be seen as authoritarian and intimidating and increase feelings apprehension (Simkin 1986).

- The majority of sources agree that mild maternal ketosis is a physiological part of normal labour and might even be beneficial (Anderson 1998)

- Narcotics appear to be the major factor in delaying stomach emptying (Holdsworth 1978; Nimmo et al 1975). If these are used, then women should stop eating and drinking be reduced to sips of water.

- While there are no risk factors suggesting the need for general anaesthesia, women who wish to eat and drink in labour should be encouraged to do so. The diet offered should be light, nutritious and easily absorbable (Grant 1990).

Second Stage of Labour

- There are many signals from the mother about the transition into the active phase of the second stage of labour: change in expression on the face, words, action (McKay, Barrows and Roberts 1990, Enkin et al 1995, Bergstom et al 1997). However, if the progress of labour gives reason to believe that the cervix is not fully dilated, a vaginal examination should be carried out (Enkin et al 1995)

- There is no good evidence to justify arbitrary time limits on the length of the second stage. While maternal and fetal conditions are satisfactory and there is clear progress with the descent of the presenting part, there are no grounds for intervention (Paterson, Saunders & Wadsworth 1992, Watson 1994). Saunders et al (1992), however, highlight an association between maternal morbidity and a second stage of 3 hours. This increase in risk needs to be weighed against the risk of instrumental delivery.

- There is no evidence to suggest that women need to be taught when and how to push (Sleep 1990) and the practice of sustained breath holding in directed pushing may be harmful (Thomson 1993). **Women should therefore be given confidence in following their own urge to push.**

- The 'no noise' rule sometimes invoked in hospital is neither helpful to labouring women, or their caregivers: 'a woman's sounds in labour should be expected, supported and explained' (McKay, Barrows and Roberts 1990)

- The recumbent position tends to lengthen labour (MIDIRS and the NHS Centre for Reviews and Dissemination1999), to reduce the incidence of spontaneous birth and increase the incidence of abnormal fetal heart rate patterns (Enkin et al 1995). **Women should be encouraged to combine spontaneous pushing with upright postures.**

- The experience of women with epidural analgesia is clearly different: midwives should follow multidisciplinary unit guidelines here.

Care of the perineum

- Antenatal perineal massage is an effective approach to increasing the chance of an intact perineum (Labrecque et al 1999 , Shipman et al 1997) and in reducing instrumental deliveries (Shipman et al 1997).

- There is no evidence to support the practices of "ironing out" or massaging the perineum during birth (Enkin et al1995). Traditional practices such as flexion and extension of the head have recently been challenged (Myrfield, Brook & Creedy 1997).

- Mcandlish et al (1998) compared two methods of management of the perineum: 'hands on' and 'hands poised'. The only significant difference in outcome was more mild pain at 10 days in the 'hands poised' group. The use of either should therefore reflect both the midwife's skill and the informed choice of the woman.

- There is no evidence of short term or long term maternal benefit to support the use of liberal episiotomy (Carroli et al 1997). Like any surgical procedure, episotomy carries a number of risks (Enkin et al 1995). Women report increased pain and discomfort after episiotomy that interferes with the experience of early motherhood (Kitzinger & Walters 1981). The practice should therefore be restricted mainly to fetal indications (Sleep 1990).

- Episiotomy is strongly associated with a higher frequency of serious trauma (third and fourth degree lacerations) (Renfrew et al 1998, Albers et al 1999)

Third Stage

- Midwives should feel competent in both active and physiological management

Active management - includes a prophylactic oxytocic drug, early clamping and cutting of the cord and controlled cord traction (Gyte 1994).

Physiological management is where there is no prophylactic oxytocic drug, no cord clamping until after placental delivery and no cord traction but the use of maternal effort, guided by gravity or assisted by the baby being put to the breast (Gyte 1994)

- Active management is superior to physiological in terms of blood loss (Prendiville et al 1997, Rogers et al 1998). Adverse effects of active management are increase in nausea, vomiting, headache and hypertension (Prendiville et al). Syntometrine is associated with a significantly higher incidence of nausea and vomiting than syntocinon and a small reduction in the incidence of postpartum haemorrhage. However there is no difference in the incidence of major haemorrhage (greater than 1000ml) when comparing the two drugs (McDonald et al 1999)

- **Physiological management is only appropriate for women with low risk of post-partum haemorrhage and who have had a normal physiological labour.** Any circumstances which may inhibit the uterus to function normally such as syntocinon , large doses of narcotics, epidurals and early clamping and cutting of the cord should be seen as contraindications to a physiological third stage (Inch 1988)

- If physiological management is attempted but intervention needed, then management must proceed actively. If the placenta is retained after one hour, active management should be considered (Prendiville et al 1988).

- When physiological management is offered to women as a reasonable option, many will choose it (Rogers & Wood 1999). Physiological management can be seen as the logical ending to a normal physiological labour (RCM 1997)

Suturing the perineum

- Green et al's (1998) large prospective study of women's experience of childbirth, found that suturing is a major and sometimes traumatic event for women. 12% of the women described it as 'the worst thing about their birth'

- It is important that suturing be carried out quickly and skilfully with adequate pain relief (Green et al 1998)

- There is evidence that women prefer to be sutured by midwives: it can mean a reduction in waiting time (Ho 1985) and a more sympathetic approach (Hulme & Greenshields 1993)

- The recent Ipswich Childbirth Study (1998) found that women in the two-stage repair group (leaving the skin unsutured), had less pain and dyspareunia at three months postpartum and that there were no apparent disadvantages. It will, however, be necessary for midwives to have re-training in this technique.

- There is little research to date on the non-suturing of second degree tears. Midwives should clearly discuss the lack of evidence, and the theory of the healing process, when considering this with women (Lewis 1997)

- Clement & Reed's (1999) small follow-up study of unsutured tears, offers a psychological and social point of view, as well as a physical one, which could be useful to helping women make an informed decision

Immediate Care of the Newborn

- Kindness and respect of the newborn baby should involve gentle handling and lack of excessive noise (Tyson 1992). There is no evidence of adverse effects of Leboyer (1975) style deliveries: dimmed lights, soft voices, gentle handling, lack of activity.

- Babies can loose heat quite dramatically after birth (Enkin et al 1995). They should be dried with pre-warmed towels and placed in contact with the mother's skin (Fardig 1980, Christensson et al 1992).

- Early mother-baby contact should be encouraged in an unhurried environment (Enkin et al 1995).

- **Skin to skin contact and the opportunity to suckle within the first half hour of birth are important to the initiation of breastfeeding (WHO 1998).** Such early contact also has a positive effect on the duration of breastfeeding at 2 to 3 months (Perez-Escamilla et al 1994).

- Routine delivery ward practice should not be allowed to interfere with the needs of the family to be together and the initiation of breast feeding.

Referral to obstetric care

Women who should be in consultant obstetric care at the onset of labour are those with

- pre-existing medical problems
- gestation of < 37 completed weeks or >42 completed weeks
- multiple pregnancy
- group B haemolytic steptococcus positive
- previous stillbirth or neonatal death
- previous LSCS/shoulder dystocia/uterine surgery
- placenta praevia
- antepartum haemorrhage
- presence of rhesus or other antibodies
- malpresentation
- suspected small for dates fetus and/or oligohydramnios
- pregnancy induced hypertension, pre-eclampsia
- any meconium staining of the liquor

- ***all women having induction or augmentation of labour***

Reasons for intra-partum referral to consultant obstetric care

- Any concern about the woman's or fetal condition
- Any concern about the progress of labour
- Use of epidural pain relief (labour then moves out of the normal physiological and active management needs to be considered)

Women receiving consultant led care in labour should have a plan of management documented on the partogram, at the time of admission and regularly through labour, by an obstetrician of appropriate seniority.

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